

# **Ústav stavebníctva a architektúry SAV**



## **Správa o činnosti organizácie SAV za rok 2020**

Bratislava  
január 2021

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## 1. Základné údaje o organizácii

### 1.1. Kontaktné údaje

**Názov:** Ústav stavebníctva a architektúry SAV

**Riaditeľ:** Ing. Peter Matiašovský, CSc.

**Zástupca riaditeľa:** Prof.Dr.Ing. Martin-Tchingnabé Palou

**Vedecký tajomník:** RNDr. Ladislav Kómar, PhD.

**Predseda vedeckej rady:** Mgr. Miroslav Kocifaj, PhD.

**Člen Snemu SAV:** Prof. Ing. Ján Sládek, DrSc.

**Adresa:** Dúbravská cesta 9, 845 03 Bratislava 45

<http://www.ustarch.sav.sk>

**Tel.:** 02/ 5477 3548

**E-mail:** [usarstav@savba.sk](mailto:usarstav@savba.sk)

**Názvy a adresy organizačných zložiek a detašovaných pracovísk:**

Organizačné zložky: nie sú

Detašované pracoviská: nie sú

**Vedúci organizačných zložiek a detašovaných pracovísk:**

Organizačné zložky: nie sú

Detašované pracoviská: nie sú

**Členovia Snemu SAV za organizačné zložky:**  
nie sú

**Typ organizácie:** Príspevková od roku 1994

### 1.2. Údaje o zamestnancoch

Tabuľka 1a Počet a štruktúra zamestnancov

Štruktúra zamestnancov	K	K		K do 35 rokov		F	P	T	O
		M	Ž	M	Ž				
<b>Celkový počet zamestnancov</b>	40	23	16	5	2	39	33.77	20.65	0
<b>Vedeckí pracovníci</b>	18	15	2	3	0	18	15.17	15.5	0
<b>Odborní pracovníci VŠ</b> (výskumní a vývojoví zamestnanci <sup>1)</sup> )	5	3	2	2	2	4	2.25	2.15	0
<b>Odborní pracovníci VŠ</b> (ostatní zamestnanci <sup>2)</sup> )	5	0	5	0	0	5	4.7	0	0

<b>Odborní pracovníci ÚS</b>	7	2	5	0	0	7	7.25	3	0
<b>Ostatní pracovníci</b>	5	3	2	0	0	5	4.4	0	0

<sup>1</sup> odmeňovaní podľa 553/2003 Z.z., príloha č. 5<sup>2</sup> odmeňovaní podľa 553/2003 Z.z., príloha č. 3 a č. 4

*K – kmeňový stav zamestnancov v pracovnom pomere k 31.12.2020 (uvádzať zamestnancov v pracovnom pomere, vrátane riadnej materskej dovolenky, zamestnancov pôsobiacich v zahraničí, v štátnych funkciách, členov Predsedníctva SAV, zamestnancov pôsobiacich v zastupiteľských zboroch)*

*F – fyzický stav zamestnancov k 31.12.2020 (bez riadnej materskej dovolenky, zamestnancov pôsobiacich v zahraničí v štátnych funkciách, členov Predsedníctva SAV, zamestnancov pôsobiacich v zastupiteľských zboroch)*

*P – celoročný priemerný prepočítaný počet zamestnancov*

*T – celoročný priemerný prepočítaný počet riešiteľov projektov*

*O – celoročný priemerný prepočítaný počet obslužného personálu podieľajúceho sa na riešení projektov (technikov, laborantov, projektových manažérov a pod.) mimo zamestnancov v administratívne, správe a údržbe budov, upratovačiek, vodičov a pod.*

*M, Ž – muži, ženy*

Tabuľka 1b Štruktúra vedeckých pracovníkov (kmeňový stav k 31.12.2020)

<b>Rodová skladba</b>	<b>Pracovníci s hodnotou</b>				<b>Vedeckí pracovníci v stupňoch</b>		
	<b>DrSc.</b>	<b>CSc./PhD.</b>	<b>prof.</b>	<b>doc.</b>	<b>I.</b>	<b>II.a.</b>	<b>II.b.</b>
<b>Muži</b>	2	11	4	2	3	7	6
<b>Ženy</b>	1	1	0	0	1	1	0

Tabuľka 1c Štruktúra pracovníkov podľa veku a rodu, ktorí sú riešiteľmi projektov

<b>Veková štruktúra (roky)</b>	<b>&lt; 31</b>		<b>31-35</b>		<b>36-40</b>		<b>41-45</b>		<b>46-50</b>		<b>51-55</b>		<b>56-60</b>		<b>61-65</b>		<b>&gt; 65</b>	
	<b>A</b>	<b>B</b>	<b>A</b>	<b>B</b>	<b>A</b>	<b>B</b>	<b>A</b>	<b>B</b>	<b>A</b>	<b>B</b>	<b>A</b>	<b>B</b>	<b>A</b>	<b>B</b>	<b>A</b>	<b>B</b>	<b>A</b>	<b>B</b>
<b>Muži</b>	1	0.5	4	3.5	3	2.5	0	0.0	0	0.0	2	2.0	1	1.0	2	2.0	3	3.0
<b>Ženy</b>	1	0.3	0	0.0	0	0.0	1	1.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0

*A - Prepočet bez zohľadnenia úväzkov zamestnancov*

*B - Prepočet so zohľadnením úväzkov zamestnancov*

Tabuľka 1d Priemerný vek zamestnancov organizácie k 31.12.2020

	<b>Kmeňoví zamestnanci</b>	<b>Vedeckí pracovníci</b>	<b>Riešitelia projektov</b>
<b>Muži</b>	49.5	47.8	47.9
<b>Ženy</b>	49.9	49.5	41.0
<b>Spolu</b>	49.6	48.0	46.8

### 1.3. Iné dôležité informácie k základným údajom o organizácii a zmeny za posledné obdobie (v zameraní, v organizačnej štruktúre a pod.)

## 2. Vedecká činnosť

### 2.1. Domáce projekty

Tabuľka 2a Domáce projekty riešené v roku 2020

ŠTRUKTÚRA PROJEKTOV	Počet		Čerpané financie (€)					
	A	B	A				B	
			Zo zdrojov SAV		Z iných zdrojov		Zo zdrojov SAV	Z iných zdrojov
			Spolu	Pre organizáciu	Spolu	Pre organizáciu		
<b>1. Projekty VEGA</b>	5	0	39588	37043	-	-	-	-
<b>2. Projekty APVV</b>	4	0	-	-	268453	249786	-	-
<b>3. Projekty OP ŠF</b>	0	0	-	-	-	-	-	-
<b>4. Projekty SASPRO</b>	0	0	-	-	-	-	-	-
<b>5. Iné projekty (FM EHP, ŠPVV, Vedecko-technické projekty, ESF, na objednávku rezortov a pod.)</b>	2	0	-	-	42967	42967	-	-

A - organizácia je nositeľom projektu

B - organizácia sa zmluvne podieľa na riešení projektu

Tabuľka 2b Domáce projekty podané v roku 2020

Štruktúra projektov	Miesto podania	Organizácia je nositeľom projektu	Organizácia sa zmluvne podieľa na riešení projektu
<b>1. Účasť na nových výzvach APVV r. 2020</b>	-		
<b>2. Projekty výziev OP ŠF podané r. 2020</b>	Bratislava		
	Regióny		

## 2.2. Medzinárodné projekty

### 2.2.1. Medzinárodné projekty riešené v roku 2020

Tabuľka 2c Medzinárodné projekty riešené v roku 2020

ŠTRUKTÚRA PROJEKTOV	Počet		Čerpané financie (€)					
	A	B	A				B	
			Zo zdrojov SAV		Z iných zdrojov		Zo zdrojov SAV	Z iných zdrojov
			Spolu	Pre organizáciu	Spolu	Pre organizáciu		
<b>1. Projekty 7. RP EÚ a Horizont 2020</b>	0	0	-	-	-	-	-	-
<b>2. Projekty ERA.NET, ESA, JRP</b>	0	0	-	-	-	-	-	-
<b>3. Projekty COST</b>	0	0	-	-	-	-	-	-
<b>4. Projekty EUREKA, NATO, UNESCO, CERN, IAEA, IVF, ERDF a iné</b>	0	3	-	-	-	-	-	-
<b>5. Projekty v rámci medzivládnych dohôd</b>	0	0	-	-	-	-	-	-
<b>6. Bilaterálne projekty MAD</b>	0	0	-	-	-	-	-	-
<b>7. Bilaterálne projekty ostatné</b>	0	0	-	-	-	-	-	-
<b>8. Podpora MVTs z národných zdrojov okrem SAV (APVV a iné)</b>	0	0	-	-	-	-	-	-
<b>9. Iné projekty</b>	0	0	-	-	-	-	-	-

A - organizácia je nositeľom projektu

B - organizácia sa zmluvne podieľa na riešení projektu

## 2.2.2. Medzinárodné projekty Horizont 2020 podané v roku 2020

Tabuľka 2d Počet projektov Horizont 2020 v roku 2020

	A	B
<b>Počet podaných projektov Horizont 2020</b>		

A - organizácia je nositeľom projektu

B - organizácia sa zmluvne podieľa na riešení projektu

Údaje k domácim a medzinárodným projektom sú uvedené v Prílohe B.

## 2.2.3. Zámery na čerpanie štrukturálnych fondov EÚ v ďalších výzvach

**2.3. Najvýznamnejšie výsledky vedeckej práce** (maximálne 1000 znakov + 1 obrázok; bibliografický údaj uvádzajte rovnako ako v zozname publikačnej činnosti, vrátane IF)

### 2.3.1. Základný výskum

#### Satelitný monitoring atmosféry nad pozemnými zdrojmi svetla

(APVV-18-0014, VEGA 2/0010/20)

Mená riešiteľov: M. Kocifaj, S. Bará, L. Kómar, H. A. Solano-Lamphar, S. Wallner

Svetlo produkované pozemnými zdrojmi je príčinou neželaného presvetlenia prostredia miest, ale aj vyššie položených lokalít. Časť fotónov definitívne uniká do horného polpriestoru a predstavuje tak nielen energetické straty, ale je detegovateľný signál na orbite satelitov snímajúcich povrch Zeme. Ukázali sme, že svetelný signál závisí na znečistení spodnej atmosféry, čo otvorilo nové možnosti využitia doposiaľ pasívneho monitoringu zemského povrchu v noci. V spolupráci s Universidade de Santiago de Compostela sme vyvinuli metódu stanovenia fyzikálnych vlastností atmosférického aerosólu z intenzity rozptýleného svetla. Porovnaním intenzity difúzneho svetla na vonkajšom okraji mesta s priamymi svetelnými emisiami dokáže satelit určiť rozmerovú distribúciu aerosólu. Metóda tak umožňuje diaľkový monitoring atmosférického znečistenia a následne presnejšie modelovanie šírenia svetelného znečistenia z miest do ich okolia. Dve práce boli uverejnené v časopise zaradenom do tzv. Nature indexu.



Satelit deteguje žiaru zemského povrchu s uhlovým rozlíšením  $0.03^\circ$  (v závislosti od orbity). Obrázok bol vytvorený na podklade snímok z earth.google.com (Earth at Night – Google Earth).

KOCIFAJ, Miroslav - BARÁ, Salvador. Aerosol characterization using satellite remote sensing of light pollution sources at night. In Monthly Notices of the Royal Astronomical Society: Letters, 2020, vol. 495, p. L76-L80. (2019: 5.356 - IF, Q1 - JCR, 1.964 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 1745-3925.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia). Typ: ADCA

KOCIFAJ, Miroslav\*\* - KÓMAR, Ladislav - SOLANO LAMPHAR, H. A. - WALLNER, Stefan. Are population-based models advantageous in estimating the lumen outputs from light-pollution sources? In Monthly Notices of the Royal Astronomical Society: Letters, 2020, vol. 496, no. 1, p. L138-L141. (2019: 5.356 - IF, Q1 - JCR, 1.964 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 1745-3925.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. VEGA 2/0010/20 : Difúzne svetlo v mestskom prostredí: nový model zohľadňujúci vlastnosti lokálnej atmosféry). Typ: ADCA

## **Modelovanie a numerické simulácie efektov viazaných polí v mikro/nano súčiastkach**

### **Modelling and numerical simulations coupled field effects in micro/nano structural elements**

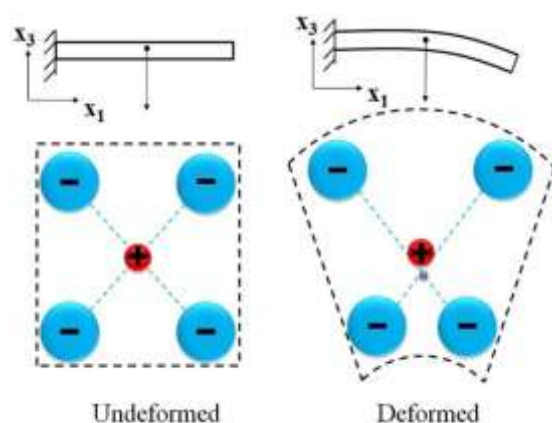
(APVV-18-0004, SK-CN-RD-18-0005)

Je dobre známe, že klasické teórie kontinua sú škaloovo invariantné a nepopisujú efekty veľkosti vzorky, ktoré sú experimentálne pozorovateľné v mikro/nano súčiastkach. Atomistické modely sú nepoužiteľné z dôvodov hardverových obmedzení a tiež sú nevhodné na získanie globálnej odozvy súčiastky na vonkajšie podnety. Najschodnejšími sa ukazujú byť modely zovšeobecnenej teórie kontinua. Z dôvodu derivácií vyšších rádov v gradientných teóriách kontinua sú štandardné numerické výpočtové techniky nepraktické a nespoľahlivé. So zohľadnením mikroštruktúrnych aspektov boli vypracované progresívne modely pre mnohé multifyzikálne problémy: konverzia tepelnej a elektrickej energie, foto-termoelastická analýza polovodičového mikro/nano nosníkového rezonátora, modelovanie funkcionálne gradovaných mikro/nano dosiek v modifikovanej teórii momentovej elasticity, trhlinové problémy v kvázi-kryštáloch a termoelastických materiáloch, modelovanie piezoelektrických a flexoelektrických efektov. Boli vyvinuté a rozpracované tri progresívne výpočtové metódy (mixed finite element method, moving finite element approximation method, meshless method with MLS approximation) na numerické riešenie úloh s vysokými deriváciami polných premenných. Navrhnuté výpočtové techniky boli verifikované v mnohých numerických experimentoch a numerické simulácie priniesli užitočné vysvetlenia javov v mikro/nano súčiastkach.

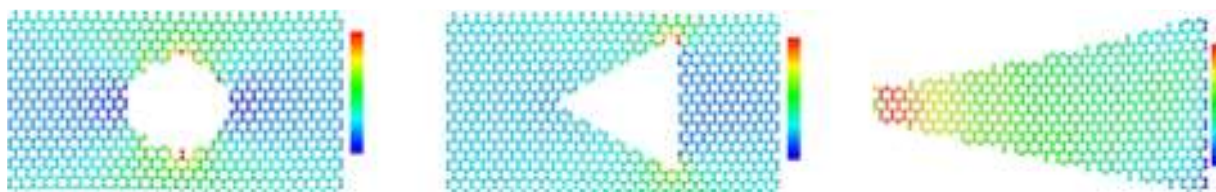
- [1] J. Sladek, V. Sladek, M. Repka, E. Pan: A novel gradient theory for thermoelectric material structures. *International Journal of Solids and Structures*, 206 (2020) 292-303.  
<https://doi.org/10.1016/j.ijsolstr.2020.09.023>
- [2] S.M. Hosseini, J. Sladek, V. Sladek: Nonlocal coupled photo-thermoelasticity analysis in a semiconducting micro/nano beam resonator subjected to plasma shock loading: A Green-Naghdi-based analytical solution. *Applied Mathematical Modelling* 88 (2020) 631-651.  
<https://doi.org/10.1016/j.apm.2020.06.069>
- [3] V. Sladek, J. Sladek, M. Repka, L. Sator: FGM micro/nano-plates within modified couple stress elasticity. *Composite Structures* 245 (2020) 112294.  
<https://doi.org/10.1016/j.compstruct.2020.112294>



- [4] J. Sladek, V. Sladek, P.H. Wen: The meshless analysis of scale-dependent problems for coupled fields, *Materials* **2020**, 13, 2527. <https://doi.org/10.3390/ma13112527>
- [5] X. Tian, M. Xu, Q. Deng, J. Sladek, V. Sladek, M. Repka, Q. Li: Size-dependent direct and converse flexoelectricity around a micro-hole, *Acta Mechanica* 231 (2020) 4851-4865. <https://doi.org/10.1007/s00707-020-02792-7>
- [6] L. Sator, V. Sladek, J. Sladek: Analysis of coupling effects in FGM piezoelectric plates by a meshless method. *Composite Structures* 244 (2020), 112256. <https://doi.org/10.1016/j.compstruct.2020.112256>
- [7] J. Sladek, V. Sladek, M. Repka, S. Schmauder: Crack analysis of nano-sized thermoelectric material structures. *Engineering Fracture Mechanics* 234 (2020) 107078.
- [8] O. Hrytsyna: A Bernoulli-Euler beam model based on the local gradient theory of elasticity. *Journal of Mechanics of Materials and Structures* 15 (2020) No 4, 471-487. <https://doi.org/10.2140/jomms.2020.15.471>



Polarization due to bending of a centrosymmetric beam  
(non-piezoelectric material)



The flexoelectric effect by the non-uniform straining of a non-piezoelectric material (graphene nanoribbon)

## Analýza efektov viazanosti v piezoelektrických smart materiáloch

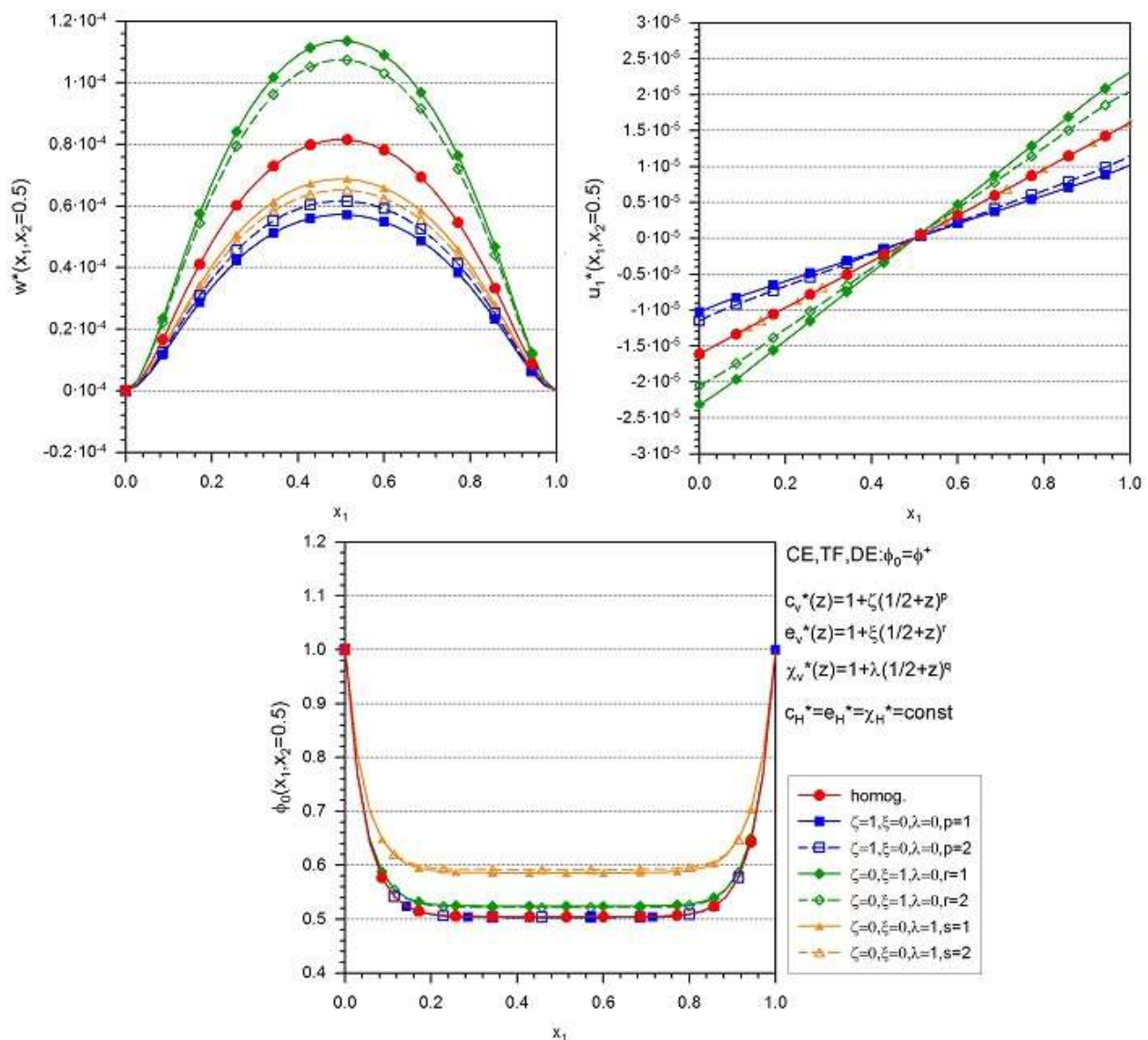
(SK-CN-RD-18-0005)

V poslednej dobe sa monitorovanie a samomonitorovanie inžinierskych konštrukcií stalo významnou úlohou inžinierskeho a vedeckeho bádania. Inteligentné materiály, napr. piezoelektrické materiály používané ako senzory a aktuátory, sa zvyčajne vyrábajú ako laminované kompozity z keramických plátok. Nespojitosť napätí na rozhraní medzi dvomi rôznymi materiálmi často predstavuje výrazný faktor poškodenia laminovaných kompozitných štruktúr. Preto je potrebné spoľahlivé predpovedanie mechanických napätí v kompozitných štruktúrach a tiež je to silnou motiváciou nahradiť laminované

doskové konštrukcie FGM (funkcionálne gradované materiály) doskami, ak je to možné. Je prirodzenou snahou mať jednotnú formuláciu úloh, ktorá by zahŕňala deformačné predpoklady rôznych tórií ohybu dosiek a použitím rovnakých výpočtových metód poskytovala ucelený obraz odozvy dosiek na vonkajšie podnety s uvažovaním variability doskových charakteristík.

V práci [1] je vypracovaný jednotný model pre FGPM (funkcionálne gradované piezoelektrické materiály) dosky. Pre numerické riešenie pomerne zložitých okrajových úloh pre parciálne diferenciálne rovnice s premenlivými koeficientami je vyvinutá silná forma bezprvkovej metódy, využívajúca MLS aproximáciu. Ukázalo sa, že funkcionálne gradovanie materiálových parametrov má veľmi výrazný vplyv na správanie sa FGM piezoelektrických dosiek.

[1] SÁTOR, Ladislav - SLÁDEK, Vladimír - SLÁDEK, Ján. Analysis of coupling effects in FGM piezoelectric plates by a meshless method. In Composite Structures, 2020, vol. 244, art. no. 112256. (2019: 5.138 - IF, Q1 - JCR, 1.784 - SJR, Q1 - SJR). ISSN 0263-8223.(SK-CN-RD-18-0005 : Multiškálová flexoelektrická teória a nova metóda na detekciu mikrotrhlín v dielektrikách v realnom čase).



Obr. Vplyv tranzverzálnej gradácie elastických ( $c_v$ ), piezoelektrických ( $e_v$ ) a dielektrických ( $\chi_v$ ) materiálových koeficientov na priebeh priebybov ( $w^*$ ), rovinných deformácií ( $u_1^*$ ) a elektrických potenciálov ( $\phi_0^*$ ) tenkých FGPM dosiek



3. KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - JURIŠOVÁ, Jana - PALOU, Martin T. Hydrothermal preparation and thermal stability of analcime. In CEEC-TAC5 & Medicta2019. 5th Central and Eastern European Conference on Thermal Analysis and Calorimetry (CEEC-TAC5) and 14th Mediterranean Conference on Calorimetry and Thermal Analysis (Medicta2019) : book of abstracts. - Germany : Central and Eastern European Committee for Thermal Analysis and Calorimetry, 2019, p. 480. ISBN 978-3-940237-59-0. Typ: AFG

### 2.3.2. Aplikačný typ

**Charakteristika pórovej štruktúry: Vedecké vyhodnotenie vytvorenej pórovej štruktúry betónov ak dôležitá súčasť komplexnej materiálovej diagnostiky mostov.**

Zodpovedný riešiteľ: Martin T. Palou

Na posúdenie betónovej štruktúry je dôležité analyzovať pórovú štruktúru a priepustnosti konštrukcií za účelom diagnostikovať základné príčiny poškodenia a degradácie betónu, a navrhovať materiálové riešenie. Pomocou metódy ortuťovej póroziometrie boli stanovené základné charakteristiky pórovej štruktúry ako sú merný povrch pórov, distribúcia veľkosti pórov, medián a polomer pórov, celková pórovitosť a koeficient priepustnosti niekoľko poškodených vzoriek betónu. V kombinácii s metódou termickej a röntgenovej analýzy, metód ortuťovej póroziometrie poskytuje komplexné podklady na identifikáciu príčiny poškodenia a degradácie betónu, ktorými sú dlhodobé autogénne chemické a fyzikálne procesy ako aj vplyvy vonkajších faktorov.

### 2.3.3. Medzinárodné vedecké projekty

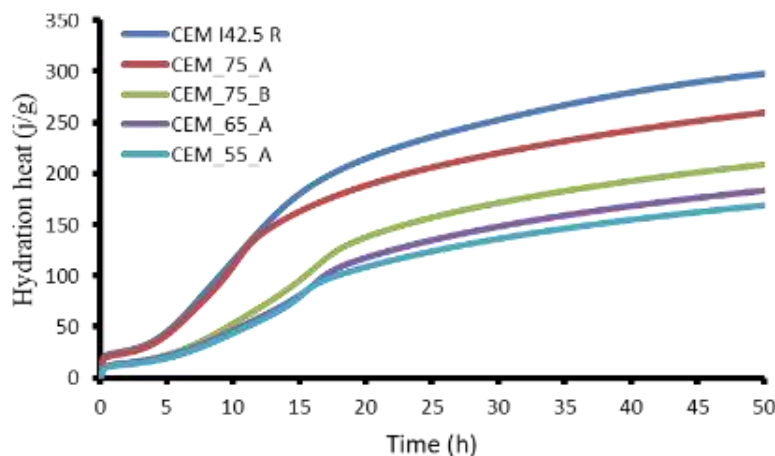
**Projekt: MVTs - Visegrad Group (V4)-Korea Joint Research Program On Chemistry and Chemical Engineering “The Effect of Chemical Composition of Concrete on Its Long-term Performance in Irradiated Environment „RADCON“**

**Optimalizácia zloženia ťažkých betónov na základe izotermickej vodivostnej kalorimetrie**

Hydratačné teplo cementu zohráva kľúčovú úlohu pri vzniku a vývoji trhlin v betóne. V štruktúre vznikajú ťahové napätia v dôsledku veľkých teplotných gradientov medzi jadrom a povrchom betónu, aj následkom rozpínania vlhkého vzduchu v póroch. Použitie cementového spojiva s nízkym hydratačným teplom je obzvlášť dôležité v prípade masívnych stavieb z ťažkého betónu. Zloženie spojiva vhodného na prípravu ťažkého betónu s tieniacimi vlastnosťami proti rádioaktívnemu žiareniu bolo optimalizované na základe stanovenia hydratačného tepla izotermickou vodivostnou kalorimetriou.

Portlandský cement CEM I 42,5 R bol nahrádzaný rôznymi prísadami tak, aby hydratačné teplo nepresahovalo  $250 \text{ J g}^{-1}$ . Na prípravu ťažkých betónov sa použila zmes barytu a magnetitu. Pevnosť v tlaku prevyšovala 45 MPa a objemová hmotnosť dosahovala  $3400 \text{ až } 3500 \text{ kg m}^{-3}$ . Po objemovej

expanzii, ku ktorej dochádzalo počas prvých 4 h, bolo zaznamenané iba mierne zmraštenie (max.  $0.3^{\circ}/^{\circ}$ ). Materiály teda možno charakterizovať ako objemovo stále. Merané a hodnotené boli tiež tepelné vlastnosti pripravených materiálov (koeficient tepelnej vodivosti, merná tepelná kapacita, objemová tepelná kapacita).



Obr. Vývoj hydratačného tepla zmesových cementov

## Výstupy

DRAGOMIROVÁ, Janette - PALOU, Martin T. - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - NOVOTNÝ, Radoslav - GMÉLING, Katalin. Optimization of cementitious composite for heavyweight concrete preparation using conduction calorimetry. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, no. 1, p. 255-266. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR). ISSN 1388-6150.

## Významné výsledky - iné

### Simulácia geotermálneho vrtu pozdĺž celej jeho hĺbky

(APVV-15-0631)

Zodpovedný riešiteľ: Martin T. Palou

V porovnaní s jednoduchšími modelmi simulujúcimi geotermálne vrty len v ich vybraných častiach, vedie navrhnutý model popisujúci celý vrt k spoľahlivým výsledkom. Umožňuje modelovať premenlivosť materiálových charakteristík v závislosti od geologického zloženia okolia vrtu, ako aj teploty okolia; zohľadňuje lokálny výskyt zmeny teploty okolia, resp. nespojitost' v horninách okolia vrtu. Takýto model nám teda umožňuje včleniť do výpočtov s hĺbkou sa meniacu teplotu okolia aj geotermálnej vody, či zmenu tepelnej vodivosti geologického podložia s teplotou. Výpočet je pomerne rýchly a preto možno uskutočniť rôzne varianty výpočtov v pomerne krátkej dobe. Ako konzervatívny model môže viesť k vyšším hodnotám tlakov a napätí a jeho výsledky sú veľmi ovplyvňované voľbou okrajových podmienok modelu.

Výstupy:

Sadovský, Zoltán., Kriváček, Jozef. Influential geometric imperfections in buckling of axially compressed cylindrical shells – A novel approach. Engineering Structures 223 (2020) 111170; doi:10.1016/j.engstruct.2020.111170; Typ: ADC.

**2.4. Publikačná činnosť** (zoznam je uvedený v prílohe C)

Tabuľka 2e Štatistika vybraných kategórií publikácií

<b>PUBLIKAČNÁ A EDIČNÁ ČINNOSŤ</b>	<b>Počet v r. 2020/ doplňky z r. 2019</b>
<b>1. Vedecké monografie a monografické štúdie vydané v domácich vydavateľstvách (AAB, ABB)</b>	<b>0 / 0</b>
<b>2. Vedecké monografie a monografické štúdie vydané v zahraničných vydavateľstvách (AAA, ABA)</b>	<b>1 / 0</b>
<b>3. Odborné monografie, vysokoškolské učebnice a učebné texty vydané v domácich vydavateľstvách (BAB, ACB, CAB)</b>	<b>0 / 0</b>
<b>4. Odborné monografie a vysokoškolské učebnice a učebné texty vydané v zahraničných vydavateľstvách (BAA, ACA, CAA)</b>	<b>0 / 0</b>
<b>5. Kapitoly vo vedeckých monografiách vydaných v domácich vydavateľstvách (ABD)</b>	<b>0 / 0</b>
<b>6. Kapitoly vo vedeckých monografiách vydaných v zahraničných vydavateľstvách (ABC)</b>	<b>0 / 0</b>
<b>7. Kapitoly v odborných monografiách, vysokoškolských učebniciach a učebných textoch vydaných v domácich vydavateľstvách (BBB, ACD)</b>	<b>0 / 0</b>
<b>8. Kapitoly v odborných monografiách, vysokoškolských učebniciach a učebných textoch vydaných v zahraničných vydavateľstvách (BBA, ACC)</b>	<b>0 / 0</b>
<b>9. Vedecké práce registrované v Current Contents Connect (ADCA, ADCB, ADDA, ADDB)</b>	<b>33 / 1</b>
<b>10. Vedecké práce registrované vo Web of Science Core Collection alebo Scopus (ADMA, ADMB, ADNA, ADNB)</b>	<b>6 / 1</b>
<b>11. Vedecké práce v ostatných domácich časopisoch (ADFA, ADFB)</b>	<b>0 / 0</b>
<b>12. Vedecké práce v ostatných zahraničných časopisoch (ADEA, ADEB)</b>	<b>0 / 0</b>
<b>13. Vedecké práce v domácich recenzovaných zborníkoch (AEDA)</b>	<b>0 / 0</b>
<b>14. Vedecké práce v zahraničných recenzovaných zborníkoch (AECA)</b>	<b>0 / 0</b>
<b>15. Publikované príspevky na domácich vedeckých konferenciách (AFB, AFD)</b>	<b>3 / 0</b>
<b>16. Publikované príspevky na zahraničných vedeckých konferenciách (AFA, AFC)</b>	<b>1 / 0</b>
<b>17. Vydané periodiká evidované v CCC, WoS Core Collection, SCOPUS</b>	<b>0</b>
<b>18. Ostatné vydané periodiká</b>	<b>0</b>
<b>19. Zostavovateľské práce knižného charakteru (FAI)</b>	<b>0 / 0</b>
<b>20. Preklady vedeckých a odborných textov (EAJ)</b>	<b>0 / 0</b>
<b>21. Heslá v odborných terminologických slovníkoch a encyklopédiách (BDA, BDB)</b>	<b>1 / 0</b>
<b>22. Recenzie v časopisoch a zborníkoch (EDI)</b>	<b>0 / 0</b>

*Evidujú len tie práce zamestnancov a doktorandov, v ktorých je uvedená afiliácia k organizácii*

Tabuľka 2f Štatistika vedeckých prác podľa kvartilu vedeckého časopisu

Kvartil vedeckého časopisu	Q1	Q2	Q3	Q4	Spolu
<b>Podľa IF z r. 2019 (zdroj JCR)</b> <i>Počet článkov / doplnky 2018</i>	22 / 0	7 / 0	2 / 0	2 / 1	33 / 1
<b>Podľa SJR z r. 2019 (zdroj Scimago)</b> <i>Počet článkov / doplnky 2018</i>	22 / 0	6 / 1	7 / 0	3 / 0	38 / 1

Tabuľka 2g Ohlasy

<b>OHLASY</b>	<b>Počet v r. 2019/ doplnky z r. 2018</b>
<b>Citácie vo WOS (1.1, 2.1)</b>	797 / 11
<b>Citácie v SCOPUS (1.2, 2.2)</b>	108 / 0
<b>Citácie v iných citačných indexoch a databázach (9, 10, 3.2, 4.2)</b>	0 / 0
<b>Citácie v publikáciách neregistrovaných v citačných indexoch (3, 4, 3.1, 4.1)</b>	1 / 0
<b>Recenzie na práce autorov z organizácie (5, 6, 7, 8)</b>	0 / 0

## 2.5. Aktívna účasť na vedeckých podujatiach

Tabuľka 2h Vedecké podujatia

<b>Prednášky a vývesky na medzinárodných vedeckých podujatiach</b>	3
<b>Prednášky a vývesky na národných vedeckých podujatiach</b>	0

## 2.6. Vyžiadané prednášky

*Ak boli príspevky publikované, sú súčasťou prílohy C, kategória (AFC, AFD, AFE, AFF, AFG, AFH)*

### 2.6.1. Vyžiadané prednášky na medzinárodných vedeckých podujatiach

J. Sladek: Modelling of advanced thermoelectric material structures. 2020 Silk Road International Conference on the Cooperation and Integration of Industry, Education, Research and Application of Aeronautics and Astronautics, Xian, December 11, 2020

M. Kocifaj: Calculation methods and models. CIE Online Workshop on the Calculation and Measurement of Obtrusive Lighting, November 12-13 2020, Ostrava, Czech Republic.

### 2.6.2. Vyžiadané prednášky na národných vedeckých podujatiach

### 2.6.3. Vyžiadané prednášky na významných vedeckých inštitúciách

Darula, S. Online prednáška na FEKT VUT v Brne

## 2.7. Patentová a licenčná činnosť na Slovensku a v zahraničí v roku 2020

### 2.7.1. Vynálezy, na ktoré bol v roku 2020 udelený patent

#### a) na Slovensku

#### b) v zahraničí

Pôvodca: Videen Gorden, Kocifaj Miroslav, Klačka Jozef

Číslo patentu: United States Patent and Trademark Office US 10,859,694



Názov vynálezu: Method and apparatus for lightning threat indication

Majiteľ / spolumajiteľ: Ústav stavebníctva a architektúry SAV, Univerzita Komenského v Bratislave, Videen Gorden, Adelphi Maryland, US

Issue date: 8. dec. 2020

### 2.7.2. Vynálezy prihlásené v roku 2020

#### a) na Slovensku

1. Eva Kuzielová, Martin T. Palou, Matuš Žemlička; Ústav stavebníctva a architektúry SAV, Bratislava; Patentová prihláška č. PP50038-2020: Čistá kubická forma kryštalického analcímu a spôsob jej prípravy
2. Martin T. Palou, Eva Kuzielová, Matuš Žemlička; Ústav stavebníctva a architektúry SAV, Bratislava ; Patentová prihláška č. PP 50053-2020: Cementová zmes na použitie v hydrotermálnych vrtoch pri teplotách medzi 200 a 300 °C

#### b) v iných krajinách ako prioritná prihláška

#### c) PCT

#### d) EP

#### e) v iných krajinách v rámci tzv. národnej fázy po PCT, resp. po validácii EP

### 2.7.3. Úžitkové vzory na Slovensku

#### a) prihlásené v roku 2020

#### b) udelené v roku 2020

### 2.7.4. Realizované vynálezy

#### a) predané patenty resp. prihlášky vynálezov (v prípade úplnej zmeny majiteľa patentu)

#### b) predané licencie (v prípade že majiteľom ostáva organizácia SAV)

*Finančný prínos pre organizáciu SAV v roku 2020 a súčet za predošlé roky sa neuvádzajú, ak je zverejnenie v rozpore so zmluvou súvisiacou s realizáciou patentu.*

### 2.8. Účasť expertov na hodnotení národných projektov (APVV, VEGA a iných)

Tabuľka 2i Experti hodnotiaci národné projekty

Meno pracovníka	Typ programu/projektu/výzvy	Počet hodnotených projektov
Kuzielová Eva	VEGA	2
Ján Sládek	VEGA	1
Vladimír Sládek	VEGA	1
Martin T. Palou	VEGA	1
Peter Matiašovský	VEGA	3

### 2.9. Účasť na spracovaní hesiel do encyklopédie Beliana

Počet autorov hesiel: 0

**2.10. Recenzovanie publikácií a príspevkov vo vedeckých časopisoch**

Tabuľka 2j Počet recenzovaných monografií, článkov, zborníkov

Meno pracovníka	Knížné monografie		Príspevky v časopisoch			Zborníky	
	Domáce	Zahra- ničné	WoS, SCOPUS	Iné databázy	Ostatné	Domáce	Zahra- ničné
Darula Stanislav	1	0	3	0	2	0	1
Kocifaj Miroslav	0	0	30	0	0	0	5
Kómar Ladislav	0	0	10	0	0	0	0
Kuzielová Eva	0	0	13	0	0	0	0
Matiašovský Peter	0	0	3	0	0	0	0
Palou Martin- Tchingnabé	1	46	48	0	0	0	0
Petržala Jaromír	0	0	2	0	0	0	0
Sátor Ladislav	0	0	3	0	0	0	0
Sládek Ján	0	0	14	0	0	0	2
Sládek Vladimír	0	0	14	1	0	0	1
<b>Spolu</b>	<b>2</b>	<b>46</b>	<b>140</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>9</b>

**2.11. Iné informácie k vedeckej činnosti.**

### 3. Doktorandské štúdium, iná pedagogická činnosť a budovanie ľudských zdrojov pre vedu a techniku

#### 3.1. Údaje o doktorandskom štúdiu

Tabuľka 3a Počet doktorandov v roku 2020

Forma	Počet k 31.12.2020				Počet doktorandov po doktorandskej skúške		Počet ukončených doktorantúr v r. 2020					
							Ukončenie z dôvodov					
	celkový počet		z toho novoprijatí						ukončenie úspešnou obhajobou		predčasné ukončenie	
	M	Ž	M	Ž	M	Ž	M	Ž	M	Ž	M	Ž
Denná zo zdrojov SAV	0	2	0	1	0	1	0	0	0	0	0	0
Denná z iných zdrojov	0	0	0	0	0	0	0	0	0	0	0	0
Externá	0	0	0	0	0	0	0	0	0	0	0	0
Spolu	0	2	0	1	0	1	0	0	0	0	0	0
Súhrn	2		1		1		0		0		0	

Uvádzajte len doktorandov organizácie ako externej vzdelávacej inštitúcie.

Riadok „Spolu“ je súčtom troch riadkov nad ním. Každá bunka v „Súhrn“ je súčtom dvoch buniek nad ňou. V stĺpci „Počet doktorandov po doktorandskej skúške“ sa uvádza počet doktorandov, ktorí počas roku 2020 boli aspoň 1 deň doktorandami po doktorandskej skúške. Sú číselne zahrnutí aj v predchádzajúcich stĺpcoch.

#### 3.2. Zmena formy doktorandského štúdia

Tabuľka 3b Počty preradení z dennej formy na externú a z externej na dennú

Pôvodná forma	Denná z prostriedkov SAV	Denná z prostriedkov SAV	Denná z iných zdrojov	Denná z iných zdrojov	Externá	Externá
Nová forma	Denná z iných zdrojov	Externá	Denná z prostriedkov SAV	Externá	Denná z prostriedkov SAV	Denná z iných zdrojov
Počet	0	0	0	0	0	0

#### 3.3. Zoznam doktorandov, ktorí ukončili doktorandské štúdium úspešnou obhajobou

Tabuľka 3c Menný zoznam ukončených doktorandov v roku 2020 úspešnou obhajobou

Meno doktoranda	Forma DŠ	Mesiac, rok nástupu na DŠ	Mesiac, rok obhajoby	Číslo a názov študijného odboru	Meno a organizácia školiteľa	Fakulta udeľujúca vedeckú hodnotu
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### 3.4. Zoznam doktorandov, ktorí ukončili doktorandské štúdium úspešnou obhajobou v nadštandardnej dĺžke štúdia

Tabuľka 3d Menný zoznam ukončených doktorandov v roku 2020 úspešnou obhajobou v nadštandardnej dĺžke štúdia

Meno doktoranda	Forma DŠ	Mesiac, rok nástupu na DŠ	Mesiac, rok obhajoby	Číslo a názov študijného odboru	Meno a organizácia školiteľa	Fakulta udeľujúca vedeckú hodnotu
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### 3.5. Uplatnenie absolventov doktorandského štúdia

Tabuľka 3e Prehľad uplatnenia absolventov doktorandského štúdia

Počet absolventov PhD. štúdia v roku 2020 (obhajoba leto 2020)	z toho koľkí sa zamestnali vo výskume (SAV, univerzity, rezortné výskumné ústavy)	z toho koľkí sa zamestnali v praxi mimo výskum, kde využívajú svoju kvalifikáciu	z toho koľkí sa zamestnali v praxi, kde nevyužívajú svoju kvalifikáciu	z toho koľkí boli nejaký čas nezamestnaní
0	0	0	0	0

*Zoznam interných a externých doktorandov je uvedený v prílohe A.*

### 3.6. Medzinárodné doktorandské štúdium

Tabuľka 3f Počet študentov v medzinárodných programoch doktorandského štúdia

Cotutelle	Co-direction	Iné	Zahranční doktorandi štátne občianstvo/počet
0	0	0	

*Zahranční doktorandi sú doktorandi v dennej alebo externej forme štúdia, ktorí sú občanmi iných krajín.*

*Doktorandi školení v rámci Cotutelle alebo Co-direction sa do posledného stĺpca nezapočítavajú.*

### 3.7. Zoznam študijných odborov, na ktoré má ústav uzatvorenú rámcovú dohodu, s uvedením VŠ

Tabuľka 3g Zoznam študijných odborov, na ktoré má ústav uzatvorenú rámcovú dohodu, s uvedením univerzity/vysokej školy a fakulty, kde sa doktorandský študijný program uskutočňuje

Názov študijného odboru (ŠO)	Číslo ŠO	Doktorandské štúdium uskutočňované na (univerzita/vysoká škola a fakulta)
stavebníctvo	3659	Slovenská technická univerzita v Bratislave
strojárstvo	2381	Slovenská technická univerzita v Bratislave

Tabuľka 3h Účasť na pedagogickom procese

Menný prehľad pracovníkov, ktorí boli menovaní do odborových komisií pre doktorandské štúdium	Menný prehľad pracovníkov, ktorí pôsobili ako členovia vedeckých rád univerzít, správnych rád univerzít a fakúlt	Menný prehľad pracovníkov, ktorí získali vyššiu vedeckú, pedagogickú hodnotu alebo vyšší kvalifikačný stupeň
doc. Ing. Stanislav Darula, CSc. (pozemné stavby)	doc. Ing. Stanislav Darula, CSc. (Stavebná fakulta TUKE)	
Ing. Peter Matiašovský, CSc. (pozemné stavby)	Ing. Peter Matiašovský, CSc. (Slovenská technická univerzita v Bratislave)	
Ing. Peter Matiašovský, CSc. (stavebníctvo)	Ing. Peter Matiašovský, CSc. (Stavebná fakulta STU)	
Prof.Dr.Ing. Martin-Tchingnabé Palou (anorganická technológia a materiály)		
Prof.Dr.Ing. Martin-Tchingnabé Palou (stavebníctvo)		
Prof.Dr.Ing. Martin-Tchingnabé Palou (odbor v zahraničí)		
Prof. Ing. Ján Sládek, DrSc. (aplikovaná mechanika)		
Prof. RNDr. Vladimír Sládek, DrSc. (aplikovaná mechanika)		
Prof. RNDr. Vladimír Sládek, DrSc. (numerická analýza a vedecko-technické výpočty)		

### 3.8. Údaje o pedagogickej činnosti

Tabuľka 3i Prednášky a cvičenia vedené v roku 2020

PEDAGOGICKÁ ČINNOSŤ	Prednášky		Cvičenia a semináre	
	doma	v zahraničí	doma	v zahraničí
Počet prednášateľov alebo vedúcich cvičení	2	1	0	0
Celkový počet hodín v r. 2020	76	2	0	0

*Prehľad prednášateľov predmetov a vedúcich cvičení, s uvedením názvu predmetu, úväzku, katedry, fakulty, univerzity/vysokej školy je uvedený v prílohe D.*

Tabuľka 3j Aktivity pracovníkov na VŠ

1.	Počet pracovníkov, ktorí pôsobili ako vedúci alebo konzultanti diplomových a bakalárskych prác	1
2.	Počet vedených alebo konzultovaných diplomových a bakalárskych prác	1
3.	Počet pracovníkov, ktorí pôsobili ako školitelia doktorandov (PhD.)	2
4.	Počet školených doktorandov (aj pre iné inštitúcie)	1
5.	Počet oponovaných dizertačných a habilitačných prác	4
6.	Počet pracovníkov, ktorí oponovali dizertačné a habilitačné práce	3
7.	Počet pracovníkov, ktorí pôsobili ako členovia komisií pre obhajoby DrSc. prác	3
8.	Počet pracovníkov, ktorí pôsobili ako členovia komisií pre obhajoby PhD. prác	5
9.	Počet pracovníkov, ktorí pôsobili ako členovia komisií, resp. oponenti v inauguračnom alebo habilitačnom konaní na vysokých školách	2

### 3.9. Iné dôležité informácie k pedagogickej činnosti

## 4. Medzinárodná vedecká spolupráca

### 4.1. Medzinárodné vedecké podujatia

#### 4.1.1. Medzinárodné vedecké podujatia, ktoré organizácia SAV organizovala v roku 2020 alebo sa na ich organizácii podieľala, s vyhodnotením vedeckého a spoločenského prínosu podujatia

Thermophysics 2020, Smolenice, 7. 9. - 9. 9. 2020

V dňoch 7 – 9. septembra 2020 ústav organizoval v Kongresovom centre SAV v Smoleniciach medzinárodnú konferenciu Thermophysics 2020, 25. zo série tradičných mítingov, ktoré sa konajú od roku 1996. Program konferencie zahŕňal pozvané prednášky, prezentácie a diskusie na vybrané témy. Poslaním konferencie je diskusia o výsledkoch akademického a priemyselného výskumu a výmena neoceniteľných skúseností v oblasti termofyzikálnych vlastností materiálov. V tomto roku sa podujatia zúčastnilo 24 vedcov a doktorandov zo Slovenska, Českej republiky, Poľska, Švédska, Francúzska, Ukrajiny, Ruska a Indie.

#### 4.1.2. Medzinárodné vedecké podujatia, ktoré usporiada organizácia SAV v roku 2021 (anglický a slovenský názov podujatia, miesto a termín konania, meno, telefónne číslo a e-mail zodpovedného pracovníka)

5th International Conference on Light Pollution Theory, Modelling and Measurements (LPTMM)

Conference date: June 15-18, 2021

Location: TBA, Galacia, Spain

M. Kocifaj, 02/59309293, kocifaj@savba.sk

#### 4.1.3. Počet pracovníkov v programových a organizačných výboroch medzinárodných konferencií

Tabuľka 4a Programové a organizačné výbory medzinárodných konferencií

Meno pracovníka	Programový	Organizačný	Programový i organizačný
Matiašovský Peter	0	0	1
Mihálka Peter	0	1	0
Sládek Vladimír	1	0	0
<b>Spolu</b>	1	1	1

### 4.2. Členstvo a funkcie v medzinárodných orgánoch

#### 4.2.1. Členstvo a funkcie v medzinárodných vedeckých spoločnostiach, úniách a národných komitétach SR

doc. Ing. Stanislav Darula, CSc.

CIB - International Council for Research and Innovation in Building and Construction (funkcia: W67 - člen)

CIE - Commission Internationale de l'Eclairage (funkcia: Reprezentant SR v CIE Divízii 3)

CIE TC3-39, Discomfort Glare from Daylight in Buildings (funkcia: člen)

IBPSA – the International Building Performance Simulation Associati (funkcia: člen)

TC 3-54: Revision of CIE 16-1970: Daylight (funkcia: člen)

Mgr. Miroslav Kocifaj, PhD.

International Astronomical Union (funkcia: člen)  
International Solar Energy Society (ISES) (funkcia: člen {silver member})  
Optical Society of America (OSA) (funkcia: člen)  
The Illuminating Engineering Society (funkcia: člen Sky Glow Committee)

Ing. Peter Matiašovský, CSc.

CIB - W40 Heat and Moisture Transfer in Buildings (funkcia: člen pracovnej skupiny)

Prof.Dr.Ing. Martin-Tchingnabé Palou

CIB- International Council for Research and Innovation in Building and Construction  
(funkcia: Člen)  
ICIC International Committee for Irradiated Concrete (funkcia: člen)

Prof. Ing. Ján Sládek, DrSc.

Central European Assoc. for Computational Mechanics (funkcia: člen)  
Int. Soc. Comput. Eng. & Sciences (ICCES) (funkcia: člen)

Prof. RNDr. Vladimír Sládek, DrSc.

Central European Assoc. for Computational Mechanics (funkcia: člen)  
International Society for Boundary Elements (funkcia: člen )

**4.3. Účast' expertov na hodnotení medzinárodných projektov (EÚ RP, ESF a iných)**

Tabuľka 4b Experti hodnotiaci medzinárodné projekty

Meno pracovníka	Typ programu/projektu/výzvy	Počet hodnotených projektov
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**4.4. Najvýznamnejšie prínosy MVTS ústavu vyplývajúce z mobility a riešenia medzinárodných projektov a iné informácie k medzinárodnej vedeckej spolupráci**

Účast' ÚSTARCH na medzinárodnom projekte MVTS - Visegrad Group (V4)-Korea Joint Research Program on Chemistry and Chemical Engineering "The Effect of Chemical Composition of Concrete on Its Long-term Performance in Irradiated Environment „RADCON“

Napriek pandémie COVID-19 jednotlivé pracovné skupiny aktívne pokračovali v riešení projektu, vzájomných konzultáciách a účasti na virtuálnom medzinárodnom workshope (ICIC Virtual Workshop on Meso-Scale Modelling of Concrete, on 18th November 2020). V spolupráci s našimi partnermi z Maďarska (Hungarian Academy of Sciences, MTA Centre for Energy Research) a z Južnej Kórei (Yonsei University) boli publikované dve práce v kategórii ADCA a jedna práca je v kategórii ADM prijatá na publikovanie.

1. DRAGOMIROVÁ, Janette - PALOU, Martin T. - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - NOVOTNÝ, Radoslav - GMÉLING, Katalin. Optimization of cementitious composite for heavyweight concrete preparation using conduction calorimetry. In Journal of Thermal



- Analysis and Calorimetry, 2020, vol. 142, no. 1, p. 255-266. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR). ISSN 1388-6150, Typ: ADCA
2. U, Minkwan - JEONG, Jae-Gwon - PALOU, Martin T. - PARK, Kyoungsoo. Mechanical Behavior of Fine Recycled Concrete Aggregate Concrete with the Mineral Admixtures. In Materials, 2020, vol. 13, art. no. 2264. (2019: 3.057 - IF, Q2 - JCR, 0.647 - SJR, Q2 - SJR). ISSN 1996-1944. Typ: ADCA
  3. Janette DRAGOMIROVÁ, Martin T. PALOU, Katalin GMÉLING, Veronika SZILÁGYI, Ildikó HARSÁNYI, László SZENTMIKLÓSI. Experimental study of selected properties of heavyweight concrete based on analysis of chemical composition and radioactive elements of its components, scientific.net. Accepted Type ADM

*Prehľad údajov o medzinárodnej mobilite pracovníkov organizácie je uvedený v Prílohe E.*

*Prehľad a údaje o medzinárodných projektoch sú uvedené v kapitole 2 a Prílohe B.*

## 5. Koncepcia dlhodobého rozvoja organizácie

### 5.1. Odporúčania z posledného pravidelného hodnotenia organizácií SAV (akreditácie)

- Bez dôrazného vývoja v strategickom plánovaní a riadení je ťažké pochopiť ako ústav (v jeho štruktúre) môže byť považovaný za udržateľný.
- Opísaná činnosť ústavu je skôr vedeckým výskumom, než skutočne súvisiaci so stavebníctvom. Musia byť zlepšené procesy identifikujúce línie výskumu, vrátane autoritatívneho vonkajšieho poradenstva.
- Ústav by mal viac hľadiť navonok, v zmysle jeho väzieb na stavebný priemysel a jeho viditeľnosť pri interakcii s medzinárodnou výskumnou komunitou v relevantných tematických oblastiach.
- Ak je daná jasná stratégia, tá by mala priťahovať viac PhD študentov, ako aj podnecovať súčasných zamestnancov k spolupráci s univerzitami, s cieľom zabezpečiť viac kandidátov na doktorát, prinášajúc viac vitálnosti. Zamestnanci by mali stále hľadať cesty po ktorých by ich výskum mohol viesť mimo produkciu článkov.

### 5.2. Hlavné body Akčného plánu organizácie a stav ich plnenia

V reakcii na odporúčania z poslednej akreditácie deklaruujeme, že Akčný plán ústavu je založený na skutočnosti, že organizácia je pracoviskom základného, nie aplikovaného výskumu. Jej súčasná štruktúra je výsledkom vývoja daného špecifickými potrebami stavebného výskumu ako celku, konkrétne v oblasti aplikovanej mechaniky, stavebnej fyziky a materiálového inžinierstva:

- Ústav je vedeckým pracoviskom so slobodou bádania s vysokou mierou interdisciplinarity (zdôrazňovanou aj riadiacimi orgánmi SAV) s výskumom zameraným na progresívne témy, ktoré sú ťažiskové v celosvetovom meradle. Dosiahnuté výsledky sú používané v aplikovanom výskume a praxi a výrazne zvyšujú kredit ústavu a zviditeľňujú jeho postavenie v rámci vedeckých a výskumných pracovísk.
- Ústav je pracoviskom základného výskumu so širokým spektrom medzinárodných spoluprác postavených práve na platforme vedeckého bádania. Zapojenie sa do výskumných projektov a publikovanie výsledkov v impaktovaných časopisoch po recenzii medzinárodnými expertami sú všetkými vedeckými autoritami považované za jednoznačne reprezentatívny ukazovateľ kvality realizovaného výskumu a jeho užitočnosti.

*Akčný plán ústavu je nástrojom realizácie strategických cieľov ústavu, ktorými sú:*

progresívne témy výskumu

- Vývoj pokročilých multiškálových kontinuálnych matematicko-fyzikálnych modelov, potrebných pre popis kompozitov s nanokonštituentmi.
- Vývoj pokročilých anorganických spojív založených na mnohozložkových cementoch obsahujúcich prímеси, geopolymérov a fosfátových keramických spojív.
- Výskum mechanizmu akým kumulatívne svetelné emisie z mnohých zdrojov ovplyvňujú jas nočnej oblohy je celkom novou témou v stavebnej fyzike a urbanizme.
- Inovatívne riešenia tepelnej regulácie povrchových vrstiev netransparentných vonkajších

konštrukcií budov.

Plnenie: V rámci projektov APVV, MO SR a VEGA a zabezpečenia podmienok ich realizácie v dlhodobom časovom horizonte.

- *Internacionalizácia - zlepšovanie postavenia v európskom výskumnom priestore*

Plnenie: Po formálnej aj neformálnej stránke ústav aktívne spolupracuje s mnohými zahraničnými pracoviskami. Vedenie ústavu plne podporuje úsilie o publikovanie vedeckých výsledkov v renomovaných zahraničných periodikách a vydavateľstvách s prihliadnutím na impakt faktor daného periodika a zaradenie do kvartilu s najvyšším hodnotením (Q1). Z 33 CC publikácií má ústav tento rok 22 v Q1 a 7 v Q2. Teda asi 90% všetkých publikácií je v top časopisoch. Ústav organizoval medzinárodnú konferenciu Thermophysics 2020. Bola podpísaná dohoda o spolupráci s Jakutským vedeckým centrom sibírskej pobočky Ruskej akadémie vied. Riešiteľská kapacita pracoviska sa zvýšila..

- *Rozšírenie možností domácej spolupráce vo výskume*

Plnenie: Podávanie žiadostí o národné projekty je podriadené analýze a optimalizácii aktivít pri podávaní návrhov projektov VEGA, APVV a ďalších (MVTs, MO SR), žiadatelia z ústavu sú v získavaní národných projektov dlhodobo úspešní. Spoluriešiteľmi projektov sú univerzity. Boli podané návrhy výskumných projektov v spolupráci s univerzitnými pracoviskami.

- *Aplikácie – popularizácia – publicita*

Plnenie: Tvoriví pracovníci ústavu priebežne popularizujú výsledky svojho výskumu formou článkov na internete. V hodnotenom období bola zintenzívnená popularizácia najmä formou pružnejšej aktualizácie webovej stránky ústavu, aktívneho zapojenia sa do Týždňa vedy a techniky.

- *Vyhodnocovanie kvality výstupov výskumu. Kariérny rast post doktorandov a výskumníkov*

Plnenie: Každoročne sú posudzované výsledky práce vedeckých pracovníkov s dôrazom na publikovanie v periodikách zaradených v hodnotení Q1 a Q2, zároveň sa vykonávajú každoročne, prípadne podľa potreby atestačné konania pre posudzovanie predĺženia pracovných zmlúv a pre posudzovanie žiadostí o preradenie vedeckých pracovníkov do vyššieho kvalifikačného stupňa. Bolo dosiahnuté zvýšenie rovnomernosti rozdelenia kvality výsledkov vedeckých pracovníkov, individuálne i medzi odbormi. Bolo aktualizované zloženie atestačnej komisie ústavu. V hodnotenom roku bol preradený ďalší vedecký pracovník do kvalifikačného stupňa IIa. Jeden pracovník podáva DrSc prácu. Viacerí mladí vedeckí pracovníci boli zapojení do aktivít v ústavných poradných orgánoch a v komisii VEGA.

- *Vzdelávanie – doktorandské štúdium*

Plnenie: Pre skvalitnenie doktorandského štúdia bol analyzovaný súčasný stav a využívanie aktuálnych možností. Boli prehodené študijné programy a ponúkané témy dizertačných prác. Pravidelné hodnotenie doktorandov prebieha na základe vnútorného systému kvality doktorandského štúdia, v súlade so študijnými plánmi. Bol prijatý jeden nový doktorand. Ústav má dvoch garantov doktorandského štúdia v programoch stavebníctvo a strojárstvo.

- *Nakladanie s duševným vlastníctvom*

Plnenie: Priebežne sa hľadajú efektívne riešenia nakladania s duševným vlastníctvom, osobitne predaja licencií a patentov. Venovala sa pozornosť uplatňovaniu výsledkov výskumu a zariadení v spoločenskej praxi. Bol schválený patent v USA.

- *Manažment*

Plnenie: Je naďalej otvorená téma integrácie ústavu s inými technickými ústavmi SAV. Bol znížený podiel pracovníkov so stredoškolským vzdelaním. Zároveň boli zamestnaní jeden domáci a traja zahraniční noví vedeckí pracovníci.

- *Infraštruktúra*

Plnenie: Laboratóriá ústavu boli združené do jedného celku. Prioritou je ich využívanie v rámci vedeckých projektov. Špecializované prístrojové vybavenie je prístupné partnerským organizáciám SAV a univerzitám, ako aj pre využitie v praxi.

Vedenie a vedecká rada ústavu kontrolujú plnenie akčného plánu priebežne a o výsledkoch práce ústavu sú zamestnanci každoročne informovaní na výročných schôdzach ústavu.

Členmi Medzinárodného poradného výboru Ústavu stavebníctva a architektúry SAV sú:  
doc. Zoltán Kolláth, DSc., Eotvos Loránd University, Szombathely,  
prof. Ing. Robert Černý, DrSc., České vysoké učení technické v Praze,  
Dr. Arnon Chaipanich, Ass. prof., Chiang Mai University.

### **5.3. Aktualizácia Akčného plánu organizácie v roku 2020**

V rámci Akčného plánu sa ústav sústreďí okrem uvedených bodov aj na nasledovné akcie:

- Aktívne pokračovať v hľadaní kvalifikovaných vedeckých pracovníkov doma i v zahraničí.
- Priebežne aktualizovať webovú stránku ústavu v anglickom a tiež slovenskom jazyku.
- Dokončiť vypracovanie kompaktných verzií výročných správ ústavu v anglickom jazyku.
- Pokračovať v hľadaní riešení pre predaj licencií/patentov v réžii ústavu.
- Propagácia výsledkov ústavu a špičkových pracovníkov na vedeckých sociálnych sieťach.
- Popularizácie výsledkov na internete.
- Priebežná aktualizácia kritérií hodnotenia tvorivých pracovníkov v súlade s kritériami výkonového financovania vedeckých pracovísk SAV.
- Hľadanie konsenzu v zmene názvu ústavu - súčasný názov má domáce i medzinárodné renomé.
- Organizovanie medzinárodnej konferencie 5th Central European Symposium on Building Physics 2022.

## **6. Spolupráca s univerzitami/vysokými školami a inými subjektmi v oblasti vedy a techniky, okrem aktivít uvedených v kap. 2, 3, 4**

### **6.1. Spoločné pracoviská organizácie**

#### **6.1.1. Spolupráca s univerzitami/VŠ (fakultami)**

*Pozn.: uvádzajte len tie spolupráce, na ktoré má organizácia zmluvu resp. memorandum o zriadení spoločného pracoviska, resp. o vzájomnej spolupráci v konkrétnej oblasti výskumu*

#### **6.1.2. Spoločné pracoviská s inými organizáciami SAV**

*Pozn.: uvádzajte len tie spolupráce, na ktoré má organizácia zmluvu resp. memorandum o zriadení spoločného pracoviska, resp. o vzájomnej spolupráci v konkrétnej oblasti výskumu*

### **6.2. Spoločné pracoviská organizácie s inými inštitúciami mimo SAV a VŠ**

*Pozn.: uvádzajte len tie spolupráce, na ktoré má organizácia zmluvu resp. memorandum o zriadení spoločného pracoviska, resp. o vzájomnej spolupráci v konkrétnej oblasti výskumu*

### **6.3. Spoločné projekty s univerzitami a ostatnými inštitúciami mimo SAV**

Názov projektu: Globálna charakterizácia svetelného znečistenia

Agentúra a číslo projektu: APVV-18-0014

Spolupracujúce inštitúcie: Fakulta matematiky, fyziky a informatiky UK

Koordinátor projektu: Miroslav Kocifaj

Obdobie riešenia: 1.7.2019-30.6.2023

Názov projektu: Difúzne svetlo v mestskom prostredí: nový model zohľadňujúci vlastnosti lokálnej atmosféry

Agentúra a číslo projektu: VEGA 2/0010/20

Spolupracujúce inštitúcie: Fakulta matematiky, fyziky a informatiky UK

Koordinátor projektu: Miroslav Kocifaj

Obdobie riešenia: 1.1.2020-31.12.2023

Agentúra a číslo projektu: VEGA 2/0017/20

Spolupracujúce inštitúcie: SvF TU Košice

Koordinátor projektu: Stanislav Darula

Začiatok spolupráce: 1. 1. 2020 – 31. 12. 2022

*Pozn.: uviesť konkrétne spoločné aj bilaterálne projekty na základe platnej zmluvy o spolupráci*

### **6.4. Iné typy spoločných aktivít s inštitúciami mimo SAV**

Projekt ministerstva obrany Slovenskej republiky: Nežiadúci a cielený rezonančný útlm mikrovlnných komunikačných liniek

Kód projektu: SEMOD-74-2/2019

Koordinátor projektu: Miroslav Kocifaj

Obdobie riešenia: 1.4.2019-30.6.2021

## **7. Aplikácia výsledkov výskumu v spoločenskej a hospodárskej praxi**

### **7.1. Výsledky výskumu organizácie aplikované v praxi**

### **7.2. Kontraktový – zmluvný výskum (vrátane zahraničných kontraktov)**

### **7.3. Iné formy aplikácie výsledkov výskumu v spoločenskej a hospodárskej praxi**

## 8. Aktivity pre Národnú radu SR, vládu SR, ústredné orgány štátnej správy SR a iné organizácie

### 8.1. Členstvo v poradných zboroch vlády SR, Národnej rady SR, ministerstiev SR, orgánoch EÚ, EP, NATO a pod.

Tabuľka 8a Členstvo v poradných zboroch Národnej rady SR, vlády SR, ministerstiev SR, orgánoch EÚ, EP, NATO a pod.

Meno pracovníka	Názov orgánu	Funkcia
Ing. Matúš Žemlička, PhD.	TK č. 5 Betónové konštrukcie / SK č. 2 Výroba, skúšanie betónu a zhotovovanie betónových konštrukcií; Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky	člen TK5/SK2
Prof. RNDr. Ján Sládek, DrSc.	Ministerstvo školstva	SKVH

### 8.2. Expertízna činnosť a iné služby pre štátnu správu a samosprávy

**Názov expertízy:** TK 108 Svetlo a osvetlenie

**Adresát expertízy:** Úrad pre normalizáciu, metrológiu a skúšobníctvo SR

**Spracoval:** doc. Ing. Stanislav Darula, CSc.

**Stručný opis:** predseda komisie, expertízna a normalizačno technická činnosť

**Názov expertízy:** PS 714 Revízia STN 73 4301 Budovy na bývanie

**Adresát expertízy:** Úrad pre normalizáciu, metrológiu a skúšobníctvo SR

**Spracoval:** doc. Ing. Stanislav Darula, CSc.

**Stručný opis:** člen, riešiteľ pracovnej skupiny

### 8.3. Členstvo v radách štátnych programov a podprogramov ŠPVV a ŠO

Tabuľka 8b Členstvo v radách štátnych programov a podprogramov ŠPVV a ŠO

Meno pracovníka	Názov orgánu	Funkcia
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### 8.4. Prehľad aktuálnych spoločenských problémov, ktoré riešilo pracovisko v spolupráci s Kanceláriou prezidenta SR, s vládnyimi a parlamentnými orgánmi alebo pre ich potrebu

## 9. Vedecko-organizačné a popularizačné aktivity

### 9.1. Vedecko-popularizačná činnosť

Tabuľka 9a Súhrnné počty vedecko-popularizačných činností organizácie SAV

Typ	Počet	Typ	Počet	Typ	Počet
prednášky/besedy	3	tlač	1	TV	0
rozhlas	0	internet	5	exkurzie	0
publikácie	0	multimediálne nosiče	0	dokumentárne filmy	0
iné	0				

### 9.2. Vedecko-organizačná činnosť

Tabuľka 9b Vedecko-organizačná činnosť

Názov podujatia	Domáca/ medzinárodná	Miesto	Dátum konania	Počet účastníkov
-----------------	-------------------------	--------	---------------	---------------------

### 9.3. Účasť na výstavách

### 9.4. Účasť v programových a organizačných výboroch národných konferencií

Tabuľka 9c Programové a organizačné výbory národných konferencií

Meno pracovníka	Programový	Organizačný	Programový i organizačný
Spolu			

### 9.5. Členstvo v redakčných radách časopisov

Mgr. Miroslav Kocifaj, PhD.

Journal of Quantitative Spectroscopy & Radiative Transfer (funkcia: Guest Editor)  
Remote Sensing (funkcia: Editor (Urban remote sensing))

doc. Ing. Stanislav Darula, CSc.

Light and Engineering (funkcia: člen redakčnej rady)  
Lighting Research and Technology (funkcia: člen redakčnej rady)  
VTS News (funkcia: člen redakčnej rady)

Prof.Dr.Ing. Martin-Tchingnabé Palou

Ceramics-Silikaty (funkcia: Editorial Board)  
Journal of Thermal Analysis and Calorimetry (funkcia: Editorial Board )

Prof. Ing. Ján Sládek, DrSc.

CMES-Computer Modeling in Engineering & Sciences (funkcia: editor {Corresponding editor})  
Electronic Jour. Boundary Elements (funkcia: člen)  
Jour. Computational and Applied Mechanics (funkcia: člen)  
Journal of Multiscale Modelling (funkcia: člen)



SDHM-Structural Durability and Health Monitoring Journal (funkcia: člen)  
Strojnícky časopis (funkcia: člen)

Prof. RNDr. Vladimír Sládek, DrSc.

Communications in Numerical Analysis (funkcia: člen redakčnej rady)  
Composites Part C (funkcia: člen redakčnej rady)  
Int. Jour. Engineering Analysis with Boundary Elements (funkcia: Editor)  
Journal of Industrial Mathematics and Computational Mechanics (funkcia: člen redakčnej rady)  
Newsletter of the Int. Soc. of Boundary Element Methods (funkcia: člen redakčnej rady)  
Series Advances in Boundary Elements (funkcia: člen edičnej rady)

## **9.6. Činnosť v domácich vedeckých spoločnostiach**

doc. Ing. Stanislav Darula, CSc.

SNK CIE (funkcia: člen predsedníctva, vedecký tajomník)  
SSTP - Slovenská spoločnosť pre techniku prostredia (funkcia: člen)  
SSTS-Slovenská svetelnotechnická spoločnosť (funkcia: člen predsedníctva)  
ZSVTS (funkcia: člen Rady)

Mgr. Miroslav Kocifaj, PhD.

CIE Div5, TC 5-28 (funkcia: člen)  
Slovenská astronomická spoločnosť (funkcia: člen)

Ing. Eva Kuzielová, PhD.

VEGA (funkcia: posudzovateľ)

Ing. Peter Matiašovský, CSc.

Slovenská bioklimatologická spoločnosť pri SAV (funkcia: člen)  
Slovenská fyzikálna spoločnosť pri SAV (funkcia: člen)  
Slovenská spoločnosť pre techniku prostredia (funkcia: člen)  
Zväz slovenských vedeckotechnických spoločností (funkcia: Auditor EUR-ACE akreditačného centra ZSVTS)

Prof.Dr.Ing. Martin-Tchingnabé Palou

CO-SM Qualiform s.r.o. (funkcia: člen)

Ing. Ladislav Sátor, PhD.

Slovenská spoločnosť pre mechaniku (funkcia: člen)

Prof. Ing. Ján Sládek, DrSc.

Slovenska spoločnosť pre mechaniku (funkcia: člen)

Prof. RNDr. Vladimír Sládek, DrSc.

Slovenská spoločnosť pre mechaniku (funkcia: člen hlav. výboru)

#### **9.7. Iné dôležité informácie o vedecko-organizačných a popularizačných aktivitách**

## 10. Činnosť knižnično-informačného pracoviska

### 10.1. Knižničný fond

Tabuľka 10a Knižničný fond

<b>Knižničné jednotky spolu</b>		89726
z toho	knihy a zviazané periodiká	79914
	audiovizuálne dokumenty	
	elektronické dokumenty (vrátane digitálnych)	
	mikroformy	
	iné špeciálne dokumenty - dizertácie, výskumné správy	10185
	Rukopisy, vzácne tlače	
Počet titulov dochádzajúcich periodík		2
z toho zahraničné periodiká		2
Ročný prírastok knižničných jednotiek		14
v tom	kúpou	11
	darom	3
	výmenou	
	bezodplatným prevodom	
	náhradou	
Úbytky knižničných jednotiek		
Knižničné jednotky spracované automatizovane		

Výraz „v tom“ označuje úplné (vyčerpávajúce) údaje, ktorých súčet sa musí rovnať údaju v riadku „spolu“, čiže nadradenému riadku.

Výraz „z toho“ označuje neúplné (výberové) údaje, ktorých súčet sa nemusí rovnať údaju v riadku „spolu“.

### 10.2. Výpožičky a služby

Tabuľka 10b Výpožičky a služby

<b>Výpožičky spolu (riadok 1)</b>		183
v tom z r. 1	prezenčné výpožičky	16
	absenčné výpožičky	167
v tom z r. 1	odborná literatúra pre dospelých	172
	výpožičky periodík	11
MVS iným knižniciam		3
MVS z iných knižníc		9
MMVS iným knižniciam		
MMVS z iných knižníc		
Počet vypracovaných bibliografií		
Počet vypracovaných rešerší		

### 10.3. Používatelia

Tabuľka 10c Používatelia

Registrovaní používatelia	40
Návštevníci knižnice spolu (bez návštevníkov podujatí)	58

### 10.4. Iné údaje

Tabuľka 10d Iné údaje

On-line katalóg knižnice na internete ( 1=áno, 0=nie)	0
Náklady na nákup knižničného fondu v €	980,59

### 10.5. Iné informácie o knižničnej činnosti

## **11. Aktivity v orgánoch SAV**

### **11.1. Členstvo vo Výbore Snemu SAV**

### **11.2. Členstvo v Predsedníctve SAV a vo Vedeckej rade SAV**

### **11.3. Členstvo vo vedeckých kolégiách SAV**

Ing. Peter Matiašovský, CSc.

- VK SAV pre elektroniku, materiálový výskum a technológie (člen)

### **11.4. Členstvo v komisiách SAV**

Ing. Peter Matiašovský, CSc.

- Komisia SAV pre rovnosť príležitostí (člen)

Prof. Ing. Ján Sládek, DrSc.

- Komisia SAV pre posudzovanie vedeckej kvalifikácie zamestnancov (člen)

### **11.5. Členstvo v orgánoch VEGA**

Mgr. Miroslav Kocifaj, PhD.

- komisia č. 6 pre stavebné inžinierstvo (stavebníctvo, dopravu a geodéziu) a environmentálne inžinierstvo vrátane baníctva, hutníctva a vodohospodárskych vied (člen)

Ing. Peter Matiašovský, CSc.

- Komisia VEGA pre stavebné inžinierstvo (stavebníctvo, dopravu a geodéziu) a environmentálne inžinierstvo vrátane baníctva, hutníctva a vodohospodárskych vied (člen)

Prof.Dr.Ing. Martin-Tchingnabé Palou

- Komisia VEGA pre stavebné inžinierstvo (stavebníctvo, dopravu a geodéziu) a environmentálne inžinierstvo vrátane baníctva, hutníctva a vodohospodárskych vied (Predseda komisie)

Prof. RNDr. Vladimír Sládek, DrSc.

- komisia č.6 pre stavebné inžinierstvo (stavebníctvo, dopravu a geodéziu) a environmentálne inžinierstvo vrátane baníctva a vodohospodárskych vied (člen)

## 12. Hospodárenie organizácie

### 12.1. Výdavky organizácie

Tabuľka 12a Výdavky organizácie (skutočnosť k 31. 12. 2020 v €)

Typ organizácie (RO,PO)		Zdroje, z ktorých sa kryli jednotlivé výdavky			
Výdavky	Spolu	kapitola SAV (111)	iné štátne a verejné zdroje	ostatné zdroje	% krytia z kapitoly SAV
<b>1. Bežné výdavky</b>	1367900	1052516	300885	14499	
z toho: mzdy (610)	872246	722644	147696	1906	
vedecká výchova štipendiá (640)	9006	9006	0	0	
poistné a príspevok do poisťovní (620)	271879	223179	47078	1622	
tovary a služby (630)	186721	88146	87803	10773	
transfery partnerom projektov (640)	18308	0	18308	0	
<b>2. Kapitálové výdavky</b>	0	0	0	0	
z toho: obstarávanie kapitálových aktív	0	0	0	0	
kapitálové transfery	0	0	0	0	

### 12.2. Zdroje financovania organizácie

Tabuľka 12b Zdroje financovania organizácie (skutočnosť k 31. 12. 2020 v €)

Typ organizácie (RO,PO)		Z toho kategórie			
Zdroje	Spolu	Kapitálové zdroje	zdroje na mzdy (610)	zdroje na odvody do poisťovní (620)	zdroje na transfery partnero m projektov
<b>1. kapitola SAV (111)</b>	1052516	0	722644	233179	0
z toho: VEGA	37043	0	0	0	0
MVTS výskumné projekty	1129	0	0	0	0
MVTS podpora	0	0	0	0	0
SASPRO/MOREPRO	0	0	0	0	0
Vydávanie časopisov	0	0	0	0	0

Vedecká výchova (štipendiá)	9006	0	0	0	0
OTAS (630)	0	0	0	0	0
<b>2. ŠF EÚ vr. fin. zo ŠR</b>	0	0	0	0	0
<b>3. medzinárodné grantové projekty</b>	0	0	0	0	0
z toho: H2020	0	0	0	0	0
<b>4. iné štátne a verejné zdroje (spolu)</b>	319362	0	147696	47078	18308
z toho: APVV	273918	0	124895	38323	18308
podpora z kapitoly MŠVVaŠ SR (stimuly)	0	0	0	0	0
<b>5. ostatné zdroje</b>	130805	0	1906	1622	0
z toho: príjmy z prenájmu	59185	0	0	0	0
príjmy z podnikateľskej činnosti	0	0	0	0	0
príjmy z expertnej činnosti a služieb	71619	0	1906	1622	0

### **13. Nadácie a fondy pri organizácii SAV**



## **14. Iné významné činnosti organizácie SAV**

## **15. Vyznamenania, ocenenia a ceny udelené pracovníkom organizácie v roku 2020**

### **15.1. Domáce ocenenia**

#### **15.1.1. Ocenenia SAV**

##### **Kocifaj Miroslav**

Špičková publikácia SAV (Nature index)

*Oceňovateľ: Predsedníctvo SAV*

*Opis: Publikácia v PNAS, 2019, vol. 116, No. 16, p. 7712-7717*

#### **15.1.2. Iné domáce ocenenia**

### **15.2. Medzinárodné ocenenia**

**16. Poskytovanie informácií v súlade so zákonom č. 211/2000 Z. z. o slobodnom prístupe k informáciám v znení neskorších predpisov (Zákon o slobode informácií)**

## **17. Problémy a podnety pre činnosť SAV**

**Správu o činnosti organizácie SAV spracoval(i):** RNDr., Ladislav Kómar, PhD.

Vedecká rada ústavu schválila Správu o činnosti dňa 22.1.2021.

**Riaditeľ organizácie SAV**

**Predseda vedeckej rady**

.....  
Ing. Peter Matiašovský, CSc.

.....  
Mgr. Miroslav Kocifaj, PhD.

## Prílohy

### Príloha A

#### Zoznam zamestnancov a doktorandov organizácie k 31.12.2020

##### Zoznam zamestnancov podľa štruktúry

	Meno s titulmi	Úväzok (v %)	Ročný prepočítaný úväzok
<b>Vedúci vedeckí pracovníci DrSc.</b>			
1.	Mgr. Olha Hrytsyna, DrSc.	100	1.00
2.	Prof. Ing. Ján Sládek, DrSc.	100	1.00
3.	Prof. RNDr. Vladimír Sládek, DrSc.	100	1.00
<b>Vedúci vedeckí pracovníci CSc., PhD.</b>			
<b>Samostatní vedeckí pracovníci</b>			
1.	doc. Ing. Stanislav Darula, CSc.	100	1.00
2.	Dr. Tong Kai Pong	100	0.27
3.	Mgr. Miroslav Kocifaj, PhD.	100	1.00
4.	RNDr. Ladislav Kómar, PhD.	100	1.00
5.	Ing. Eva Kuzielová, PhD.	100	1.00
6.	Ing. Peter Matiašovský, CSc.	100	1.00
7.	Prof.Dr.Ing. Martin-Tchingnabé Palou	100	1.00
8.	Prof. Wen Pihua	50	0.45
9.	Ing. Tomáš Profant, Doc.,PhD.	50	0.50
<b>Vedeckí pracovníci</b>			
1.	Ing. Peter Mihálka, PhD.,	50	0.50
2.	Mgr. Jaromír Petržala, PhD.	100	1.00
3.	Ing. Miroslav Repka, PhD.	100	1.00
4.	Ing. Ladislav Sátor, PhD.	100	1.00
5.	Ing. Michal Slaný, PhD.	50	0.25
6.	Ing. Matúš Žemlička, PhD.	100	1.00
<b>Odborní pracovníci s VŠ vzdelaním (výskumní a vývojoví zamestnanci)</b>			
1.	Ing. Jana Čepčianska	30	0.10
2.	Ing. Janette Dragomirová	30	0.15
3.	Mgr. Stanislav Fecko	50	0.50
4.	Ing. Marián Vrabec	100	1.00
5.	Mgr. Stefan Wallner	50	0.50

<b>Odborní pracovníci s VŠ vzdelaním (ostatní zamestnanci)</b>			
1.	RNDr. Anna Kocifajová	100	1.00
2.	Mgr. Renata Miklošová	100	0.10
3.	Ing. Katarína Mocková	100	1.00
4.	Mgr. Dagmar Práznovská	80	0.80
5.	Ing. Danko Sitarčíková	80	0.80
<b>Odborní pracovníci ÚSV</b>			
1.	Iveta Boříková	100	1.00
2.	Sylvia Bučičová	100	1.00
3.	Martin Habovštiak	100	1.00
4.	Katarína Jakubove	100	0.25
5.	Roman Kralovič	100	1.00
6.	Anna Rajnohová	100	1.00
7.	Dagmar Slámová	100	1.00
<b>Ostatní pracovníci</b>			
1.	Eva Janotová	80	0.80
2.	Karol Kasák	100	1.00
3.	Jozef Kováč	80	0.40
4.	Rudolf Maninka	100	1.00
5.	Lucia Pinkavová	100	1.00

**Zoznam zamestnancov, ktorí odišli v priebehu roka**

	<b>Meno s titulmi</b>	<b>Dátum odchodu</b>	<b>Ročný prepočítaný úväzok</b>
<b>Samostatní vedeckí pracovníci</b>			
1.	Mgr. Hector Antonio Solano.L., PhD.	9.4.2020	0.20
<b>Odborní pracovníci s VŠ vzdelaním (ostatní zamestnanci)</b>			
1.	Ing. Mária Považancová	31.7.2020	1.00
<b>Odborní pracovníci ÚSV</b>			
1.	Olga Adamcová	31.5.2020	1.00
<b>Ostatní pracovníci</b>			
1.	Veronika Kovárová	31.8.2020	0.00
2.	Ladislav Prikler	6.3.2020	0.20

**Zoznam doktorandov**

	Meno s titulmi	Škola/fakulta	Študijný odbor
<b>Interní doktorandi hradení z prostriedkov SAV</b>			
1.	Ing. Janette Dragomirová	Slovenská technická univerzita v Bratislave	3659 - stavebníctvo
2.	Ing. Jana Čepčianská	Slovenská technická univerzita v Bratislave	3659 - stavebníctvo
<b>Interní doktorandi hradení z iných zdrojov</b>			
<i>organizácia nemá interných doktorandov hradených z iných zdrojov</i>			
<b>Externí doktorandi</b>			
<i>organizácia nemá externých doktorandov</i>			

**Zoznam zamestnancov prijatých do jedného roka od získania PhD.**

	Meno s titulmi	Dátum obhajoby	Dátum prijatia	Úväzok (v %)
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**Zoznam emeritných vedeckých zamestnancov**



## **Príloha B**

### **Projekty riešené v organizácii**

#### **Medzinárodné projekty**

#### **Programy: UNESCO**

##### **1.) SkyMe APP (*SkyMeAPP*)**

<b>Zodpovedný riešiteľ:</b>	Miroslav Kocifaj
<b>Trvanie projektu:</b>	8.11.2017 /
<b>Evidenčné číslo projektu:</b>	
<b>Organizácia je koordinátorom projektu:</b>	nie
<b>Koordinátor:</b>	CENTROMET Consortium, National Council of Science and Technology
<b>Počet spoluriešiteľských inštitúcií:</b>	5 - Španielsko: 1, Mexiko: 2, Slovensko: 2
<b>Čerpané financie:</b>	-

Dosiahnuté výsledky:

#### **Programy: IEA**

##### **2.) Integrované riešenia pre denné a umelé osvetlenie (*Integrated Solutions for daylighting and electric lighting* )**

<b>Zodpovedný riešiteľ:</b>	Stanislav Darula
<b>Trvanie projektu:</b>	1.1.2018 / 30.6.2021
<b>Evidenčné číslo projektu:</b>	IEA SHC Task 61
<b>Organizácia je koordinátorom projektu:</b>	nie
<b>Koordinátor:</b>	Fraunhofer Institute of Building Physics
<b>Počet spoluriešiteľských inštitúcií:</b>	16 - Austrália: 1, Rakúsko: 1, Belgicko: 1, Brazília: 1, Nemecko: 2, Dánsko: 1, Švajčiarsko: 1, Čína: 1, Taliansko: 1, Japonsko: 1, Holandsko: 1, Nórsko: 1, Poľsko: 1, Švédsko: 1, USA: 1
<b>Čerpané financie:</b>	-

Dosiahnuté výsledky:

#### **Programy: Multilaterálne - iné**

##### **3.) Vplyv chemického zloženia betónu na jeho dlhodobú trvanlivosť v (ionizujúcom) ionizovanom prostredí (*The Effect of Chemical Composition of Concrete on Its Long-term Performance in Irradiated Environment*)**

<b>Zodpovedný riešiteľ:</b>	Martin-Tchingnabé Palou
<b>Zodpovedný riešiteľ v organizácii SAV:</b>	Martin-Tchingnabé Palou
<b>Trvanie projektu:</b>	1.10.2017 / 30.9.2020

**Evidenčné číslo projektu:**

**Organizácia je** nie

**koordinátorom projektu:**

**Koordinátor:** Kyoungsoo Park

**Počet spoluriešiteľských** 9 - Česko: 2, Maďarsko: 2, Kórejská republika: 3, Poľsko: 2

**inštitúcií:**

**Čerpané financie:** -

Dosiahnuté výsledky:

MVTS - Visegrad Group (V4)-Korea Joint Research Program On Chemistry and Chemical Engineering "Vplyv chemického zloženia betónu na jeho dlhodobú trvanlivosť v (ionizujúcom) ionizovanom prostredí, RADCON"

Jednotlivé úlohy, ktoré boli zvolené v roku 2020 na dosiahnuté vytýčených cieľov projektu:

Významný výsledky"

Optimalizácia zloženia ťažkých betónov na základe izotermickej vodivostnej kalorimetrie

Hydratačné teplo cementu zohráva kľúčovú úlohu pri vzniku a rozvoji trhlin v betóne. V štruktúre vznikajú ťahové napätia v dôsledku veľkých teplotných gradientov medzi jadrom a povrchom betónu a rozpínania vlhkého vzduchu v póroch. Použitie cementového spojiva s nízkym hydratačným teplom je obzvlášť dôležité v prípade masívnych stavieb z ťažkého betónu určených pre atómové elektrárne. Zloženie spojiva vhodného na prípravu ťažkého betónu s tieniacimi vlastnosťami proti rádioaktívnemu žiareniu bolo optimalizované na základe výsledkov laboratórnych skúšok o vývoji uvoľňovania hydratačného tepla pomocou izotermickej vodivostnej kalorimetrie.

Portlandský cement CEM I 42,5 R bol v rôznom množstve nahradený rôznymi prísadami (granulovanou vysokopecnou troskou, metakaolínom, kremičitým úletom, resp. vápencom) tak, aby hydratačné teplo nepresahovalo  $250 \text{ J g}^{-1}$ . Na prípravu ťažkých betónov sa použila zmes dvoch agregátov s vysokou hustotou: barytu a magnetitu. Pevnosť v tlaku pripravených materiálov presahovala 45 MPa a ich objemová hmotnosť sa pohybovala v rozmedzí 3400 až 3500  $\text{kg m}^{-3}$ . Po objemovej expanzii, ku ktorej dochádzalo počas prvých 4 h, bolo zaznamenané iba mierne zmraštenie (max.  $0.3^{\circ}/^{\circ}$ ). Materiály teda možno charakterizovať ako objemovo stále. Merané a hodnotené boli tiež tepelné vlastnosti pripravených materiálov (koeficient tepelnej vodivosti, merná tepelná kapacita, objemová tepelná kapacita). Získané výsledky preukázali zhodu s tými, ktoré sú uvedené v literatúre.

DRAGOMIROVÁ, Janette - PALOU, Martin T. - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - NOVOTNÝ, Radoslav - GMÉLING, Katalin. Optimization of cementitious composite for heavyweight concrete preparation using conduction calorimetry. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, no. 1, p. 255-266. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR). ISSN 1388-6150, Typ: ADCA

JEONG, Minkwan - PALOU, Martin T. - PARK, Kyoungsoo. Mechanical Behavior of Fine Recycled Concrete Aggregate Concrete with the Mineral Admixtures. In Materials, 2020, vol. 13, art. no. 2264. (2019: 3.057 - IF, Q2 - JCR, 0.647 - SJR, Q2 - SJR). ISSN 1996-1944. Typ: ADCA

PALOU, Martin T. - BOHÁČ, Martin - KUZIELOVÁ, Eva - NOVOTNÝ, Radoslav - ŽEMLIČKA, Matúš - DRAGOMIROVÁ, Janette. Use of calorimetry and thermal analysis to assess the heat of supplementary cementitious materials during the hydration of composite cementitious binders. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, no. 1, p. 97-117. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR). ISSN 1388-6150.

DRAGOMIROVÁ, Janette - PALOU, Martin T. - GMÉLING, Katalin - SZILÁGYI, Veronika - HARSÁNYI, Ildikó - SZENTMIKLÓSI, László. Experimental study of selected properties of heavyweight concrete based on analysis of chemical composition and radioactive elements of its components, scientific.net. Typ: ADM

PALOU, Martin T. – DRAGOMIROVÁ, Janette – JU, Mikwan – PARK, Kyoungsoo – KUZIELOVÁ, Eva – ŽEMLIČKA, Matúš – KOPLIK, Ján. Mix Proportion and Experimental study of Heavyweight Self-Compacting Concrete based on Magnetite and Barite; International Journal of Concrete Structures and Materials. Submitted to Manuscript Number: CSTR-D-20-00087; International Journal of Concrete Structures and Materials

## Programy: Iné

### 4.) Program metropolitných štúdií (*Programa en Estudios Metropolitanos (Metropolitan Studies Programme)*)

**Zodpovedný riešiteľ:** Miroslav Kocifaj  
**Trvanie projektu:** 1.9.2014 /  
**Evidenčné číslo projektu:** 2723 CONACYT  
**Organizácia je** nie  
**koordinátorom projektu:**  
**Koordinátor:** Cátedras CONACYT  
**Počet spoluriešiteľských** 0  
**inštitúcií:**  
**Čerpané financie:** -

#### Dosiahnuté výsledky:

## Domáce projekty

## Programy: VEGA

### 1.) Výskum priamej zložky dennej osvetlenosti v architektonickom a interiérovom prostredí (*Research of direct component of daylighting in architectural and interior environment*)

**Zodpovedný riešiteľ:** Stanislav Darula  
**Trvanie projektu:** 1.1.2020 / 31.12.2022  
**Evidenčné číslo projektu:** VEGA- 2/0017/20  
**Organizácia je** áno  
**koordinátorom projektu:**  
**Koordinátor:** Ústav stavebníctva a architektúry SAV  
**Počet spoluriešiteľských** 0  
**inštitúcií:**  
**Čerpané financie:** VEGA SAV: 2345 €

#### Dosiahnuté výsledky:

DOLNIKOVA, Erika – KATUNSKY, Dušan – DARULA, Stanislav. Assessment of the level of daylight in the premises of engineering operation considering alternative shapes of skylights. Building and Environment, Volume 180, August 2020, <https://doi.org/10.1016/j.buildenv.2020.106976>

DARULA, Stanislav. Denné osvetlenie z pohľadu noriem STN a európskej EN 17037. Národné centrum ošetrovateľstvá a nelékařských zdravotníckých oborů, Inovačný kurz 851-530/2020 HYGIENA OSVĚTLOVÁNÍ pre odborných pracovníkov KHS a zdravotných ústavov. Brno, 2. – 3.

### 3. 2020, prednáška

DARULA, Stanislav. Denné osvetlenie budov v kontexte európskej a slovenských noriem. 7 ročník Navrhujeme a stavíme budovy s takmer nulovou potrebou energie. On line odborný seminár 7. ročníka Navrhujeme a stavíme budovy s takmer nulovou potrebou. 23.11.2020, online prednáška

DARULA, Stanislav. Požiadavky na denné osvetlenie budov a ich dopad na hodnotenie energetickej hospodárnosti osvetlenia. Online konferencia SKSI Hodnotenie energetickej hospodárnosti osvetlenia v budovách v zmysle aktuálnych predpisov. SKSI Bratislava, 25. 11. 2020, online prednáška

## **2.) Difúzne svetlo v mestskom prostredí: nový model zohľadňujúci vlastnosti lokálnej atmosféry** (*Diffuse light in urban environment: A new model which embraces the optical properties of a local urban atmosphere*)

<b>Zodpovedný riešiteľ:</b>	Miroslav Kocifaj
<b>Trvanie projektu:</b>	1.1.2020 / 31.12.2023
<b>Evidenčné číslo projektu:</b>	DIFFUSE
<b>Organizácia je koordinátorom projektu:</b>	áno
<b>Koordinátor:</b>	Ústav stavebníctva a architektúry SAV
<b>Počet spoluriešiteľských inštitúcií:</b>	0
<b>Čerpané financie:</b>	VEGA SAV: 7034 €

### Dosiahnuté výsledky:

KOCIFAJ, Miroslav\*\* - KÓMAR, Ladislav - SOLANO LAMPFAR, H. A. - WALLNER, Stefan. Are population-based models advantageous in estimating the lumen outputs from light-pollution sources? In Monthly Notices of the Royal Astronomical Society: Letters, 2020, vol. 496, no. 1, p. L138-L141. (2019: 5.356 - IF, Q1 - JCR, 1.964 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 1745-3925.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. VEGA 2/0010/20 : Difúzne svetlo v mestskom prostredí: nový model zohľadňujúci vlastnosti lokálnej atmosféry). Typ: ADCA

WALLNER, Stefan\* - KOCIFAJ, Miroslav\* - KÓMAR, Ladislav - SOLANO LAMPFAR, H. A.. Night-sky imaging as a potential tool for characterization of total lumen output from small and medium-sized cities. In Monthly Notices of the Royal Astronomical Society, 2020, vol. 494, iss. 4, p. 5008-5017. (2019: 5.356 - IF, Q1 - JCR, 1.937 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 0035-8711.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. VEGA 2/0010/20 : Difúzne svetlo v mestskom prostredí: nový model zohľadňujúci vlastnosti lokálnej atmosféry). Typ: ADCA

KOCIFAJ, Miroslav - BARÁ, Salvador. Aerosol characterization using satellite remote sensing of light pollution sources at night. In Monthly Notices of the Royal Astronomical Society: Letters, 2020, vol. 495, p. L76-L80. (2019: 5.356 - IF, Q1 - JCR, 1.964 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 1745-3925.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. VEGA 2/0010/20 : Difúzne svetlo v mestskom prostredí: nový model zohľadňujúci vlastnosti lokálnej atmosféry). Typ: ADCA

### **3.) Výskum energetickej účinnosti inovatívnych BIPV/T článkov chladených PCM**

**technológiou.** (*The energy efficiency of an innovative BIPV/T-TE-PCM module with PCM passive cooling*)

**Zodpovedný riešiteľ:** Ladislav Kómar  
**Trvanie projektu:** 1.1.2020 / 31.12.2023  
**Evidenčné číslo projektu:** 2/0095/20  
**Organizácia je** áno  
**koordinátorom projektu:**  
**Koordinátor:** Ústav stavebníctva a architektúry SAV  
**Počet spoluriešiteľských** 0  
**inštitúcií:**  
**Čerpané financie:** VEGA SAV: 4220 €

*Dosiahnuté výsledky:*

V prvom roku bol podľa plánu navrhnutý prvotný model integrovaného BIPV/T-TE-PCM článku so zohľadnením fyzikálnych javov prenosu tepla medzi jednotlivými vrstvami v systéme. Bol vylepšený simulačný nástroj pre výpočet prenosu tepla v systéme. Pomocou nascriptovaného modelu rozptylu žiarenia v oblačnej atmosfére, sa získali parametre aerosolu pri danom pokrytí oblohy oblakmi a z nich rozloženie žiary na oblohe a vertikálnej ožiarenosti. Pre monitoring a zber dát pri reálnych klimatických podmienkach boli na streche USTARCH SAV inštalované dva PV moduly s viacbodovým meraním teploty, horizontálnej a vertikálnej ožiarenosti, ako aj meteo stanica na merania poveternostných podmienok v reálnom čase. Čiastkové výsledky z modelovania boli prezentované na konferencii Therophysics 2020 v Smoleniciach, ktorú organizoval USTARCH SAV.

**4.) Štúdium procesov hydratácie a vývoja mikroštruktúry v mnohózložkových cementových spojivách** (*Study of hydration process and microstructure development in multi-component cementitious binders*)

**Zodpovedný riešiteľ:** Martin-Tchingnabé Palou  
**Trvanie projektu:** 1.1.2017 / 31.12.2020  
**Evidenčné číslo projektu:** 2/0097/17  
**Organizácia je** áno  
**koordinátorom projektu:**  
**Koordinátor:** Ústav stavebníctva a architektúry SAV  
**Počet spoluriešiteľských** 0  
**inštitúcií:**  
**Čerpané financie:** VEGA SAV: 9378 €

*Dosiahnuté výsledky:*

Posledné obdobie realizácie projektu bolo zamerané predovšetkým na dlhodobé (po dobu jedného roka) a podrobné štúdium pórovej štruktúry a s ňou súvisiacich mechanických vlastností (pevnosť v tlaku, ohybová pevnosť) štvorzložkových kompozitných cementových materiálov s 25, 30 a 35 hm.% náhradou cementu.

V súlade s reaktivitou použitých prímies bolo najväčšie zjemnenie pórovej štruktúry zaznamenané pre vzorky pripravené s najvyšším obsahom veľmi jemného kremičitého úletu a najnižšou mierou nahradenia cementu. Vysoká puzolánová aktivita kremičitého úletu sa prejavila hlavne v skorých časoch hydratácie. Najväčší rozdiel medzi pevnosťou tejto vzorky a ďalšími zmesovými vzorkami a predovšetkým referenčnou vzorkou sa prejavil po siedmych dňoch hydratácie, čo dobre korešpondovalo s výsledkami ortuťovej porozimetrie (pevnosť v tlaku ~ 93 MPa, celková pórovitosť 9,8 %; referenčná vzorka: pevnosť v tlaku ~ 63 MPa, celková pórovitosť 12,6 %). V prípade dlhších časov ošetrenia sa pozitívne prejavil aj vplyv zloženia s najvyšším podielom trosky (15 hm.%)

(pevnosť v tlaku po 365 dňoch ~ 99 MPa, celková pórovitosť 10,0 %; referenčná vzorka: pevnosť v tlaku ~ 96 MPa, celková pórovitosť 11,8 %), rovnako ako metakaolínu (15 hm.%), i keď dosiahnuté pevnosti boli do značnej miery ovplyvnené tiež najnižším množstvom cementu (65 hm.%). Možno predpokladať, že v týchto vzorkách zodpovedali za vývoj pevnostných charakteristík vo väčšej miere C-A-S-H fázy.

DRAGOMIROVÁ, Janette - PALOU, Martin T. - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - NOVOTNÝ, Radoslav - GMÉLING, Katalin. Optimization of cementitious composite for heavyweight concrete preparation using conduction calorimetry. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, no. 1, p. 255-266. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR). ISSN 1388-6150.(APVV-15-0631

KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - MÁŠILKO, Jiří - HUDEC, Pavol - PALOU, Martin T. Influence of hydrothermal treatment parameters on the phase composition of zeolites. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, p. 37-50. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR). ISSN 1388-6150.Typ: ADCA

KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - JANČA, Martin - ŠILER, Pavel - PALOU, Martin T. Later stages of Portland cement hydration influenced by different portions of silica fume, metakaolin and ground granulated blast-furnace slag. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, no. 1, p. 339-348. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR). ISSN 1388-6150. Typ: ADCA

PALOU, Martin T. - BOHÁČ, Martin - KUZIELOVÁ, Eva - NOVOTNÝ, Radoslav - ŽEMLIČKA, Matúš - DRAGOMIROVÁ, Janette. Use of calorimetry and thermal analysis to assess the heat of supplementary cementitious materials during the hydration of composite cementitious binders. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, no. 1, p. 97-117. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR). ISSN 1388-6150. Typ: ADCA

##### **5.) Multiškálové štúdium a modelovanie kompozitných makrokonštrukcií (*Multiscale study and modelling of composite macrostructures*)**

<b>Zodpovedný riešiteľ:</b>	Vladimír Sládek
<b>Trvanie projektu:</b>	1.1.2020 / 31.12.2023
<b>Evidenčné číslo projektu:</b>	2/0061/20
<b>Organizácia je</b>	áno
<b>koordinátorom projektu:</b>	
<b>Koordinátor:</b>	Ústav stavebníctva a architektúry SAV
<b>Počet spoluriešiteľských inštitúcií:</b>	0
<b>Čerpané financie:</b>	VEGA SAV: 14066 €

##### Dosiahnuté výsledky:

SLÁDEK Vladimír, SLÁDEK, Ján, REPKA, Miroslav, SÁTOR, Ladislav: FGM micro/nano-plates within modified couple stress elasticity. Compos Struct 245 (2020) 112294.  
<https://doi.org/10.1016/j.compstruct.2020.112294>

SÁTOR, Ladislav, SLÁDEK Vladimír, SLÁDEK, Ján: Analysis of coupling effects in FGM piezoelectric plates by a meshless method. Composite Struct 244 (2020), 112256.  
<https://doi.org/10.1016/j.compstruct.2020.112256>

SLÁDEK, Ján, SLÁDEK Vladimír, REPKA, Miroslav, SCHMAUDER, Siegfried. Crack analysis of nano-sized thermoelectric material structures. Eng Fract Mech 234 (2020) 107078. <https://doi.org/10.1016/j.engfracmech.2020.107078>

LI, J., SLÁDEK, Ján, SLÁDEK Vladimír, WEN, P.H.: Hybrid meshless displacement discontinuity method (MDDM) in fracture mechanics: Static and dynamic. European Journal of Mechanics/ A Solids 83 (2020) 104023. <https://doi.org/10.1016/j.euromechsol.2020.104023>

SLÁDEK, Ján, SLÁDEK Vladimír, WEN, P.H.: The meshless analysis of scale-dependent problems for coupled fields, Materials 2020, 13, 2527. <https://doi.org/10.3390/ma13112527>

SLÁDEK, Ján, SLÁDEK Vladimír, WUNSCHE, Michael: Crack analysis in magneto-electro-elastic solids by gradient theory. Mechanics of Advanced Materials and Structures 27 (2020), 1354-1371. <https://doi.org/10.1080/15376494.2018.1512020>

SLÁDEK, Ján, SLÁDEK Vladimír, REPKA, Miroslav, SCHMAUDER, Siegfried: Gradient theory for crack analysis in thermoelectric materials. AIP Conference Proceedings 2309, 020003 (2020). <https://doi.org/10.1063/5.0033983>

SLÁDEK Vladimír, SLÁDEK, Ján: Unified theory of beam bending within flexoelectricity with including piezoelectricity. MATEC Web of Conferences 310, 00063 (2020). <https://doi.org/10.1051/mateconf/202031000063>

## Programy: APVV

### 6.) Globálna charakterizácia svetelného znečistenia (*Global Characterization of Skyglow*)

<b>Zodpovedný riešiteľ:</b>	Miroslav Kocifaj
<b>Trvanie projektu:</b>	1.7.2019 / 30.6.2023
<b>Evidenčné číslo projektu:</b>	APVV-18-0014
<b>Organizácia je koordinátorom projektu:</b>	áno
<b>Koordinátor:</b>	Ústav stavebníctva a architektúry SAV
<b>Počet spoluriešiteľských inštitúcií:</b>	0
<b>Čerpané financie:</b>	APVV: 45726 €

#### Dosiahnuté výsledky:

- KOCIFAJ, Miroslav\*\* - KUNDRACIK, F. - BILÝ, Ondrej. Emission spectra of light-pollution sources determined from the light-scattering spectrometry of the night sky. In Monthly Notices of the Royal Astronomical Society, 2020, vol. 491, iss. 4, p. 5586-5594. (2019: 5.356 - IF, Q1 - JCR, 1.937 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 0035-8711.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia). Typ: ADCA
- KOCIFAJ, Miroslav\*\* - KUNDRACIK, F. Multi-wavelength radiometry of aerosols designed for more accurate night sky brightness predictions. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 250, art. no. 106998. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia). Typ: ADCA
- KOCIFAJ, Miroslav\*\* - VIDEEN, Gorden - KUNDRACIK, F. Charge-controlled optical resonances in small particles: Recent developments, challenges and prospects. In Journal of

Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 240, art. no. 106703, p. 6703-6703.

(2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. SEMOD-74-2/2019 : Nežiadúci a cielený rezonančný útlm mikrovlnných komunikačných liniek). Typ: ADCA

- KOCIFAJ, Miroslav - BARÁ, Salvador. Aerosol characterization using satellite remote sensing of light pollution sources at night. In Monthly Notices of the Royal Astronomical Society: Letters, 2020, vol. 495, p. L76-L80. (2019: 5.356 - IF, Q1 - JCR, 1.964 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 1745-3925.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia). Typ: ADCA

- KOCIFAJ, Miroslav\*\* - KÓMAR, Ladislav - SOLANO LAMPHAR, H. A. - WALLNER, Stefan. Are population-based models advantageous in estimating the lumen outputs from light-pollution sources? In Monthly Notices of the Royal Astronomical Society: Letters, 2020, vol. 496, no. 1, p. L138-L141. (2019: 5.356 - IF, Q1 - JCR, 1.964 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 1745-3925.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. VEGA 2/0010/20 : Difúzne svetlo v mestskom prostredí: nový model zohľadňujúci vlastnosti lokálnej atmosféry). Typ: ADCA

- PIEDRA, P. - GOBERT, C. - KALUME, A. - PAN, Yong-Le - KOCIFAJ, Miroslav - MUINONEN, Karri - PENTTILA, A. - ZUBKO, Evgenij - VIDEEN, Gorden\*\*. Where is the machine looking? Locating discriminative light-scattering features by class-activation mapping. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 247, art. no. 106936. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia). Typ: ADCA

- SOLANO LAMPHAR, H. A.. Spatio-temporal association of light pollution and urban sprawl using remote sensing imagery and GIS: A simple method based in Otsu's algorithm. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 251, art. no. 107060. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia). Typ: ADCA

- WALLNER, Stefan\* - KOCIFAJ, Miroslav\* - KÓMAR, Ladislav - SOLANO LAMPHAR, H. A.. Night-sky imaging as a potential tool for characterization of total lumen output from small and medium-sized cities. In Monthly Notices of the Royal Astronomical Society, 2020, vol. 494, iss. 4, p. 5008-5017. (2019: 5.356 - IF, Q1 - JCR, 1.937 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 0035-8711.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. VEGA 2/0010/20 : Difúzne svetlo v mestskom prostredí: nový model zohľadňujúci vlastnosti lokálnej atmosféry). Typ: ADCA

## 7.) Výskum a vývoj mnohozložkových cementových zmesí pre špeciálne konštrukčné materiály (*Research and development of multi-component cementitious blends for special construction materials*)

<b>Zodpovedný riešiteľ:</b>	Martin-Tchingnabé Palou
<b>Trvanie projektu:</b>	1.7.2020 / 30.6.2024
<b>Evidenčné číslo projektu:</b>	APVV-19-0490
<b>Organizácia je</b>	áno
<b>koordinátorom projektu:</b>	
<b>Koordinátor:</b>	Ústav stavebníctva a architektúry SAV
<b>Počet spoluriešiteľských inštitúcií:</b>	0
<b>Čerpané financie:</b>	APVV: 22774 €

Dosiahnuté výsledky:



Janette Dragomirová, Martin T. Palou, Katalin Gméling, Veronika Szilágyi, Ildikó Harsányi, László Szentmiklósi. Experimental study of selected properties of heavyweight concrete based on analysis of chemical composition and radioactive elements of its components, Solid State Phenomenon, ISSN: 1662-9779, Vol. 321, pp 113-118. Online

**8.) Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch** (*Research on High Performance cementitious Composites under hydrothermal conditions for potential application in deep borewells*)

**Zodpovedný riešiteľ:** Martin-Tchingnabé Palou  
**Trvanie projektu:** 1.7.2016 / 30.6.2020  
**Evidenčné číslo projektu:** APVV-15-0631  
**Organizácia je koordinátorom projektu:** áno  
**Koordinátor:** Ústav stavebníctva a architektúry SAV  
**Počet spoluriešiteľských inštitúcií:** 0  
**Čerpané financie:** APVV: 41510 €

Dosiahnuté výsledky:

APVV-15-0631 – časť „Numerické simulácie podmienok hlbokých geotermálnych a ropných vrtov“

V roku 2020 bolo naše úsilie zamerané na vývoj numerických modelov popisujúcich celý hĺbkový vrt a výsledky boli porovnané s výsledkami získanými zo zjednodušeného modelu predstavujúceho iba vybranú časť studne a jej okolia. Model úplného vrtu poskytuje spoľahlivejšie výsledky, pretože umožňuje modelovať variabilitu materiálových charakteristík v závislosti od geologického zloženia prostredia vrtu a teploty okolia; zohľadňuje lokálny výskyt zmeny teploty okolia, resp. diskontinuita v skalách okolo studne.

Podrobnejšiu diskusiu o dosiahnutých výsledkoch možno nájsť v predmetných publikáciách, ako aj vo výročných správach o riešení projektu. Je dôležité poznamenať, že za experimentálnych podmienok dosiahli materiály, ktoré sme vyvinuli, vyššie hodnoty pevnostných charakteristík, ako boli získané z modelových výpočtov. Možno ich preto považovať za perspektívne pre aplikácie v geotermálnych vrtoch do simulovaných hĺbok (5 km až 10 km).

Sadovský, Zoltán., Kriváček, Jozef. Influential geometric imperfections in buckling of axially compressed cylindrical shells – A novel approach. Engineering Structures 223 (2020) 111170; doi:10.1016/j.engstruct.2020.111170; Typ: ADC

Keďže cementovanie v geotermálnych vrtoch môže byť ovplyvnené, či dokonca narušené (oslabenie štruktúry, zvýšenie priepustnosti) reakciami hydratačných produktov s CO<sub>2</sub>, projekt sa v roku 2020 zameriaval na stanovenie odolnosti odolnosti zatvrdnutých nami vyvinutých vysokohodnotných cementových kompozitov proti karbonatizácii v podmienkach simulujúcich reálne vrty. S ohľadom na geologické podmienky na našom území sme zvolili podmienky s teplotami okolo 150 °C, pri ktorých je CO<sub>2</sub> rozpustený v slanej minerálnej vode. Zloženie roztoku podobné geotermálnej vode Na-Cl typu, ktorá je obohatená o CO<sub>2</sub>, bolo vypočítané na základe skutočného zloženia geotermálnej vody. Koncentrácia solí v geotermálnej vode ovplyvňuje rozpustnosť CO<sub>2</sub> a je preto dôležitým faktorom pri výskume karbonatizácie.

Experimenty realizované v autokláve pri vysokých teplotách a porovnávané s výsledkami urýchlenej karbonatizácie vzoriek v CO<sub>2</sub> komore preukázali, že stupeň karbonatizácie do veľkej miery ovplyvňuje prístup CO<sub>2</sub> v skorých štádiách hydratácie. Vyšší obsah uhličitanov bol detegovaný v trojzložkových vzorkách (cement triedy G – kremičitý úlet – troska) pripravených s vyšším obsahom vysokopečnej trosky ako vo vzorkách pripravených náhradou trosky metakaolínom. Avšak v prípade, že boli kontaktu s CO<sub>2</sub> vystavené vzorky, ktoré boli najskôr autoklávované, mieru karbonatizácie určovala pórová štruktúra vytvorená predovšetkým vplyvom

vysokých teplôt.

**9.) Multiškalovala teória flexoelektricity a nové metódy pre detekciu mikrotrhlín v reálnom čase v dielektrických materiáloch** (*A multiscale flexoelectric theory and a new method for real-time detection of microcracks in dielectric materials*)

**Zodpovedný riešiteľ:** Ján Sládek  
**Trvanie projektu:** 1.10.2018 / 30.9.2021  
**Evidenčné číslo projektu:** SK-CN-RD-18-0005  
**Organizácia je** áno  
**koordinátorom projektu:**  
**Koordinátor:** Ústav stavebníctva a architektúry SAV  
**Počet spoluriešiteľských inštitúcií:** 1 - Čína: 1  
**Čerpané financie:** APVV: 79188 €

Dosiahnuté výsledky:

- [1] X. Tian, M. Xu, Q. Deng, J. Sladek, V. Sladek, M. Repka, Q. Li: A general explicit solution to a micro-hole in flexoelectric solids, *Acta Mechanica* 231 (2020) 4851-4865.  
<https://doi.org/10.1007/s00707-020-02792-7>
- [2] L. Sator, V. Sladek, J. Sladek: Analysis of coupling effects in FGM piezoelectric plates by a meshless method. *Composite Structures* 244 (2020), 112256.  
<https://doi.org/10.1016/j.compstruct.2020.112256>
- [3] J. Sladek, V. Sladek, M. Repka, S. Schmauder: Crack analysis of nano-sized thermoelectric material structures. *Engineering Fracture Mechanics* 234 (2020) 107078.
- [4] O. Hrytsyna: A Bernoulli-Euler beam model based on the local gradient theory of elasticity. *Journal of Mechanics of Materials and Structures* 15 (2020) No 4, 471-487.  
<https://doi.org/10.2140/jomms.2020.15.471>
- [5] O. Hrytsyna: Applications of the local gradient elasticity to the description of the size effect of shear modulus. *SN Applied Sciences* 2 (2020) 1453.  
<https://doi.org/10.1007/s42452-020-03217-9>
- [6] J. Sladek, S. Hocker, H. Lipp, V. Sladek, Q. Deng: Atomistic approach for the evaluation of direct flexoelectric coefficients in gradient theory, *Ferroelectrics* 569 (2020).
- [7] J. Sladek, V. Sladek, S.M. Hosseini: Analysis of a curved Timoshenko nano-beam with flexoelectricity. *Acta Mechanica* (accepted)
- [8] X. Tian, J. Sladek, V. Sladek, Q. Deng, Q. Li: Collocation mixed finite elements for flexoelectric solids. *International Journal of Solids and Structures* (submitted).
- [9] J. Sladek, V. Sladek, M. Repka, E. Pan: Size effect in piezoelectric semiconductor nanostructures, *European Journal of Mechanics – A solids* (submitted).
- [10] J. Sladek, V. Sladek, M. Repka, Q. Deng: Flexoelectric effect in dielectrics under a dynamic load, *Composite Structures* (submitted).
- [11] O. Hrytsyna: Local Gradient Bernoulli-Euler Beam Model for Dielectrics: Effect of Local Mass Displacement on Coupled Fields. *Mathematics and Mechanics of Solids*. (accepted)  
<https://doi.org/10.1177/1081286520963374>

**10.) Optimálny návrh mikro/nano konštrukcii pre metamateriály** (*Optimal design of micro/nano structures for metamaterials*)

**Zodpovedný riešiteľ:** Ján Sládek  
**Trvanie projektu:** 1.7.2019 / 30.6.2023

**Evidenčné číslo projektu:** APVV-18-0004  
**Organizácia je** áno  
**koordinátorom projektu:**  
**Koordinátor:** Ústav stavebníctva a architektúry SAV  
**Počet spoluriešiteľských** 0  
**inštitúcií:**  
**Čerpané financie:** APVV: 60588 €

Dosiahnuté výsledky:

- [1] J. Sladek, V. Sladek, M. Repka, E. Pan: A novel gradient theory for thermoelectric material structures. *International Journal of Solids and Structures*, 206 (2020) 292-303.  
<https://doi.org/10.1016/j.ijsolstr.2020.09.023>
- [2] S.M. Hosseini, J. Sladek, V. Sladek: Nonlocal coupled photo-thermoelasticity analysis in a semiconducting micro/nano beam resonator subjected to plasma shock loading: A Green-Naghdi-based analytical solution. *Applied Mathematical Modelling* 88 (2020) 631-651.  
<https://doi.org/10.1016/j.apm.2020.06.069>
- [3] J. Li, J. Sladek, V. Sladek, P.H. Wen: Hybrid meshless displacement discontinuity method (MDDM) in fracture mechanics: Static and dynamic. *European Journal of Mechanics/ A Solids* 83 (2020) 104023. <https://doi.org/10.1016/j.euromechsol.2020.104023>
- [4] H. Zheng, J. Sladek, V. Sladek, S.K. Wang, P.H. Wen: Hybrid meshless/displacement discontinuity method for FGM Reissner's plate with cracks. *Applied Mathematical Modeling* 90 (2021) 1226-1244. <https://doi.org/10.1016/j.apm.2020.10.023>
- [5] V. Sladek, J. Sladek, M. Repka, L. Sator: FGM micro/nano-plates within modified couple stress elasticity. *Composite Structures* 245 (2020) 112294.  
<https://doi.org/10.1016/j.compstruct.2020.112294>
- [6] J. Sladek, V. Sladek, P.H. Wen: The meshless analysis of scale-dependent problems for coupled fields, *Materials* 2020, 13, 2527. <https://doi.org/10.3390/ma13112527>
- [7] J. Sladek, V. Sladek, M. Repka: Path independent J-integral for cracks in decagonal quasicrystals, *MATEC Web of Conferences* 310 (2020) 00006.  
<https://doi.org/10.1051/matecconf/202031000006>
- [8] M. Repka, L. Sator: Thermo-electro-mechanical behaviour of nano-sized structures, *MATEC Web of Conferences* 310 (2020) 00060.  
<https://doi.org/10.1051/matecconf/2020310000060>
- [9] J. Sladek, V. Sladek, M. Repka, S. Schmauder: Gradient theory for crack analysis in thermoelectric materials. *AIP Conference Proceedings* 2309 (2020) 020003.  
<https://doi.org/10.1063/5.0033983>
- [10] L. Sator, V. Sladek, J. Sladek: Bending response of FGPM plates under voltage load. *MATEC Web of Conferences* 310, 00058 (2020). <https://doi.org/10.1051/matecconf/2020310000058>
- [11] V. Sladek, J. Sladek: Unified theory of beam bending within flexoelectricity with including piezoelectricity. *MATEC Web of Conferences* 310, 00063 (2020).  
<https://doi.org/10.1051/matecconf/2020310000063>

**Programy: Iné projekty**

**11.) Nežiadúci a cielečný rezonančný útlm mikrovlnných komunikačných liniek** (*The mechanisms of targeted resonant attenuation of microwave signals*)

**Zodpovedný riešiteľ:** Miroslav Kocifaj  
**Trvanie projektu:** 1.4.2019 / 30.6.2021  
**Evidenčné číslo projektu:** SEMOD-74-2/2019  
**Organizácia je** áno

**koordinátorom projektu:**

**Koordinátor:** Ústav stavebníctva a architektúry SAV

**Počet spoluriešiteľských** 0

**inštitúcií:**

**Čerpané financie:** Ministerstvo obrany: 41838 €

*Dosiahnuté výsledky:*

- KOCIFAJ, Miroslav\*\* - VIDEEN, Gorden - KUNDRACIK, F. Charge-controlled optical resonances in small particles: Recent developments, challenges and prospects. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 240, art. no. 106703, p. 6703-6703. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073.(APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. SEMOD-74-2/2019 : Nežiadúci a cielený rezonančný útlm mikrovlnných komunikačných liniek). Typ: ADCA
- KUNDRACIK, F. - KOCIFAJ, Miroslav\*\* - VIDEEN, Gorden - MARKOŠ, Peter. Optical properties of charged nonspherical particles determined using the discrete dipole approximation. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 254, art. no. 107245. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073.(SEMOD-74-2/2019 : Nežiadúci a cielený rezonančný útlm mikrovlnných komunikačných liniek). Typ: ADCA

## Príloha C

### Publikačná činnosť organizácie (generovaná z ARL)

#### AAA Vedecké monografie vydané v zahraničných vydavateľstvách

- AAA01 HRYTSYNA, Olha - KONDRAT, Vasyl. Local Gradient Theory for Dielectrics : Fundamentals and Applications. Jenny Stanford Publishing, 2020. 330 p. Dostupné na: <https://doi.org/10.1201/9781003006862> . ISBN 978-981-4800-2-4

#### ADCA Vedecké práce v zahraničných karentovaných časopisoch – impaktovaných

- ADCA01 BARENTINE, John C.\*\* - KUNDRACIK, F. - KOCIFAJ, Miroslav - SANDERS, Jessie C. - ESQUERDO, Gilbert A. - DALTON, Adam M. - FOOTT, Bettymaya - GRAUER, Albert - TUCKER, Scott - KYBA, Christopher C. M. Recovering the city street lighting fraction from skyglow measurements in a large-scale municipal dimming experiment. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 253, art. no. 107120. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2020.107120> (APVV-18-0014 : Globálna charakterizácia svetelného znečistenia)
- ADCA02 DAMBRAUSKAS, T. - KNABIKAITĖ, I. - EISINAS, A. - BALTAKYS, K. - PALOU, Martin T. Influence of Cr<sup>3+</sup>, Co<sup>2+</sup> and Cu<sup>2+</sup> on the formation of calcium silicates hydrates under hydrothermal conditions at 200 °C. In Journal of Asian Ceramic Societies, 2020, vol. 8, no. 3, p. 753-763. (2019: 2.653 - IF, Q1 - JCR, 0.647 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 2187-0764. Dostupné na: <https://doi.org/10.1080/21870764.2020.1789287>
- ADCA03 DOLNIKOVA, E.\*\* - KATUNSKY, D. - DARULA, Stanislav. Assessment of overcast sky daylight conditions in the premises of engineering operations considering two types of skylights. In Building and Environment, 2020, vol. 180, art. no. 106976. (2019: 4.971 - IF, Q1 - JCR, 1.871 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0360-1323. Dostupné na: <https://doi.org/10.1016/j.buildenv.2020.106976>
- ADCA04 DRAGOMIROVÁ, Janette - PALOU, Martin T. - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - NOVOTNÝ, Radoslav - GMÉLING, Katalin. Optimization of cementitious composite for heavyweight concrete preparation using conduction calorimetry. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, no. 1, p. 255-266. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-020-09530-0> (APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. VEGA 2/0097/17 : Štúdium procesov hydratácie a vývoja mikroštruktúry v mnohozložkových cementových spojivách. V4-KOREA\_RADCON : Vplyv chemického zloženia betónu na jeho dlhodobú trvanlivosť v (ionizujúcom) ionizovanom prostredí. SK-KR-18-0006 : Materiálové zloženie a mechanické vlastnosti ťažkého a samozhutňujúceho sa betónu)
- ADCA05 HOSSEINI, S. M.\*\* - SLÁDEK, Ján - SLÁDEK, Vladimír. Nonlocal coupled photo-thermoelasticity analysis in a semiconducting micro/nano beam resonator subjected to plasma shock loading: A Green-Naghdi-based analytical solution. In Applied Mathematical Modeling, 2020, vol. 88, p. 631-651. (2019: 3.633 - IF, Q1 - JCR, 0.957 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0307-904X. Dostupné na: <https://doi.org/10.1016/j.apm.2020.06.069> (APVV-14-

- 0440 : Multifyzikálne problémy v doskách z funkcionálne gradientných materiálov. APVV-18-0004 : Optimálny návrh mikro/nano konštrukcií pre metamateriály)
- ADCA06 HRYTSYNA, Olha - KONDRAT, Vasyl. Local gradient theory for thermoelastic dielectrics: Accounting for mass and electric charge transfer due to microstructure changes. In Journal of mechanics of materials and structures, 2019, vol. 14, no. 4, p. 549-568. (2018: 1.239 - IF, Q4 - JCR, 0.572 - SJR, Q2 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 1559-3959. Dostupné na: <https://doi.org/10.2140/jomms.2019.14.549> (SK-CN-RD-18-0005 : Multiškálová flexoelektrická teória a nova metóda na detekciu mikrotrhlín v dielektrikach v realnom čase)
- ADCA07 HRYTSYNA, Olha. A BERNOULLI-EULER BEAM MODEL BASED ON THE LOCAL GRADIENT THEORY OF ELASTICITY. In Journal of mechanics of materials and structures, 2020, vol. 15, no. 4, p. 471-487. (2019: 0.987 - IF, Q4 - JCR, 0.431 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1559-3959. Dostupné na: <https://doi.org/10.2140/jomms.2020.15.471> (SK-CN-RD-18-0005 : Multiškálová flexoelektrická teória a nova metóda na detekciu mikrotrhlín v dielektrikach v realnom čase)
- ADCA08 JU, Minkwan - JEONG, Jae-Gwon - PALOU, Martin T. - PARK, Kyoungsoo. Mechanical Behavior of Fine Recycled Concrete Aggregate Concrete with the Mineral Admixtures. In Materials, 2020, vol. 13, art. no. 2264. (2019: 3.057 - IF, Q2 - JCR, 0.647 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma13102264>
- ADCA09 KOCIFAJ, Miroslav\*\* - KUNDRACIK, F. - BILÝ, Ondrej. Emission spectra of light-pollution sources determined from the light-scattering spectrometry of the night sky. In Monthly Notices of the Royal Astronomical Society, 2020, vol. 491, iss. 4, p. 5586-5594. (2019: 5.356 - IF, Q1 - JCR, 1.937 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 0035-8711. Dostupné na: <https://doi.org/10.1093/mnras/stz3260> (APVV-18-0014 : Globálna charakterizácia svetelného znečistenia)
- ADCA10 KOCIFAJ, Miroslav\*\* - VIDEEN, Gorden - KUNDRACIK, F. Charge-controlled optical resonances in small particles: Recent developments, challenges and prospects. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 240, art. no. 106703. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2019.106703> (APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. SEMOD-74-2/2019 : Nežiadúci a cielelý rezonančný útlm mikrovlnných komunikačných liniek)
- ADCA11 KOCIFAJ, Miroslav\*\* - KÓMAR, Ladislav - SOLANO LAMPHAR, H. A. - WALLNER, Stefan. Are population-based models advantageous in estimating the lumen outputs from light-pollution sources? In Monthly Notices of the Royal Astronomical Society: Letters, 2020, vol. 496, no. 1, p. L138-L141. (2019: 5.356 - IF, Q1 - JCR, 1.964 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 1745-3925. Dostupné na: <https://doi.org/10.1093/mnrasl/slaa100> (APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. VEGA 2/0010/20 : Difúzne svetlo v mestskom prostredí: nový model zohľadňujúci vlastnosti lokálnej atmosféry)
- ADCA12 KOCIFAJ, Miroslav - BARÁ, Salvador. Aerosol characterization using satellite remote sensing of light pollution sources at night. In Monthly Notices of the Royal Astronomical Society: Letters, 2020, vol. 495, p. L76-L80. (2019: 5.356 - IF, Q1 - JCR, 1.964 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 1745-3925. Dostupné na: <https://doi.org/10.1093/mnrasl/slaa060> (APVV-18-0014 : Globálna charakterizácia

- svetelného znečistenia)
- ADCA13 KOCIFAJ, Miroslav\*\* - KUNDRACIK, F. Multi-wavelength radiometry of aerosols designed for more accurate night sky brightness predictions. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 250, art. no. 106998. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2020.106998> (APVV-18-0014 : Globálna charakterizácia svetelného znečistenia)
- ADCA14 KUNDRACIK, F. - KOCIFAJ, Miroslav\*\* - VIDEEN, Gorden - MARKOŠ, Peter. Optical properties of charged nonspherical particles determined using the discrete dipole approximation. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 254, art. no. 107245. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2020.107245> (SEMOT-74-2/2019 : Nežiadúci a cieleň rezonančný útlm mikrovlnných komunikačných liniek)
- ADCA15 KUZIÉLOVÁ, Eva - ŽEMLIČKA, Matúš - JANČA, Martin - ŠILER, Pavel - PALOU, Martin T.. Later stages of Portland cement hydration influenced by different portions of silica fume, metakaolin and ground granulated blast-furnace slag. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, no. 1, p. 339-348. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-020-09520-2> (APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. VEGA 2/0097/17 : Štúdium procesov hydratácie a vývoja mikroštruktúry v mnohozložkových cementových spojivách)
- ADCA16 KUZIÉLOVÁ, Eva - ŽEMLIČKA, Matúš - MÁSILKO, Jiři - HUDEC, Pavol - PALOU, Martin T.. Influence of hydrothermal treatment parameters on the phase composition of zeolites. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, p. 37-50. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-020-09784-8> (APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. VEGA 2/0097/17 : Štúdium procesov hydratácie a vývoja mikroštruktúry v mnohozložkových cementových spojivách)
- ADCA17 LI, J. - SLÁDEK, Ján - SLÁDEK, Vladimír - WEN, P. H.\*\*. Hybrid meshless displacement discontinuity method (MDDM) in fracture mechanics: Static and dynamic. In European Journal of Mechanics A: Solids, 2020, vol. 83, art. no. 104023. (2019: 3.786 - IF, Q1 - JCR, 1.295 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0997-7538. Dostupné na: <https://doi.org/10.1016/j.euromechsol.2020.104023> (APVV-18-0004 : Optimálny návrh mikro/nano konštrukcií pre metamateriály. VEGA 2/0061/20 : Multiškálové štúdium a modelovanie kompozitných makrokonštrukcií)
- ADCA18 PALOU, Martin T. - BOHÁČ, Martin - KUZIÉLOVÁ, Eva - NOVOTNÝ, Radoslav - ŽEMLIČKA, Matúš - DRAGOMIROVÁ, Janette. Use of calorimetry and thermal analysis to assess the heat of supplementary cementitious materials during the hydration of composite cementitious binders. In Journal of Thermal Analysis and Calorimetry, 2020, vol. 142, no. 1, p. 97-117. (2019: 2.731 - IF, Q2 - JCR, 0.415 - SJR, Q3 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-020-09341-3> (APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. VEGA 2/0097/17 : Štúdium procesov hydratácie a vývoja mikroštruktúry v mnohozložkových cementových

- spojivách. V4-KOREA\_RADCON : Vplyv chemického zloženia betónu na jeho dlhodobú trvanlivosť v (ionizujúcom) ionizovanom prostredí)
- ADCA19 PIEDRA, P. - GOBERT, C. - KALUME, A. - PAN, Yong-Le - KOCIFAJ, Miroslav - MUINONEN, Karri - PENTTILA, A. - ZUBKO, Evgenij - VIDEEN, Gorden\*\*. Where is the machine looking? Locating discriminative light-scattering features by class-activation mapping. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 247, art. no. 106936. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2020.106936> (APVV-18-0014 : Globálna charakterizácia svetelného znečistenia)
- ADCA20 PICHARDO-CORPUS, J. A. - SOLANO LAMPHAR, H. A.\*\* - LOPEZ-FARIAS, R. - RUIZ, O. Delgadillo. Spatio-temporal networks of light pollution. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 253, art. no. 107068. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2020.107068> (APVV-18-0014 : Globálna charakterizácia svetelného znečistenia)
- ADCA21 PUSCHNIG, Johannes\*\* - WALLNER, Stefan - POSCH, Thomas. Circalunar variations of the night sky brightness - an FFT perspective on the impact of light pollution. In Monthly Notices of the Royal Astronomical Society, 2020, vol. 492, iss. 2, p. 2622-2637. (2019: 5.356 - IF, Q1 - JCR, 1.937 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 0035-8711. Dostupné na: <https://doi.org/10.1093/mnras/stz3514>
- ADCA22 SADOVSKÝ, Zoltán\*\* - KRIVÁČEK, Jozef. Influential geometric imperfections in buckling of axially compressed cylindrical shells – A novel approach. In Engineering Structures, 2020, vol. 223, p. 111170. (2019: 3.548 - IF, Q1 - JCR, 1.595 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0141-0296. Dostupné na: <https://doi.org/10.1016/j.engstruct.2020.111170> (APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch)
- ADCA23 SÁTOR, Ladislav\*\* - SLÁDEK, Vladimír - SLÁDEK, Ján. Analysis of coupling effects in FGM piezoelectric plates by a meshless method. In Composite Structures, 2020, vol. 244, art. no. 112256. (2019: 5.138 - IF, Q1 - JCR, 1.784 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0263-8223. Dostupné na: <https://doi.org/10.1016/j.compstruct.2020.112256> (SK-CN-RD-18-0005 : Multiškálová flexoelektrická teória a nova metóda na detekciu mikrotrhlín v dielektrikách v realnom čase)
- ADCA24 SLÁDEK, Ján\*\* - SLÁDEK, Vladimír - WEN, P. H. The Meshless Analysis of Scale-Dependent Problems for Coupled Fields. In Materials, 2020, vol. 13, iss. 11, art. no. 2527. (2019: 3.057 - IF, Q2 - JCR, 0.647 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma13112527> (APVV-18-0004 : Optimálny návrh mikro/nano konštrukcií pre metamateriály. VEGA 2/0061/20 : Multiškálové štúdium a modelovanie kompozitných makrokonštrukcií)
- ADCA25 SLÁDEK, Ján\*\* - SLÁDEK, Vladimír - REPKA, Miroslav - PAN, E. A novel gradient theory for thermoelectric material structures. In International Journal of Solids and Structures, 2020, vol. 206, p. 292-303. (2019: 3.213 - IF, Q1 - JCR, 1.295 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0020-7683. Dostupné na: <https://doi.org/10.1016/j.ijsolstr.2020.09.023> (APVV-18-0004 : Optimálny návrh mikro/nano konštrukcií pre metamateriály. VEGA 2/0061/20 : Multiškálové štúdium a modelovanie kompozitných makrokonštrukcií)
- ADCA26 SLÁDEK, Ján\*\* - SLÁDEK, Vladimír - REPKA, Miroslav - SCHMAUDER,



- Siegfried. Crack analysis of nano-sized thermoelectric material structures. In Engineering Fracture Mechanics, 2020, vol. 234, art. no. 107078. (2019: 3.426 - IF, Q1 - JCR, 1.180 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0013-7944. Dostupné na: <https://doi.org/10.1016/j.engfracmech.2020.107078> (SK-CN-RD-18-0005 : Multiškálová flexoelektrická teória a nova metóda na detekciu mikrotrhlín v dielektrikách v realnom čase. VEGA 2/0061/20 : Multiškálové štúdium a modelovanie kompozitných makrokonštrukcií)
- ADCA27 SLÁDEK, Ján - SLÁDEK, Vladimír - WÜNSCHE, Michael. Crack analysis in magneto-electro-elastic solids by gradient theory. In Mechanics of Advanced Materials and Structures, 2020, vol. 27, iss. 15, p. 1354-1371. (2019: 3.517 - IF, Q1 - JCR, 0.853 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1537-6494. Dostupné na: <https://doi.org/10.1080/15376494.2018.1512020> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch. VEGA 1/0145/17. SASPRO 0106/01/01 : Multiškálové modelovanie vrstevnatých, vláknami vystužených a poréznych magnetoelektrických materiálov)
- ADCA28 SLÁDEK, Ján\*\* - HOCKER, Stephen - LIPP, Hansjorg - SLÁDEK, Vladimír - DENG, Qian. Atomistic approach for the evaluation of direct flexoelectric coefficients in gradient theory. In Ferroelectrics, 2020, vol. 569, p. 182–195. (2019: 0.669 - IF, Q4 - JCR, 0.261 - SJR, Q3 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0015-0193. Dostupné na: <https://doi.org/10.1080/00150193.2020.1822681> (SK-CN-RD-18-0005 : Multiškálová flexoelektrická teória a nova metóda na detekciu mikrotrhlín v dielektrikách v realnom čase. VEGA 2/0046/16 : Viazané úlohy tepelných a elektromechanických polí v piezoelektrických materiáloch s poréznu mikroštruktúrou)
- ADCA29 SLÁDEK, Vladimír\*\* - SLÁDEK, Ján - REPKA, Miroslav - SÁTOR, Ladislav. FGM micro/nano-plates within modified couple stress elasticity. In Composite Structures, 2020, vol. 245, art. no. 112294. (2019: 5.138 - IF, Q1 - JCR, 1.784 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0263-8223. Dostupné na: <https://doi.org/10.1016/j.compstruct.2020.112294> (APVV-18-0004 : Optimálny návrh mikro/nano konštrukcií pre metamateriály. VEGA 2/0061/20 : Multiškálové štúdium a modelovanie kompozitných makrokonštrukcií)
- ADCA30 SOLANO LAMPHAR, H. A.. Spatio-temporal association of light pollution and urban sprawl using remote sensing imagery and GIS: A simple method based in Otsu's algorithm. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2020, vol. 251, art. no. 107060. (2019: 3.047 - IF, Q1 - JCR, 0.888 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2020.107060> (APVV-18-0014 : Globálna charakterizácia svetelného znečistenia)
- ADCA31 ŠILER, Pavel\*\* - KOLÁŘOVÁ, Iva - NOVOTNÝ, Radoslav - MÁŠILKO, Jiří - BEDNÁREK, Jan - JANČA, Martin - KOPLÍK, Jan - HAJZLER, Jan - MATĚJKA, Lukáš - MARKO, Michal - ŠVEC, Jiří - ZLÁMAL, Martin - KUZIELOVÁ, Eva - OPRAVIL, Tomáš - ŠOUKAL, František. Use of Isothermal and Isoperibolic Calorimetry to Study the Effect of Zinc on Hydration of Cement Blended with Fly Ash. In Materials, 2020, vol. 13, no. 22, art. no. 5215, 18 p. (2019: 3.057 - IF, Q2 - JCR, 0.647 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 1996-1944. Dostupné na: <https://doi.org/10.3390/ma13225215>
- ADCA32 TIAN, Xinpeng - XU, Mengkang - DENG, Qian - SLÁDEK, Ján - SLÁDEK, Vladimír - REPKA, Miroslav - LI, Qun\*\*. Size-dependent direct and converse flexoelectricity around a micro-hole. In Acta Mechanica, 2020, vol. 231, p. 4851–4865. (2019: 2.102 - IF, Q3 - JCR, 0.769 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0001-5970. Dostupné na:

<https://doi.org/10.1007/s00707-020-02792-7> (SK-CN-RD-18-0005 : Multiškálová flexoelektrická teória a nova metóda na detekciu mikrotrhlín v dielektrikách v realnom čase)

- ADCA33 WALLNER, Stefan\* - KOCIFAJ, Miroslav\* - KÓMAR, Ladislav - SOLANO LAMPHAR, H. A.. Night-sky imaging as a potential tool for characterization of total lumen output from small and medium-sized cities. In Monthly Notices of the Royal Astronomical Society, 2020, vol. 494, iss. 4, p. 5008-5017. (2019: 5.356 - IF, Q1 - JCR, 1.937 - SJR, Q1 - SJR, karentované - CCC). (2020 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 0035-8711. Dostupné na: <https://doi.org/10.1093/mnras/staa925> (APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. VEGA 2/0010/20 : Difúzne svetlo v mestskom prostredí: nový model zohľadňujúci vlastnosti lokálnej atmosféry)

#### **ADDA Vedecké práce v domácich karentovaných časopisoch – impaktovaných**

- ADDA01 ŠIMON, Erik\*\* - BILLIK, Peter - OROVČÍK, Ľubomír - NAGY, Štefan - SASINKOVÁ, Vlasta - PALOU, Martin T. - ŠKRÁTEK, Martin - TREMBOŠOVÁ, Veronika - PLESCH, G. Aluminium powder as a reactive template for preparation of carbon flakes from CCl<sub>4</sub>. In Chemical Papers, 2020, vol. 74, iss. 12, p. 4599-4607. (2019: 1.680 - IF, Q3 - JCR, 0.331 - SJR, Q2 - SJR, karentované - CCC). (2020 - Current Contents). ISSN 0366-6352. Dostupné na: <https://doi.org/10.1007/s11696-020-01303-1> (ITMS2014+: 313021T081 : Vybudovanie Centra pre využitie pokročilých materiálov Slovenskej akadémie vied)

#### **ADMB Vedecké práce v zahraničných neimpaktovaných časopisoch registrovaných v databázach Web of Science alebo SCOPUS**

- ADMB01 HRYTSYNA, Olha. Applications of the local gradient elasticity to the description of the size effect of shear modulus. In SN Applied Sciences, 2020, vol. 2, art. no. 1453. ISSN 2523-3963. Dostupné na: <https://doi.org/10.1007/s42452-020-03217-9> (SK-CN-RD-18-0005 : Multiškálová flexoelektrická teória a nova metóda na detekciu mikrotrhlín v dielektrikách v realnom čase)
- ADMB02 MATIAŠOVSKÝ, Peter\*\* - MIHÁLKA, Peter. Analytical solutions of water suction and drying processes vs. experiments. In E3S Web of Conferences : NSB 2020. - EDP Sciences, 2020, vol. 172, art. no. 4009. (2019: 0.166 - SJR). ISSN 2267-1242. Dostupné na: <https://doi.org/10.1051/e3sconf/202017204009> (APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. NSB 2020 : Nordic Symposium on Building Physics)
- ADMB03 MIHÁLKA, Peter - MATIAŠOVSKÝ, Peter. Numerical simulation of photovoltaic cells cooling by honeycomb PCM structure in real climatic conditions. In AIP Conference Proceedings, 2020, vol. 2305, art. no. 020011. (2019: 0.190 - SJR). ISSN 0094-243X. Dostupné na: <https://doi.org/10.1063/5.0035156> (VEGA 2/0095/20 : Výskum energetickej účinnosti inovatívnych BIPV/T článkov chladených PCM technológiou)
- ADMB04 SÁTOR, Ladislav\*\* - SLÁDEK, Vladimír - SLÁDEK, Ján. Transient analysis of FGM plates bending under thermal loading: comparative study within classical and generalized thermoelasticity. In MATEC Web of Conferences, 2019, vol. 254, art. no. 06004. (2018: 0.169 - SJR). ISSN 2261-236X. Dostupné na: <https://doi.org/10.1051/matecconf/201925406004> (MMS 2018. Polish–Slovak Scientific Conference : Machine Modelling and Simulations. APVV-14-0440 :

- ADMB05      Multifyzikálne problémy v doskách z funkcionálne gradientných materiálov)  
SLÁDEK, Ján - SLÁDEK, Vladimír - REPKA, Miroslav - TAN, C. L. Size dependent thermo-piezoelectricity for in-plane cracks. In Key Engineering Materials, 2020, vol. 827, p. 147-152. (2019: 0.182 - SJR, Q3 - SJR). ISSN 1013-9826. Dostupné na: <https://doi.org/10.4028/www.scientific.net/KEM.827.147> (SK-CN-RD-18-0005 : Multiškálová flexoelektrická teória a nova metóda na detekciu mikrotrhlín v dielektrikách v realnom čase. VEGA 2/0046/16 : Viazané úlohy tepelných a elektromechanických polí v piezoelektrických materiáloch s poréznu mikroštruktúrou)
- ADMB06      SLÁDEK, Ján\*\* - SLÁDEK, Vladimír - REPKA, Miroslav - SCHMAUDER, Siegfried. Gradient Theory for Crack Analysis in Thermoelectric Materials. In AIP Conference Proceedings, 2020, vol. 2309, art. no. 020003. (2019: 0.190 - SJR). ISSN 0094-243X. Dostupné na: <https://doi.org/10.1063/5.0033983> (APVV-18-0004 : Optimálny návrh mikro/nano konštrukcií pre metamateriály. VEGA 2/0061/20 : Multiškálové štúdium a modelovanie kompozitných makrokonštrukcií)
- ADMB07      SLÁDEK, Vladimír - SÁTOR, Ladislav - SLÁDEK, Ján. Bending of Piezo-Electric FGM Plates by a Mesh-Free Method. In Mechanisms and Machine Science : Computational and Experimental Simulations in Engineering - Proceedings of ICCES2019. - Cham, Switzerland : Springer International Publishing AG, 2020, vol. 75, chapter 66, p. 777-790. (2019: 0.172 - SJR, Q4 - SJR). ISSN 2211-0984. Dostupné na: [https://doi.org/10.1007/978-3-030-27053-7\\_66](https://doi.org/10.1007/978-3-030-27053-7_66) (APVV-14-0440 : Multifyzikálne problémy v doskách z funkcionálne gradientných materiálov)

#### **AFC Publikované príspevky na zahraničných vedeckých konferenciách**

- AFC01      HRYTSYNA, Olha. Vplyv Neodnorodného Mechanického Navťažennja na Elektrostatičny Pole Poroznystoho Dielektryčného Cylindra = The Effect of Non-Uniform Mechanical Load on the Electrostatic Field of a Hollow Dielectric Cylinder. In INFORMACIJNI TECHNOLOGIJI TA KOMPJUTERNE MODELJU VANNJA : materialy mižnarodnoji naukovo-praktyčnoji konferenciji. Editor L. B. Petryshyn. - Ivano-Frankivsk : PNU im. V. Stefanyka, 2020, p. 177-180. ISBN 978-617-7468-58-4.(INFORMATION TECHNOLOGIES AND COMPUTER MODELLING : International Scientific Conference)

#### **AFD Publikované príspevky na domácich vedeckých konferenciách**

- AFD01      SÁTOR, Ladislav - SLÁDEK, Vladimír - SLÁDEK, Ján. Bending response of FGPM plates under voltage load. In MATEC Web of Conferences, 2020, vol. 310, art. no. 00058. (2019: 0.166 - SJR). ISSN 2261-236X.(SPACE 2019 : International Conference. APVV-18-0004 : Optimálny návrh mikro/nano konštrukcií pre metamateriály)
- AFD02      SLÁDEK, Ján\*\* - SLÁDEK, Vladimír - REPKA, Miroslav. Path-independent J-integral for cracks in decagonal quasicrystals. In MATEC Web of Conferences, 2020, vol. 310, art. no. 00006. (2019: 0.166 - SJR). ISSN 2261-236X.(SPACE 2019 : International Conference. APVV-18-0004 : Optimálny návrh mikro/nano konštrukcií pre metamateriály. VEGA 2/0046/16 : Viazané úlohy tepelných a elektromechanických polí v piezoelektrických materiáloch s poréznu mikroštruktúrou)
- AFD03      SLÁDEK, Vladimír\*\* - SLÁDEK, Ján. Unified theory of beam bending within flexoelectricity with including piezoelectricity. In MATEC Web of Conferences, 2020, vol. 310, art. no. 00063. (2019: 0.166 - SJR). ISSN 2261-236X.(SPACE 2019 : International Conference. SK-CN-RD-18-0005 : Multiškálová flexoelektrická

teória a nova metóda na detekciu mikrotrhlín v dielektrikách v realnom čase. APVV-18-0004 : Optimálny návrh mikro/nano konštrukcií pre metamateriály. VEGA 2/0061/20 : Multiškálové štúdium a modelovanie kompozitných makrokonštrukcií)

#### **AFE Abstrakty pozvaných príspevkov zo zahraničných konferencií**

- AFE01 DRAGOMIROVÁ, Janette - PALOU, Martin T. - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - NOVOTNÝ, Radoslav - GMÉLING, K. Mechanical and physical properties of heavyweight concrete = Mechanicko-fyzikální vlastnosti těžkého betonu. In ICBMPT 2020. International Conference on Building Materials, Products and Technologies. - Brno : Výzkumný ústav stavebních hmot, 2020, p. 9. ISBN 978-80-87397-33-6.(ICBMPT 2020 : Conference of Research Institute for Building Materials)

#### **AFG Abstrakty príspevkov zo zahraničných konferencií**

- AFG01 HRYTSYNA, Olha. Effect of Local Mass Displacement on Coupled Fields in Dielectric Nano-Beam. In NANO 2020 : International research and practice conference: NANOTECHNOLOGY AND NANOMATERIALS, Abstract book, 26-29 August 2020, Lviv, Ukraine. - Lviv, Ukraine : Computer-publishing, information center, 2020, p. 342. ISBN 978-966-97587-3-6.

#### **FAI Zostavovateľské práce knižného charakteru (bibliografie, encyklopédie, katalógy, slovníky, zborníky, atlasy ...)**

#### **GII Rôzne publikácie a dokumenty, ktoré nemožno zaradiť do žiadnej z predchádzajúcich kategórií**

- GII01 ZMEŠKAL, Oldřich - MATIAŠOVSKÝ, Peter - PAVLÍK, Z. Preface: Thermophysics 2020 : 25th International Meeting on Thermophysics 2020. In AIP Conference Proceedings, 2020, vol. 2305, art. no. 010001. (2019: 0.190 - SJR). ISSN 0094-243X.

#### **Ohlasy (citácie):**

#### **AAA Vedecké monografie vydané v zahraničných vydavateľstvách**

- AAA01 BALAŠ, Ján - SLÁDEK, Ján - SLÁDEK, Vladimír. Stress Analysis by Boundary Element Methods. Amsterdam - Bratislava, 1989
- Citácie:
1. [1.1] BURYACHENKO, V. A. Interface integral technique for the thermoelasticity of random structure matrix composites. In MATHEMATICS AND MECHANICS OF SOLIDS. ISSN 1081-2865, 2019, vol. 24, no. 9, p. 2785-2813., Registrované v: WOS
2. [1.1] XIE, G. Z. - ZHOU, F. L. - ZHANG, D. H. - WEN, X. Y. - LI, H. A novel triangular boundary crack front element for 3D crack problems based on 8-node serendipity element. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 105, p. 296-302., Registrované v: WOS

3. [1.1] ZHENG, H. - XIONG, J. G. - YUAN, Y. - WEN, P. H. *Mixed-mode dynamic stress intensity factors by variation technique with finite block method. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 106, p. 27-33., Registrované v: WOS*
- AAA02 KITTLER, Richard - KOCIFAJ, Miroslav - DARULA, Stanislav. Daylight Science and Daylighting Technology. New York Dordrecht Heidelberg London : Springer Science+Business Media, LLC, 2012. 341 p. ISBN 978-1-4419-8815-7
- Citácie:
1. [1.1] DEVETAKOVIC, M. S. - DORDEVIC, D. D. - DUKANOVIC, G. D. - FURUNDZIC, A. D. K. - SUDIMAC, B. S. - SCOGNAMIGLIO, A. *Design of Solar Systems for Buildings and Use of BIM Tools: Overview of Relevant Geometric Aspects. In FME TRANSACTIONS. ISSN 1451-2092, 2019, vol. 47, no. 2, p. 387-397., Registrované v: WOS*
2. [1.1] KAROL, E. - SMITH, D. *Impact of Design on Emotional, Psychological, or Social Well-Being for People With Cognitive Impairment. In HERD-HEALTH ENVIRONMENTS RESEARCH & DESIGN JOURNAL. ISSN 1937-5867, 2019, vol. 12, no. 3, p. 220-232., Registrované v: WOS*
3. [1.1] KENT, M. G. - FOTIOS, S. - ALTOMONTE, S. *Discomfort glare evaluation: The influence of anchor bias in luminance adjustments. In LIGHTING RESEARCH & TECHNOLOGY. ISSN 1477-1535, 2019, vol. 51, no. 1, p. 131-146., Registrované v: WOS*
4. [1.1] LI, Z. R. - XING, H. W. - AUGENBROE, G. *Criterion based selection of sky diffuse radiation models. In SUSTAINABLE CITIES AND SOCIETY. ISSN 2210-6707, 2019, vol. 50, art. no. UNSP 101692., Registrované v: WOS*
5. [1.1] LOU, S. W. - LI, D. H. W. - CHEN, W. Q. *Identifying overcast, partly cloudy and clear skies by illuminance fluctuations. In RENEWABLE ENERGY. ISSN 0960-1481, 2019, vol. 138, p. 198-211., Registrované v: WOS*
6. [1.1] SOLOVYOV, A. K. - NGUYEN, T. H. P. *THE CALCULATION METHOD FOR LIGHT CLIMATE PARAMETERS BASED ON SUN-LIGHTING EFFICIENCY AND THE COMPARATIVE ANALYSIS OF LIGHT CLIMATE IN HANOI AND MOSCOW. In LIGHT & ENGINEERING. ISSN 0236-2945, 2019, vol. 27, no. 5, p. 67-71., Registrované v: WOS*
- AAA03 Singular Integrals in Boundary Element Methods. Edited by V. Sládek, J. Sládek. Southampton & Boston : WIT Press Publishing, 1998. 448 s. ISBN 978-1-85312-533-1
- Citácie:
1. [1.1] LI, J. P. - FU, Z. J. - CHEN, W. - QIN, Q. H. *A regularized approach evaluating origin intensity factor of singular boundary method for Helmholtz equation with high wavenumbers. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 101, p. 165-172., Registrované v: WOS*
- AAA04 TESÁR, Alexander - FILLO, L. Transfer Metrix Method. Kluwer Academic Publishers, 1988. 244 s.
- Citácie:
1. [1.1] MAREZE, P. H. - BRANDAO, E. - FONSECA, W. D. - SILVA, O. M. - LENZI, A. *Modeling of acoustic porous material absorber using rigid multiple micro-ducts network: Validation of the proposed mode. In JOURNAL OF SOUND AND VIBRATION. ISSN 0022-460X, 2019, vol. 443, p. 376-396., Registrované v: WOS*
2. [1.1] WANG, P. Y. - LI, Z. C. - LIU, P. - PEI, Y. M. *Super resolution in depth for microwave imaging. In APPLIED PHYSICS LETTERS. ISSN 0003-6951, 2019, vol. 115, no. 4, art. no. 044101., Registrované v: WOS*

## AAB Vedecké monografie vydané v domácich vydavateľstvách

- AAB01 DULLA, Matúš - MORAVČÍKOVÁ, Henrieta. Architektúra Slovenska v 20. storočí. Bratislava : Slovart, 2002. 511 s. ISBN 80-7145-684-5  
Citácie:  
1. [1.1] KASMAN, P. - POHANIOVA, J. *FOLK ARCHITECTURE AS THE SOURCE OF INSPIRATION (RE)INTERPRETATION OF FOLK ARCHITECTURE CHARACTERISTICS IN SLOVAK FAMILY HOUSE CONCEPTS ON THE PRESENT*. In *11TH ARCHITECTURE IN PERSPECTIVE 2019/11 ARCHITEKURA V PERSPEKTIVE 2019*, 2019, p. 261-269., Registrované v: WOS  
2. [1.1] KVITKOVA, N. *Heritage Obscured: Undesirable Legacies of the Prior Department Stores in Slovakia*. In *STUDIES IN HISTORY AND THEORY OF ARCHITECTURE-STUDII DE ISTORIA SI TEORIA ARHITEKTURII*. ISSN 2344-6544, 2019, vol. 7, p. 171-188., Registrované v: WOS  
3. [1.1] ONDRUSOVA, K. *Architecture of the National Bank of Czechoslovakia in the Territory of Present-day Slovakia (1918-1938)*. In *3RD WORLD MULTIDISCIPLINARY CIVIL ENGINEERING, ARCHITECTURE, URBAN PLANNING SYMPOSIUM (WMCAUS 2018)*. ISSN 1757-8981, 2019, vol. 471, article number: 082043., Registrované v: WOS  
4. [1.1] SISLAKOVA, Livia - SELIGOVA, Andrea. *External Image of the Viticultural Towns Located at the Foot of Little Carpathians*. In *4TH WORLD MULTIDISCIPLINARY CIVIL ENGINEERING-ARCHITECTURE-URBAN PLANNING SYMPOSIUM WMCAUS*. ISSN 1757-8981, 2019, vol. 603, art. no. 032027., Registrované v: WOS  
5. [2.1] VITKOVA, L. - BOGAR, M. *Slovak Architects and Algerian Cities in the 1970s and 1980s-Historic Heritage, French Urban Planning and Czecho-Slovak Urban Interventions*. In *ARCHITEKTURA & URBANIZMUS*. ISSN 0044-8680, 2019, vol. 53, no. 3-4, p. 130-145., Registrované v: WOS
- AAB02 DULLA, Matúš. Architekt Ferdinand Milučky. Bratislava : SAS, 1998. 99 s. ISBN 8088757177  
Citácie:  
1. [1.1] KASMAN, P. - POHANIOVA, J. *FOLK ARCHITECTURE AS THE SOURCE OF INSPIRATION (RE)INTERPRETATION OF FOLK ARCHITECTURE CHARACTERISTICS IN SLOVAK FAMILY HOUSE CONCEPTS ON THE PRESENT*. In *11TH ARCHITECTURE IN PERSPECTIVE 2019/11 ARCHITEKURA V PERSPEKTIVE 2019*, 2019, p. 261-269., Registrované v: WOS
- AAB03 MORAVČÍKOVÁ, Henrieta. Friedrich Weinwurm : architekt / architect. Bratislava : Slovart, 2014. 373 s. ISBN 9788055611587  
Citácie:  
1. [1.1] BACOVA, A. - MAJZLANOVA, D. - BERGEROVA, K. *Relation Between Private and Public Spaces of Collective Housing at the Example of Bratislava and Tbilisi*. In *3RD WORLD MULTIDISCIPLINARY CIVIL ENGINEERING, ARCHITECTURE, URBAN PLANNING SYMPOSIUM (WMCAUS 2018)*. ISSN 1757-8981, 2019, vol. 471, art. no. 072028., Registrované v: WOS
- AAB04 MORAVČÍKOVÁ, Henrieta - DLHÁŇOVÁ, Viera. Divadelná architektúra na Slovensku. Bratislava : Divadelný ústav, 2011. 325 s. ISBN 978-80-89369-35-5  
Citácie:  
1. [2.1] LASLAVIKOVA, J. *The city theatre in Pressburg in the context of the development of city theatres in Central Europe in the second half of the 19th*



- century. In HISTORICKY CASOPIS. ISSN 0018-2575, 2019, vol. 67, no. 2, p. 241-263., Registrované v: WOS*
- AAB05 Architektúra na Slovensku: stručné dejiny. Editori Henrieta Moravčíková, Matúš Dulla. Bratislava : Slovart, 2005. 181 s. ISBN 8080850798  
Citácie:  
*1. [1.1] KRISTIANOVA, K. - MARCINKOVA, D. AESTHETIC FUNCTIONS OF URBAN GREENERY IN THE CONTEXT OF DEVELOPMENT OF CITIES IN SLOVAKIA. In TEKA KOMISJI URBANISTYKI I ARCHITEKTURY. ISSN 0079-3450, 2019, vol. 47, p. 175-182., Registrované v: WOS*
- AAB06 MORAVČÍKOVÁ, Henrieta - SZALAY, Peter - KRIŠTEKOVÁ, Laura - HABERLANDOVÁ, Katarína - RUTKOWSKI, Roman. Ročenka Slovenskej architektúry 2014/2015. Recenzenti M. Dulla, P. Lenyi, P. Paňák, M. Topolčanská. Bratislava : Slovart, 2016. 168 s. ISBN 978-80-5562-389-4  
Citácie:  
*1. [2.1] KASMAN, P. - POHANIOVA, J. FOLK ARCHITECTURE AS THE SOURCE OF INSPIRATION (RE)INTERPRETATION OF FOLK ARCHITECTURE CHARACTERISTICS IN SLOVAK FAMILY HOUSE CONCEPTS ON THE PRESENT. In 11TH ARCHITECTURE IN PERSPECTIVE 2019/11 ARCHITEKURA V PERSPEKTIVE 2019, 2019, p. 261-269., Registrované v: WOS*
- AAB07 SZALAY, Peter - HABERLANDOVÁ, Katarína - ANDRÁŠIOVÁ, Katarína - BARTOŠOVÁ, Nina. Moderná Bratislava 1918 – 1939 [Modern Bratislava 1918 – 1939]. Recenzenti Matúš Dulla, Elena Alexy. 1. vyd. Bratislava : Marenčin PT, 2015. 319 s. Bratislava-Pressburg. ISBN 978-80-8114-327-4  
Citácie:  
*1. [2.1] SCEPANOVA, S. The Greater Bratislava of Architects Alois Balan and Jiri Grossmann. In ARCHITEKTURA & URBANIZMUS. ISSN 0044-8680, 2019, vol. 53, no. 1-2, p. 89-102., Registrované v: WOS*

#### ABC Kapitoly vo vedeckých monografiách vydané v zahraničných vydavateľstvách

- ABC01 MORAVČÍKOVÁ, Henrieta - DLHÁŇOVÁ, Viera. Universal Values and National Symbolism. Slovak National Theatre. Slovak Chamber Theatre. Košice State Theatre. State Opera Banská Bystrica. Studio L+S. Jókai Theatre in Komarno. Andrej Bagar Theatre. Slovak National Theatre. Istropolis, Bratislava. Arena Theatre, Bratislava. Jozef Gregor Tajovský Theatre, Banská Bystrica. In Beyond Everydayness. Theatre Architecture in Central Europe. - Prague : The National Theatre, 2010, p. 65 – 68, 194 – 199, 212 – 217, 236 – 241, 340 – 345, 366 – 371, 372 – 377, 432 – 437, 450 – 455, 458 – 463, 506 – 511, 531, 537, 546.  
Citácie:  
*1. [2.1] LASLAVIKOVA, J. The city theatre in Pressburg in the context of the development of city theatres in Central Europe in the second half of the 19th century. In HISTORICKY CASOPIS. ISSN 0018-2575, 2019, vol. 67, no. 2, p. 241-263., Registrované v: WOS*
- ABC02 SLÁDEK, Vladimír - SLÁDEK, Ján - ZHANG, Chuanzeng. The use of finite elements for approximation of field variables on local sub-domains in a mesh-free way: six. In Composites with Micro – and Nano-Structures. - Heidelberg : Springer, 2008, p. 87-106. ISBN 978-1-4020-6974-1.  
Citácie:  
*1. [1.1] GAO, X. W. - GAO, L. F. - ZHANG, Y. - CUI, M. - LV, J. Free element collocation method: A new method combining advantages of finite element and mesh free methods. In COMPUTERS & STRUCTURES. ISSN 0045-7949, 2019,*

- ABC03 *vol. 215, p. 10-26., Registrované v: WOS*  
 STAŇÁK, Peter - SLÁDEK, Ján - SLÁDEK, Vladimír - TADEU, A. Three-Dimensional Meshless Modelling of Functionally Graded Piezoelectric Sensor. In *Mechatronics 2013 : Recent Technological and Scientific Advances*. - Heidelberg : Springer, 2014, p. 425-432. ISBN 978-3-319-02293-.
- Citácie:  
 1. [1.1] NOURMOHAMMADI, H. - BEHJAT, B. *Geometrically nonlinear analysis of functionally graded piezoelectric plate using mesh-free RPIM. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 131-141., Registrované v: WOS*

#### ADCA Vedecké práce v zahraničných karentovaných časopisoch – impaktovaných

- ADCA01 ALBHILIL, A. A. - PALOU, Martin T. - KOZÁNKOVÁ, Jana - BOHÁČ, Martin. Thermal and microstructure stability of cordierite-mullite ceramics prepared from natural raw materials-Part II. In *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, 2015, vol. 40, no. 1, 151-161. ISSN 2193-567X. Dostupné na: <https://doi.org/10.1007/s13369-014-1493-9>
- Citácie:  
 1. [1.1] WU, J. F. - LU, C. L. - XU, X. H. - ZHANG, Y. F. *Preparation of Cordierite-mullite Ceramics for Solar Thermal Storage. In JOURNAL OF WUHAN UNIVERSITY OF TECHNOLOGY-MATERIALS SCIENCE EDITION. ISSN 1000-2413, 2019, vol. 34, no. 5, p. 1062-1070., Registrované v: WOS*
- ADCA02 ALBHILIL, A. A. - KOZÁNKOVÁ, Jana - PALOU, Martin T.. Thermal and microstructure stability of cordierite-mullite ceramics prepared from natural raw materials. In *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, 2014, vol. 39, no. 1, p.67-73. ISSN 2193-567X. Dostupné na: <https://doi.org/10.1007/s13369-014-1493-9>
- Citácie:  
 1. [1.1] VAKALOVA, T. V. - POGREBENKOV, V. M. - REVVA, I. B. - RUSINOV, P. G. - BALAMYGIN, D. *Effect of fluorine-containing additive on the synthesis and sintering of compositions from natural raw materials in the "cordierite mullite" system. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2019, vol. 45, no. 8, p. 9695-9703., Registrované v: WOS*  
 2. [1.1] WU, J. F. - LU, C. L. - XU, X. H. - ZHANG, Y. F. *Preparation of Cordierite-mullite Ceramics for Solar Thermal Storage. In JOURNAL OF WUHAN UNIVERSITY OF TECHNOLOGY-MATERIALS SCIENCE EDITION. ISSN 1000-2413, 2019, vol. 34, no. 5, p. 1062-1070., Registrované v: WOS*
- ADCA03 ANDREJKOVIČOVÁ, Slávka - JANOTKA, Ivan - KOMADEL, Peter. Evaluation of geotechnical properties of bentonite from Lieskovec deposit, Slovakia. In *Applied Clay Science*, 2008, vol. 38, no. 3-4, p. 297-303. (2007: 1.861 - IF, Q1 - JCR, 0.949 - SJR, Q1 - SJR). ISSN 0169-1317. Dostupné na: <https://doi.org/10.1016/j.clay.2007.04.004>
- Citácie:  
 1. [1.1] CASTILLO-PEREZ, R. - HERNANDEZ-VARGAS, M. L. - FLORES-CEDILLO, O. - CAMPILLO-ILLANES, B. F. *Effect on thermo-mechanical properties by in-situ emulsion polymerization of polymer/clay nanocomposites. In POLYMER COMPOSITES. ISSN 0272-8397, 2019, vol. 40, no. 1, p. 263-276., Registrované v: WOS*  
 2. [1.1] HUSSAIN, S. - AWAD, J. - SARKAR, B. - CHOW, C. W. K. - DUAN, J. - VAN LEEUWEN, J. *Coagulation of dissolved organic matter in surface water by novel titanium (III) chloride: Mechanistic surface chemical and spectroscopic*



- characterisation. In SEPARATION AND PURIFICATION TECHNOLOGY. ISSN 1383-5866, 2019, vol. 213, p. 213-223., Registrované v: WOS*
3. [1.1] KLJAJEVIC, L. M. - MELICHOVA, Z. - KISIC, D. D. - NENADOVIC, M. T. - TODOROVIC, B. Z. - PAVLOVIC, V. B. - NENADOVIC, S. S. *The Influence of Alumino-Silicate Matrix Composition on Surface Hydrophobic Properties. In SCIENCE OF SINTERING. ISSN 0350-820X, 2019, vol. 51, no. 2, p. 163-173., Registrované v: WOS*
4. [1.1] KLJAJEVIC, L. M. - MELICHOVA, Z. - STOJMENOVIC, M. D. - TODOROVIC, B. Z. - PAVLOVIC, V. B. - CITAKOVIC, N. M. - NENADOVIC, S. S. *STRUCTURAL AND ELECTRICAL PROPERTIES OF GEOPOLYMER MATERIALS BASED ON DIFFERENT PRECURSORS (KAOLIN, BENTONITE AND DIATOMITE). In MACEDONIAN JOURNAL OF CHEMISTRY AND CHEMICAL ENGINEERING. ISSN 1857-5552, 2019, vol. 38, no. 2, p. 283-292., Registrované v: WOS*
5. [1.1] SHAH, T. U. H. - TAHIR, M. H. - RAHMAN, A. U. - LIU, H. W. *Superabsorbent Capability and High Retention Ability of China Clay (Kaolinite)/Polyacrylic Acid Composites for Aqueous Solution. In CHINESE JOURNAL OF CHEMICAL PHYSICS. ISSN 1674-0068, 2019, vol. 32, no. 4, p. 508-512., Registrované v: WOS*
- ADCA04 ANDREJKOVIČOVÁ, Slávka - ROCHA, Fernando - JANOTKA, Ivan - KOMADEL, Peter. An investigation into the use of blends of two bentonites for geosynthetic clay liners. In *Geotextiles and Geomembranes*, 2008, vol. 26, no. 5, p. 436-445. (2007: 3.050 - IF, Q1 - JCR, 1.798 - SJR, Q1 - SJR). ISSN 0266-1144. Dostupné na: <https://doi.org/10.1016/j.geotexmem.2008.01.001>  
Citácie:  
1. [2.1] OSACKY, M. - BINCIK, T. - PAL'Ó, T. - UHLIK, P. - MADEJOVA, J. - CZIMEROVA, A. *Mineralogical and physico-chemical properties of bentonites from the Jastraba Formation (Kremnicke vrchy Mts., Western Carpathians). In GEOLOGICA CARPATHICA. ISSN 1335-0552, 2019, vol. 70, no. 5, p. 433-445., Registrované v: WOS*
- ADCA05 ATLURI, S. N. - SLÁDEK, Ján - SLÁDEK, Vladimír - ZHU, T. The local boundary integral equation (LBIE) and it's meshlles implementation for linear elasticity. In *Computational Mechanics*, 2000, vol. 25, no. 2-3, . p.180-198. ISSN 0178-7675.  
Citácie:  
1. [1.1] SELLOUNTOS, E. J. - TIAGO, J. - SEQUEIRA, A. *Meshless velocity vorticity local boundary integral equation (LBIE) method for two dimensional incompressible Navier-Stokes equations. In INTERNATIONAL JOURNAL OF NUMERICAL METHODS FOR HEAT & FLUID FLOW. ISSN 0961-5539, 2019, vol. 29, no. 11, p. 4034-4073., Registrované v: WOS*  
2. [1.1] SHEKARI, Y. - TAYEBI, A. - HEYDARI, M. H. *A meshfree approach for solving 2D variable-order fractional nonlinear diffusion-wave equation. In COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING. ISSN 0045-7825, 2019, vol. 350, p. 154-168., Registrované v: WOS*  
3. [1.2] ABDOLLAHIFAR, A. - SABET, B. - NAMI, M. R. *Transient Dynamic Stress Intensity Factor of FGM Plates Using the State Space and MLPG Methods. In Iranian Journal of Science and Technology Transactions of Mechanical Engineering. ISSN 22286187, 2019, 43, p. 733-748., Registrované v: SCOPUS*
- ADCA06 AUBÉ, Martin - KOCIFAJ, Miroslav - ZAMORANO, J. - SOLANO LAMPAR, H. A. - SANCHEZ DE MIGUEL, A. The spectral amplification effect of clouds to the night sky radiance in Madrid. In *Journal of Quantitative Spectroscopy & Radiative Transfer*, 2016, vol. 181, p. 11-23. (2015: 2.859 - IF, Q1 - JCR, 1.156 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0022-4073.

Dostupné na: <https://doi.org/10.1016/j.jqsrt.2016.01.032> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest)

Citácie:

1. [1.1] AZHAR, M. A. D. M. - HAMID, N. S. A. - KAMIL, W. M. A. W. M. - MOHAMAD, N. S. *Urban Night Sky Conditions Determination Method Based on a Low Resolution All-Sky Images. In 2019 6TH INTERNATIONAL CONFERENCE ON SPACE SCIENCE AND COMMUNICATION (ICONSPACE2019). ISSN 2165-4301, 2019, p. 158-162., Registrované v: WOS*
2. [1.1] DESOUHANT, E. - GOMES, E. - MONDY, N. - AMAT, I. *Mechanistic, ecological, and evolutionary consequences of artificial light at night for insects: review and prospective. In ENTOMOLOGIA EXPERIMENTALIS ET APPLICATA. ISSN 0013-8703, 2019, vol. 167, no. 1, p. 37-58., Registrované v: WOS*
3. [1.1] FIORENTIN, P. - BETTANINI, C. - BOGONI, D. *Calibration of an Autonomous Instrument for Monitoring Light Pollution from Drones. In SENSORS, 2019, vol. 19, no. 23, art. no. 5091., Registrované v: WOS*
4. [1.1] JECHOW, A. - HOELKER, F. - KYBA, C. C. M. *Using all-sky differential photometry to investigate how nocturnal clouds darken the night sky in rural areas. In SCIENTIFIC REPORTS. ISSN 2045-2322, 2019, vol. 9, art. no. 1391., Registrované v: WOS*
5. [1.1] KOTARBA, A. Z. - CHACEWICZ, S. - ZMUDZKA, E. *Night sky photometry over Warsaw (Poland) evaluated simultaneously with surface-based and satellite-based cloud observations. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2019, vol. 235, p. 95-107., Registrované v: WOS*

ADCA07

BAGEL, Ľubomír - ŽIVICA, Vladimír. Relationship between pore structure and permeability of hardened cement mortars: On the choice of effective pore structure parameter. In *Cement and Concrete Research*, 1997, vol. 27, no. 8, p. 1225-1235. ISSN 0008-8846.

Citácie:

1. [1.1] ALAFOGIANNI, P. - DASSIOS, K. - TSAKIROGLOU, C. D. - MATIKAS, T. E. - BARKOULA, N. M. *Effect of CNT addition and dispersive agents on the transport properties and microstructure of cement mortars. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 197, p. 251-261., Registrované v: WOS*
2. [1.1] DOUSTI, M. R. - BOLUK, Y. - BINDIGANAVILE, V. *The effect of cellulose nanocrystal (CNC) particles on the porosity and strength development in oil well cement paste. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 205, p. 456-462., Registrované v: WOS*
3. [1.1] KONG, D. Y. - PAN, H. W. - WANG, L. H. - CORR, D. J. - YANG, Y. - SHAH, S. P. - SHENG, J. S. *Effect and mechanism of colloidal silica sol on properties and microstructure of the hardened cement-based materials as compared to nano-silica powder with agglomerates in micron-scale. In CEMENT & CONCRETE COMPOSITES. ISSN 0958-9465, 2019, vol. 98, p. 137-149., Registrované v: WOS*
4. [1.1] WACHIRA, J. M. - NGARI, R. W. - THIONG'O, J. K. - MARANGU, J. M. *Effect of Sulphate and Chloride Ingress on Selected Cements Mortar Prisms Immersed in Seawater and Leather Industry Effluent. In ADVANCES IN CIVIL ENGINEERING. ISSN 1687-8086, 2019, vol. 2019, art. no. 8191689., Registrované v: WOS*
5. [1.1] YANG, X. X. - KURU, E. - GINGRAS, M. - IREMONGER, S. *CT-CFD*

- integrated investigation into porosity and permeability of neat early-age well cement at downhole condition. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 205, p. 73-86., Registrované v: WOS*
6. [1.2] SUNEEL, M. - JAGADEEP, K. - MAHALAKSHMI, K. K. - PRAVEEN BABU, G. - RAMARAO, G. V. An experimental study on workability and strength characteristics of M40 grade concrete by partial replacement of cement with nano-TiO<sub>2</sub>. In *Lecture Notes in Civil Engineering. ISSN 23662557, 2019, 25, p. 253-263., Registrované v: SCOPUS*
- ADCA08 BÁGEL, Ľubomír. Strength and pore structure of ternary blended cement mortars containing blast furnace slag and silica fume. In *Cement and Concrete Research*, 1998, vol. 28, no. 7, p. 1011-1020. ISSN 0008-8846.
- Citácie:
1. [1.1] BENLI, A. Mechanical and durability properties of self-compacting mortars containing binary and ternary mixes of fly ash and silica fume. In *STRUCTURAL CONCRETE. ISSN 1464-4177, 2019, vol. 20, no. 3, p. 1096-1108., Registrované v: WOS*
  2. [1.1] HANG, T. L. P. - VERDIER, J. - VIDAL, T. - CAMPS, G. - BOURBON, X. Mechanical and transfer properties of low-pH concretes in view of classical HPC substitution in confinement structures. In *EUROPEAN JOURNAL OF ENVIRONMENTAL AND CIVIL ENGINEERING. ISSN 1964-8189, 2019, vol. 23, no. 6, p. 657-674., Registrované v: WOS*
  3. [1.1] PROSEK, Z. - NEZERKA, V. - HLUZEK, R. - TREJBAL, J. - TESAREK, P. - KARRA', A. G. Role of lime, fly ash, and slag in cement pastes containing recycled concrete fines. In *CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 201, p. 702-714., Registrované v: WOS*
  4. [1.1] ZHANG, N. - YU, H. F. - TAN, Y. S. - WANG, N. - BI, W. L. - GONG, W. - WU, C. Y. Effects of fly ash and slag on the properties of magnesium oxysulfate cement. In *EMERGING MATERIALS RESEARCH. ISSN 2046-0147, 2019, vol. 8, no. 3, p. 472-482., Registrované v: WOS*
  5. [1.2] AHMED, R. - JAAFAR, M. S. - BAREQ, M. - HEJAZI, F. - RASHID, Raizal S.M. Effect of supplementary cementitious material on chemical resistance of concrete. In *IOP Conference Series: Earth and Environmental Science. ISSN 17551307, 2019, 357, 1, art. no. 012016., Registrované v: SCOPUS*
  6. [1.2] HAMZAH, S. - APRIANTI, E. The effect of thermal activation time and type of fly ash on the compressive strength of high volume fly ash-bamboo mortar. In *Lowland Technology International. ISSN 13449656, 2019, 21, 3, p. 159-171., Registrované v: SCOPUS*
  7. [1.2] RATHAN RAJ, R. - BRIJITTA, J. - RAMACHANDRAN, D. - PERUMAL PILLAI, E. B. Microstructure Evolution in Ordinary Portland Cement–Metakaolin–Red Mud-Based Ternary Blended Cement. In *Journal of The Institution of Engineers (India): Series A. ISSN 22502149, 2019, 100, 4, p. 707-718., Registrované v: SCOPUS*
- ADCA09 BAJZA, A. - ROUSEKOVÁ, I. - ŽIVICA, Vladimír. Silica fume sodium hydroxide binding systems. In *Cement and concrete research*, 1998, vol. 28, no. 1, p. 13-18. ISSN 0008-8846.
- Citácie:
1. [1.1] BATISTA, R. P. - TRINDADE, A. C. C. - BORGES, P. H. R. - SILVA, F. D. Silica Fume as Precursor in the Development of Sustainable and High-Performance MK-Based Alkali-Activated Materials Reinforced With Short PVA Fibers. In *FRONTIERS IN MATERIALS. ISSN 2296-8016, 2019, vol. 6, art. no. 77., Registrované v: WOS*
- ADCA10 BALAŠ, Ján - SLÁDEK, Vladimír - SLÁDEK, Ján. The boundary integral

equation method for plates resting on two-parameter foundation. In ZAMM - Zeitschrift fur Angewandte Mathematik und Mechanik, 1984, vol. 64, p.137-146. ISSN 0044-2267.

Citácie:

1. [1.1] MURAKONDA, P. - MAHESHWARI, P. Analysis of rigid pavements on ground improved by geosynthetics and stone columns. In PROCEEDINGS OF THE INSTITUTION OF CIVIL ENGINEERS-GROUND IMPROVEMENT. ISSN 1755-0750, 2019, vol. 172, no. 4, p. 213-228., Registrované v: WOS
2. [1.1] ZHANG, L. - WU, G. T. - WU, J. A Kerr-type elastic foundation model for the buckling analysis of a beam bonded on an elastic layer. In ZAMM-ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND MECHANIK. ISSN 0044-2267, 2019, vol. 99, no. 10, art. no. UNSP e201900162., Registrované v: WOS

ADCA11 BARENTINE, John C.\*\* - WALKER, Constance E. - KOCIFAJ, Miroslav - KUNDRACIK, F. - JUAN, Amy - KANEMOTO, John - MONRAD, Christian K. Skyglow changes over Tucson, Arizona, resulting from a municipal LED street lighting conversion. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2018, vol. 212, p. 10-23. (2017: 2.600 - IF, Q2 - JCR, 0.779 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2018.02.038> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest. VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

Citácie:

1. [1.1] GRAUER, A. D. - GRAUER, P. A. - DAVIES, N. - DAVIES, G. Impact of Space Weather on the Natural Night Sky. In PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF THE PACIFIC. ISSN 0004-6280, 2019, vol. 131, no. 1005, art. no. 114508., Registrované v: WOS
2. [1.1] KOTARBA, Andrzej Z. - CHACEWICZ, Sara - ZMUDZKA, Elwira. Night sky photometry over Warsaw (Poland) evaluated simultaneously with surface-based and satellite-based cloud observations. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2019, vol. 235, p. 95-107., Registrované v: WOS
3. [1.1] WALLNER, Stefan. Usage of Vertical Fisheye-Images to Quantify Urban Light Pollution on Small Scales and the Impact of LED Conversion. In JOURNAL OF IMAGING, 2019, vol. 5, no. 11, art. no. 86., Registrované v: WOS
4. [1.2] KOTARBA, Andrzej Z. - CHACEWICZ, Sara - ZMUDZKA, Elwira. Night sky photometry over Warsaw (Poland) evaluated simultaneously with surface-based and satellite-based cloud observations. In Journal of Quantitative Spectroscopy and Radiative Transfer. ISSN 00224073, 235, p. 95-107., Registrované v: SCOPUS

ADCA12 BARTZOKAS, A. - KAMBEZIDIS, H.D. - DARULA, Stanislav - KITTLER, Richard. Comparison between winter and summer sky-luminance distribution in Central Europe and Eastern Mediterranean. In Journal of Atmospheric and Solar - Terrestrial Physics, 2005, vol. 67, no. 7, p. 709-718. (2004: 1.517 - IF, karentované - CCC). (2005 - Current Contents, WOS, SCOPUS). ISSN 1364-6826.

Citácie:

1. [1.1] KIM, C. H. - KIM, K. S. Development of Sky Luminance and Daylight Illuminance Prediction Methods for Lighting Energy Saving in Office Buildings. In ENERGIES. ISSN 1996-1073, 2019, vol. 12, no. 4, art. no. 592., Registrované v: WOS



- ADCA13 BISHAY, P.L. - SLÁDEK, Ján - SLÁDEK, Vladimír - ATLURI, S. N. Analysis of functionally graded multiferroic composites Using Hybrid/Mixed Finite Elements and Node-Wise Material Properties. In CMC - Computers Materials & Continua, 2012, vol. 29, p. 213-262. (2011: 0.972 - IF, Q2 - JCR, 0.599 - SJR, Q2 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 1546-2218.  
Citácie:  
1. [1.1] BRISCHETTO, S. Exponential matrix method for the solution of exact 3D equilibrium equations for free vibrations of functionally graded plates and shells. In JOURNAL OF SANDWICH STRUCTURES & MATERIALS. ISSN 1099-6362, 2019, vol. 21, no. 1, p. 77-114., Registrované v: WOS  
2. [1.1] DHITAL, S. - ROKAYA, A. - KAIZER, M. R. - ZHANG, Y. - KIM, J. Accurate and efficient thermal stress analyses of functionally graded solids using incompatible graded finite elements. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 222, art. no. UNSP 110909., Registrované v: WOS  
3. [1.2] QIAN, Hai - LO, Sai Huen - ZHOU, Ding - YANG, Yang. 3-D thermo-stress field in laminated cylindrical shells. In CMES Computer Modeling in Engineering and Sciences. ISSN 15261492, 2019, 121, 1, p. 215-247., Registrované v: SCOPUS
- ADCA14 BOHÁČ, Martin - PALOU, Martin T. - NOVOTNÝ, Radoslav - MÁŠILKO, Jiří - ŠOUKAL, František - OPRAVIL, Tomáš. Influence of temperature on early hydration of Portland cement-metakaolin-slag system. In Journal of Thermal Analysis and Calorimetry, 2017, vol. 127, p. 309-318. (2016: 1.953 - IF, Q2 - JCR, 0.609 - SJR, Q2 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-016-5592-6> (VEGA 2/0082/14 : Syntéza a charakterizácia chemicky viazaných fosfátových keramických spojív)  
Citácie:  
1. [1.1] CHAIPANICH, A. - WIANGLOR, K. - PIYAWORAPAIBOON, M. - SINTHUPINYO, S. Thermogravimetric analysis and microstructure of alkali-activated metakaolin cement pastes. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, 2019, vol. 138, no. 3, p. 1965-1970., Registrované v: WOS
- ADCA15 ČAVAJDA, V. - UHLÍK, Peter - DERKOWSKI, Arkadiusz - ČAPLOVIČOVÁ, Mária - MADEJOVÁ, Jana - MIKULA, M. - IFKA, Tomáš. Influence of grinding and sonication on the crystal structure of talc. In Clays and Clay Minerals, 2015, vol. 63, n. 4, p. 311-327. (2014: 1.228 - IF, Q3 - JCR, 0.672 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0009-8604. Dostupné na: <https://doi.org/10.1346/CCMN.2015.0630405>  
Citácie:  
1. [1.1] KIM, H. N. - KIM, J. W. - KIM, M. S. - LEE, B. H. - KIM, J. C. Effects of Ball Size on the Grinding Behavior of Talc Using a High-Energy Ball Mill. In MINERALS, 2019, vol. 9, no. 11, art. no. 668., Registrované v: WOS  
2. [1.1] MARTIN, F. - AYMONTIER, C. - EINLOFT, S. - CAREME, C. - POIRIER, M. - CLAVERIE, M. - PRADO, M. A. - DIAS, G. - QUILFEN, C. - AUBERT, G. - MICOUD, P. - LE ROUX, C. - SALVI, S. - DUMAS, A. - FERY-FORGUES, S. A review of Ni and Co incorporation during talc synthesis: Applications to crystal chemistry, industrial compounds and natural Ni- and Co-rich ore. In JOURNAL OF GEOCHEMICAL EXPLORATION. ISSN 0375-6742, 2019, vol. 200, p. 27-36., Registrované v: WOS
- ADCA16 DANAJ, I. - FRANKOVSKÁ, J. - JANOTKA, Ivan. The influence of smectite content on microstructure and geotechnical properties of calcium and sodium bentonites. In Applied Clay Science, 2005, vol. 28, no. 1-4, p. 223-232. (2004: 1.267 - IF, karentované - CCC). (2005 - Current Contents). ISSN 0169-1317.

Citácie:

1. [1.1] WOJCIK, E. - TRZCINSKI, J. - LADKIEWICZ-KROCHMAL, K. *Microstructural changes of expansive clays during dehydration caused by suction pressure a case study of Miocene to Pliocene clays from Warsaw (Poland). In ACTA GEOLOGICA POLONICA. ISSN 0001-5709, 2019, vol. 69, no. 3, p. 465-488., Registrované v: WOS*

- ADCA17 DAN, Elena - JANOTKA, Ivan. Chemical resistance of Portland cement, blast-furnace slag portland cement and sulphoaluminate-belite cement in acid, chloride and sulphate solution: Some preliminary results. In *Ceramics-Silikáty*, 2003, vol. 47, no. 4, p. 141-148. ISSN 0862-5468.

Citácie:

1. [1.1] WACHIRA, J. M. - NGARI, R. W. - THIONG'O, J. K. - MARANGU, J. M. *Effect of Sulphate and Chloride Ingress on Selected Cements Mortar Prisms Immersed in Seawater and Leather Industry Effluent. In ADVANCES IN CIVIL ENGINEERING. ISSN 1687-8086, 2019, vol. 2019, art. no. 8191689., Registrované v: WOS*

- ADCA18 DARULA, Stanislav - KITTLER, Richard - GUEYMARD, CH.A. Reference luminous solar constant and solar luminance for illuminance calculations. In *Solar Energy*, 2005, vol. 79, no. 5, p. 559-565. (2005 - Current Contents). ISSN 0038-092X.

Citácie:

1. [1.1] WU, Y. J. - KAEMPF, J. H. - SCARTEZZINI, J. L. *Design and validation of a compact embedded photometric device for real-time daylighting computing in office buildings. In BUILDING AND ENVIRONMENT. ISSN 0360-1323, 2019, vol. 148, p. 309-322., Registrované v: WOS*

- ADCA19 DARULA, Stanislav - KOCIFAJ, Miroslav - MOHELNÍKOVÁ, Jitka. Hollow light guide efficiency and illuminance distribution on the light-tube base under overcast and clear sky conditions. In *Optik*, 2013, vol. 124, p. 3165-3169. (2012: 0.524 - IF, Q4 - JCR, 0.318 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0030-4026. Dostupné na: <https://doi.org/10.1016/j.ijleo.2012.09.052>

Citácie:

1. [1.1] AZAD, A. S. - SALMAN, M. - KAUSHIK, S. C. - RAKSHIT, D. *Energy saving potential of tubular light pipe system with different colors on internal surfaces. In INTERNATIONAL JOURNAL OF ENERGY SECTOR MANAGEMENT. ISSN 1750-6220, 2019, vol. 14, no. 4, p. 793-837., Registrované v: WOS*

2. [1.2] MOHAPATRA, B. N. - RAVI KUMAR, M. - MANDAL, S. K. *Analysis of light tubes in interior daylighting system for building. In Indonesian Journal of Electrical Engineering and Computer Science. ISSN 25024752, 2019-01-01, 17, 2, p. 710-719., Registrované v: SCOPUS*

3. [1.2] OBRADOVIC, B. - MATUSIAK, B. S. *Daylight transport systems for buildings at high latitudes. In Journal of Daylighting. ISSN 23838701, 2019-12-01, 6, 2, p. 60-79., Registrované v: SCOPUS*

- ADCA20 DARULA, Stanislav - KITTLER, Richard - KOCIFAJ, Miroslav. Luminous effectiveness of tubular light-guides in tropics. In *Applied Energy*, 2010, vol. 87, no. 11, p. 3460-3466. (2009: 2.209 - IF, Q2 - JCR, 0.992 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0306-2619. Dostupné na: <https://doi.org/10.1016/j.apenergy.2010.05.006>

Citácie:

1. [1.1] BAGLIVO, C. - BONOMOLO, M. - CONGEDO, P. M. *Modeling of Light Pipes for the Optimal Disposition in Buildings. In ENERGIES, 2019, vol. 12, no. 22, art. no. 4323., Registrované v: WOS*

2. [1.1] HE, K. Y. - CHEN, Z. Q. - ZHONG, S. K. - QIAN, Y. D. - LIU, H. Y. - YIN, J. H. - ZHOU, B. D. A solar fiber daylighting system without tracking component. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 194, p. 461-470., Registrované v: WOS
  3. [1.2] OBRADOVIC, B. - MATUSIAK, B. S. Daylight transport systems for buildings at high latitudes. In Journal of Daylighting. ISSN 23838701, 2019, 6, 2, p. 60-79., Registrované v: SCOPUS
- ADCA21 DARULA, Stanislav - KOCIFAJ, Miroslav - KITTLER, Richard - KUNDRACIK, F. Illumination of interior spaces by bended hollow light guides: Application of the theoretical light propagation method. In Solar Energy, 2010, vol. 84, p. 2112-2119. (2009: 2.011 - IF, Q2 - JCR, 1.265 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2010.09.003>  
Citácie:  
1. [1.1] MALET-DAMOUR, B. - BIGOT, D. - GUICHARD, S. - BOYER, H. Photometrical analysis of mirrored light pipe: From state-of-the-art on experimental results (1990-2019) to the proposition of new experimental observations in high solar potential climates. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 193, p. 637-653., Registrované v: WOS
- ADCA22 DARULA, Stanislav - KITTLER, Richard. A methodology for designing and calibrating an artificial sky to simulate ISO/CIE sky types with an artificial sun. In Leukos, 2015, vol. 11, no. 2, p. 93-105. (2014: 0.958 - IF, Q2 - JCR, 0.364 - SJR, Q3 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1550-2724. Dostupné na: <https://doi.org/10.1080/15502724.2014.977391>  
Citácie:  
1. [1.1] KIM, Chul-Ho - KIM, Kang-Soo. Development of Sky Luminance and Daylight Illuminance Prediction Methods for Lighting Energy Saving in Office Buildings. In ENERGIES. ISSN 1996-1073, 2019, vol. 12, no. 4, art. no. 592., Registrované v: WOS
- ADCA23 DARULA, Stanislav - KITTLER, Richard - KÓMAR, Ladislav. Simulation of luminance sky patterns predetermining daylight illuminance on vertical house fronts with windows. In Solar Energy, 2015, vol. 120, p. 195-207. (2014: 3.469 - IF, Q1 - JCR, 1.962 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2015.06.025>  
Citácie:  
1. [1.1] NEKVAPIL, J. - SKODA, J. - MOTYCKA, M. Influence of Changes of Material's BRDF on a Skylight Performance under Various Exterior Conditions. In PROCEEDINGS OF THE 2019 20TH INTERNATIONAL SCIENTIFIC CONFERENCE ON ELECTRIC POWER ENGINEERING (EPE). ISSN 2376-5623, 2019, p. 150-154., Registrované v: WOS
- ADCA24 EKHLAKOV, A.V. - KHAY, O.M. - ZHANG, Chuanzeng - GAO, X.W. - SLÁDEK, Ján - SLÁDEK, Vladimír. A comparative study of three domain-integral evaluation techniques in the boundary-domain integral equation method for transient thermoelastic crack analysis in FGMs. In CMES: Computer Modeling in Engineering & Sciences, 2013, vol. 92, no. 6, p. 595-614. (2012: 0.849 - IF, Q2 - JCR, 0.727 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 1526-1492.  
Citácie:  
1. [1.1] JAMSHIDI, B. - HEMATIYAN, M. R. - MAHZOON, M. An improved time domain meshfree method for analysis of quasi-static and dynamic inhomogeneous viscoelastic problems. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 106, p. 59-67., Registrované v: WOS
- ADCA25 EKHLAKOV, A.V. - KHAY, O.M. - ZHANG, Chuanzeng - SLÁDEK, Ján -

SLÁDEK, Vladimír - GAO, X.W. Thermoelastic crack analysis in functionally graded materials and structures by a BEM. In *Fatigue & Fracture of Engineering Materials & Structures*, 2012, vol. 35, p. 742–766. (2011: 0.847 - IF, Q2 - JCR, 1.026 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 8756-758X. Dostupné na: <https://doi.org/10.1111/j.1460-2695.2011.01657.x>

Citácie:

1. [1.1] LIU, S. M. - ZHANG, H. H. - XIONG, A. Q. - LIU, Q. Thermal fracture behavior of functionally graded materials a brief review and some prospects. In *2018 INTERNATIONAL CONFERENCE ON CONSTRUCTION, AVIATION AND ENVIRONMENTAL ENGINEERING*. ISSN 1755-1307, 2019, vol. 233., Registrované v: WOS

2. [1.1] PANT, M. - GARG, S. Applications of Computational Methods in Manufacturing Processes. In *ADVANCED APPLICATIONS IN MANUFACTURING ENGINEERING*, 2019, p. 191-229., Registrované v: WOS

3. [1.1] SHAHSAVAN, M. - NAZARI, M. B. - ROKHI, M. M. Dynamic analysis of cracks under thermal shock considering thermoelasticity without energy dissipation. In *JOURNAL OF THERMAL STRESSES*. ISSN 0149-5739, 2019, p. 1-22., Registrované v: WOS

4. [1.1] SUN, L. - GRASSELLI, G. - LIU, Q. S. - TANG, X. H. Thermal cracking simulation of functionally graded materials using the combined finite-discrete element method. In *COMPUTATIONAL PARTICLE MECHANICS*. ISSN 2196-4378, 2019., Registrované v: WOS

5. [1.2] ZHANG, Qiaoyun - GUO, Y. - ZHAO, M. Iterative boundary element method for cracks in a thermal medium with exact crack face boundary conditions. In *WIT Transactions on Engineering Sciences*. ISSN 17433533, 2019, 122, p. 51-62., Registrované v: SCOPUS

ADCA26

EKHLAKOV, A.V. - KHAY, O.M. - ZHANG, C. - SLÁDEK, Ján - SLÁDEK, Vladimír. A BDEM for transient thermoelastic crack problems in functionally graded materials under thermal shock. In *Computational Materials Science*, 2012, vol. 57, p. 30-37. (2011: 1.574 - IF, Q2 - JCR, 0.987 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0927-0256. Dostupné na: <https://doi.org/10.1016/j.commatsci.2011.06.019>

Citácie:

1. [1.1] BOUSSAA, D. Coupled heat equation in thermoelasticity with temperature dependent moduli. In *JOURNAL OF THERMAL STRESSES*. ISSN 0149-5739, 2019, vol. 42, no. 12, p. 1603-1616., Registrované v: WOS

2. [1.1] GAYEN, D. - TIWARI, R. - CHAKRABORTY, D. Static and dynamic analyses of cracked functionally graded structural components: A review. In *COMPOSITES PART B-ENGINEERING*. ISSN 1359-8368, 2019, vol. 173, art. no. UNSP 106982., Registrované v: WOS

3. [1.1] MEMARI, A. - AZAR, M. R. K. - VAKILI-TAHAMI, F. Meshless fracture analysis of 3D planar cracks with generalized thermo-mechanical stress intensity factors. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 99, p. 169-194., Registrované v: WOS

4. [1.1] SHAHSAVAN, M. - NAZARI, M. B. - ROKHI, M. M. Dynamic analysis of cracks under thermal shock considering thermoelasticity without energy dissipation. In *JOURNAL OF THERMAL STRESSES*. ISSN 0149-5739, 2019, p. 1-22., Registrované v: WOS

5. [1.1] ZHANG, H. H. - LIU, S. M. - HAN, S. Y. - FAN, L. F. The numerical manifold method for crack modeling of two-dimensional functionally graded materials under thermal shocks. In *ENGINEERING FRACTURE MECHANICS*. ISSN 0013-7944, 2019, vol. 208, p. 90-106., Registrované v: WOS



- ADCA27 FABIAN, Miroslav\*\* - UETANI, Y. - DARULA, Stanislav. Monthly luminous efficacy models and illuminance prediction using ground measured and satellite data. In *Solar Energy*, 2018, vol. 162, p. 95-108. (2017: 4.374 - IF, Q1 - JCR, 1.615 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2017.12.056> (APVV 0118-12 : Simulovanie denného svetla v umelej oblohe. VEGA 2/0045/17)
- Citácie:
1. [1.1] SOLOVYOV, A. K. - NGUYEN, T. H. P. *THE CALCULATION METHOD FOR LIGHT CLIMATE PARAMETERS BASED ON SUN-LIGHTING EFFICIENCY AND THE COMPARATIVE ANALYSIS OF LIGHT CLIMATE IN HANOI AND MOSCOW. In LIGHT & ENGINEERING. ISSN 0236-2945, 2019, vol. 27, no. 5, p. 67-71., Registrované v: WOS*
- ADCA28 FILOVÁ, Eva - RAMPICHOVÁ, Michala - LITVINEC, Andrej - DRŽÍK, Milan - MICKOVÁ, Andrea - BUZGO, Matej - KOSTÁKOVÁ, Eva - MARTINOVÁ, Lenka - USVALD, Dušan - PROSECKÁ, Eva - UHLIK, Jiří - MOTLIK, J. - VAJNER, Ludek - AMLER, E. A cell-free nanofiber composite scaffold regenerated osteochondral defects in miniature pigs. In *International Journal of Pharmaceutics*, 2013, vol. 447, no. 1-2, p. 139-149. (2012: 3.458 - IF, Q1 - JCR, 1.552 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0378-5173. Dostupné na: <https://doi.org/10.1016/j.ijpharm.2013.02.056>
- Citácie:
1. [1.1] PATEL, Jay M. - SALEH, Kamiel S. - BURDICK, Jason A. - MAUCK, Robert L. *Bioactive factors for cartilage repair and regeneration: Improving delivery, retention, and activity. In ACTA BIOMATERIALIA. ISSN 1742-7061, 2019, vol. 93, p. 222-238., Registrované v: WOS*
2. [1.1] YE, Lijuan - WANG, Jingguang - LIAO, Cancheng - LI, Shuqi - FANG, Yuqi - YANG, Zhuohong - HU, Yang - GUO, Bohong. *3D Printed Composite Scaffolds Incorporating Ruthenium Complex-Loaded Liposomes as a Delivery System to Prevent the Proliferation of MG-63 Cells. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, 2019, vol. 304, no. 11, art. no. 1900295., Registrované v: WOS*
3. [1.2] JUN, Zhang - QI, You - GANG, Zou - ZHEN, Ge - YI, Liu. *In situ tissue engineering in the field of bone and cartilage repair: Application and problems. In Chinese Journal of Tissue Engineering Research. ISSN 20954344, 2019, 23, 20, p. 3255-3260., Registrované v: SCOPUS*
- ADCA29 GANGL, M. - KOCIFAJ, Miroslav - VIDEEN, Gorden - HORVATH, Helmuth. Light absorption by coated nano-sized carbonaceous particles. In *Atmospheric Environment*, 2008, vol. 42, no. 11, p. 2571-2581. (2007: 2.549 - IF, Q1 - JCR, 1.999 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 1352-2310.
- Citácie:
1. [1.1] LEFEVRE, G. - YON, J. - BOUVIER, M. - LIU, F. S. - COPPALLE, A. *Impact of Organic Coating on Soot Angular and Spectral Scattering Properties. In ENVIRONMENTAL SCIENCE & TECHNOLOGY. ISSN 0013-936X, 2019, vol. 53, no. 11, p. 6383-6391., Registrované v: WOS*
2. [1.1] ZHU, K. Y. - LI, S. L. - HUANG, Y. *Analytical solutions and numerical simulations of radiative property in the two-layer concentrically spherical large particle. In INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, 2019, vol. 128, p. 516-525., Registrované v: WOS*
- ADCA30 GAO, X.W. - ZHANG, C. - SLÁDEK, Ján - SLÁDEK, Vladimír. Fracture analysis of functionally graded materials by a BEM. In *Composites Science and Technology*, 2008, vol. 68, no. 5, p. 1209-1215. (2007: 2.171 - IF, Q1 - JCR, 1.408 - SJR, Q1 -

SJR, karentované - CCC). (2008 - Current Contents). ISSN 0266-3538.

Citácie:

1. [1.1] AMIRPOUR, M. - BICKERTON, S. - CALIUS, E. - DAS, R. - MACE, B. Numerical and experimental study on deformation of 3D-printed polymeric functionally graded plates: 3D-Digital Image Correlation approach. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 211, p. 481-489., Registrované v: WOS
2. [1.1] FAROUQ, W. - KHAZAL, H. - HASSAN, A. K. F. Fracture analysis of functionally graded material using digital image correlation technique and extended element-free Galerkin method. In OPTICS AND LASERS IN ENGINEERING. ISSN 0143-8166, 2019, vol. 121, p. 307-322., Registrované v: WOS
3. [1.1] FENG, W. Z. - LI, H. Y. - GAO, L. F. - QIAN, W. - YANG, K. Hypersingular flux interface integral equation for multi-medium heat transfer analysis. In INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, 2019, vol. 138, p. 852-865., Registrované v: WOS
4. [1.1] KOU, K. P. - YANG, Y. A meshfree boundary-domain integral equation method for free vibration analysis of the functionally graded beams with open edged cracks. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, 2019, vol. 156, p. 303-309., Registrované v: WOS
5. [1.1] YANG, Y. - KOU, K. P. - LAM, C. C. In-Plane Free Vibration of Circular and Annular FG Disks. In INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS. ISSN 0219-8762, 2019, vol. 16, no. 6, art. no. 1840024., Registrované v: WOS

ADCA31 GARCIA-SANCHES, F. - ZHANG, Chuanzeng - SLÁDEK, Ján - SLÁDEK, Vladimír. 2D transient dynamic crack analysis in piezoelectric solids by BEM. In Computational Materials Science, 2007, vol. 39, no. 1, p. 179-186. (2006: 1.104 - IF, Q2 - JCR, 0.860 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0927-0256.

Citácie:

1. [1.1] AZIZI, S. - BAGHERI, R. Mixed mode transient analysis of functionally graded piezoelectric plane weakened by multiple cracks. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 101, p. 127-140., Registrované v: WOS
2. [1.1] ZHOU, L. M. - LI, M. - ZHAO, H. W. - TIAN, W. J. Cell-Based Smoothed Finite Element Method for the Intensity Factors of Piezoelectric Bimaterials with Interfacial Crack. In INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS. ISSN 0219-8762, 2019, vol. 16, no. 7, art. no. 1850107., Registrované v: WOS
3. [1.2] RAN, R. - QIN, T. Y. Analysis of hypersingular integral equation method to 3d dynamic crack. In Jisuan Lixue Xuebao/Chinese Journal of Computational Mechanics. ISSN 10074708, 2019, 36, 3, p. 358-363., Registrované v: SCOPUS

ADCA32 HANEČKA, Karol - KORONTHÁLYOVÁ, Oľga - MATIAŠOVSKÝ, Peter. The carbonation of autoclaved aerated concrete. In Cement and Concrete Research, 1997, vol. 27, no. 4, p. 589-599. ISSN 0008-8846.

Citácie:

1. [1.1] BHOSALE, A. - ZADE, N. P. - DAVIS, R. - SARKAR, P. Experimental Investigation of Autoclaved Aerated Concrete Masonry. In JOURNAL OF MATERIALS IN CIVIL ENGINEERING. ISSN 0899-1561, 2019, vol. 31, no. 7, art. no. 04019109., Registrované v: WOS

ADCA33 HOSSEINI, S. M.\*\* - SLÁDEK, Ján - SLÁDEK, Vladimír. Anisotropic transient thermoelasticity analysis in a two-dimensional decagonal quasicrystal using

meshless local Petrov-Galerkin (MLPG) method. In Applied Mathematical Modeling, 2019, vol. 66, p. 275-295. (2018: 2.841 - IF, Q1 - JCR, 0.873 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0307-904X. Dostupné na: <https://doi.org/10.1016/j.apm.2018.09.024> (APVV-14-0440 : Multifyzikálne problémy v doskách z funkcionálne gradientných materiálov)

**Citácie:**

1. [1.1] MEMARI, A. - AZAR, M. R. K. *Thermo-mechanical shock fracture analysis by meshless method. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 102, p. 171-192., Registrované v: WOS*

2. [1.1] MEMARI, A. - MOHEBALIZADEH, H. *Quasi-static analysis of mixed-mode crack propagation using the meshless local Petrov-Galerkin method. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 106, p. 397-411., Registrované v: WOS*

ADCA34 HOSSEINI, S. M. - SLÁDEK, Ján - SLÁDEK, Vladimír. Application of meshless local integral equations to two dimensional analysis of coupled non-Fick diffusion-elasticity. In Engineering Analysis with Boudary Elements, 2013, vol. 37, no. 3, p. 603-615. (2012: 1.596 - IF, Q1 - JCR, 1.244 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2013.01.010>

**Citácie:**

1. [1.1] LI, C. L. - GUO, H. L. - TIAN, X. G. - HE, T. H. *Nonlocal diffusion-elasticity based on nonlocal mass transfer and nonlocal elasticity and its application in shock-induced responses analysis. In MECHANICS OF ADVANCED MATERIALS AND STRUCTURES. ISSN 1537-6494, 2019., Registrované v: WOS*

ADCA35 HOSSEINI, S. M. - SLÁDEK, Ján - SLÁDEK, Vladimír. Meshless local Petrov-Galerkin method for coupled thermoelasticity analysis of a functionally graded thick hollow cylinder. In Engineering Analysis with Boudary Elements, 2011, vol. 35 no. 6, p. 827-835. (2010: 1.359 - IF, Q1 - JCR, 0.938 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2011.02.001>

**Citácie:**

1. [1.1] ZHANG, J. P. - WANG, S. S. - GONG, S. G. - ZUO, Q. S. - HU, H. Y. *Thermo-mechanical coupling analysis of the orthotropic structures by using element-free Galerkin method. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 101, p. 198-213., Registrované v: WOS*

2. [1.2] LI, Q. - CHEN, S. *Meshless natural neighbour Petrov-Galerkin method for two-dimensional dynamic coupled thermoelasticity problem. In Tumu yu Huanjing Gongcheng Xuebao/Journal of Civil and Environmental Engineering. ISSN 20966717, 2019, 41, 5, p. 109-114., Registrované v: SCOPUS*

3. [1.2] WANG, F. - ZHENG, B. J. - LIN, G. - ZHOU, Y. H. - FAN, Y. *Meshless method based on interpolating moving least square shape functions for dynamic coupled thermoelasticity analysis. In Gongcheng Lixue/Engineering Mechanics. ISSN 10004750, 2019, 36, 4, p. 37-43., Registrované v: SCOPUS*

ADCA36 HOSSEINI, S. M. - SLÁDEK, Ján - SLÁDEK, Vladimír. Two dimensional transient analysis of coupled non-Fick diffusion-thermoelasticity based on Green-Naghdi theory using the meshless local Petrov-Galerkin (MLPG) method. In International Journal of Mechanical Sciences, 2014, vol. 82, p. 74-80. (2013: 2.061 - IF, Q1 - JCR, 1.306 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0020-7403. Dostupné na: <https://doi.org/10.1016/j.ijmecsci.2014.03.009>

**Citácie:**

1. [1.1] *GHIASI, N. - KHOSRAVIFARD, A. A novel method for estimation of intensity and location of multiple point heat sources based on strain measurement. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 98, p. 203-216., Registrované v: WOS*
  2. [1.1] *LI, C. L. - GUO, H. L. - TIAN, X. G. Transient responses of a hollow cylinder under thermal and chemical shock based on generalized diffusion-thermoelasticity with memory-dependent derivative. In JOURNAL OF THERMAL STRESSES. ISSN 0149-5739, 2019, vol. 42, no. 3, p. 313-331., Registrované v: WOS*
- ADCA37 CHOU, C. K. - SUN, C. - YOUNG, D. L. - SLÁDEK, Ján - SLÁDEK, Vladimír. Extrapolated local radial basis function collocation method for shallow water problems. In Engineering Analysis with Boundary Elements, 2015, vol. 50, p. 275-290. (2014: 1.392 - IF, Q2 - JCR, 1.032 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2014.09.002>  
Citácie:  
  1. [1.1] *HSU, T. W. - LIANG, S. J. - WU, N. J. Application of meshless SWE model to moving wet/dry front problems. In ENGINEERING WITH COMPUTERS. ISSN 0177-0667, 2019, vol. 35, no. 1, p. 291-303., Registrované v: WOS*
  2. [1.1] *SUN, C. T. - KWOK, O. L. A. - GUAN, P. C. - SHIH, W. K. USING REPRODUCING KERNEL PARTICLE METHOD FOR SHALLOW WATER PROBLEMS. In JOURNAL OF MARINE SCIENCE AND TECHNOLOGY-TAIWAN. ISSN 1023-2796, 2018, vol. 26, no. 3, p. 431-440., Registrované v: WOS*
  3. [1.2] *CHAABELASRI, E. - JEYAR, M. - SALHI, N. - ELMAHI, I. A simple unstructured finite volume scheme for solving shallow water equations with wet/dry interface. In International Journal of Mechanical Engineering and Technology. ISSN 09766340, 2019, 10, 1, p. 1849-1861., Registrované v: SCOPUS*
  4. [1.2] *TALBI, H. - JEYAR, M. - CHAABELASRI, E. - IMAD, E. - SALHI, N. Application of an efficient hydraulic model for surface water flows. In Proceedings 2019 International Conference on Intelligent Systems and Advanced Computing Sciences, ISACS 2019, 2019, art. no. 9068888., Registrované v: SCOPUS*
- ADCA38 IFKA, Tomáš - PALOU, Martin T. - BARAČEK, Jan - ŠOUKAL, František - BOHÁČ, Martin. Evaluation of P2O5 distribution inside the main clinker minerals by the application of EPMA method. In Cement and Concrete Research, 2014, vol. 59, p. 147-154. (2013: 3.848 - IF, Q1 - JCR, 4.335 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0008-8846. Dostupné na: <https://doi.org/10.1016/j.cemconres.2014.02.010>  
Citácie:  
  1. [1.1] *HUANG, Y. B. - QIAN, J. S. - KANG, X. J. - YU, J. C. - FAN, Y. R. - DANG, Y. D. - ZHANG, W. S. - WANG, S. D. Belite-calcium sulfoaluminate cement prepared with phosphogypsum: Influence of P2O5 and F on the clinker formation and cement performances. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 203, p. 432-442., Registrované v: WOS*
- ADCA39 JANOTKA, Ivan - BÁGEL, Ľubomír. Pore structures, permeabilities, and compressive strengths of concrete at temperatures up to 800 degrees C. In ACI Materials Journal, 2002, vol. 99, no. 2, . p. 196-200. ISSN 0889-325X.  
Citácie:  
  1. [1.1] *RIVAROLA, F. L. - LABANDA, N. - ETSE, G. Thermodynamically*



- consistent multiscale homogenization for thermo-poroplastic materials. In ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND PHYSIK. ISSN 0044-2275, 2019, vol. 70, no. 3, art. no. 82., Registrované v: WOS*
- ADCA40 JANOTKA, Ivan - KRAJČI, Ľudovít. The properties of mortar using blends with Portland cement clinker, zeolite tuff and gypsum. In *Ceramics-Silikáty*, 1995, vol. 39, no. 3, p. 105-111. ISSN 0862-5468.  
Citácie:  
*1. [1.1] MOLINARI, C. - ZANELLI, C. - DONDI, M. Zeolites and modified clays in environmentally sustainable building materials. In MODIFIED CLAY AND ZEOLITE NANOCOMPOSITE MATERIALS: ENVIRONMENTAL AND PHARMACEUTICAL APPLICATIONS, 2019, p. 289-307., Registrované v: WOS*
- ADCA41 JANOTKA, Ivan - KRAJČI, Ľudovít - RAY, A. - MOJUMDAR, Subhash Chandra. The hydration phase and pore structure formation in the blends of sulphoaluminate-belite cement with Portland cement. In *Cement and Concrete Research*, 2003, vol. 33, no. 4, p. 489-497. ISSN 0008-8846.  
Citácie:  
*1. [1.1] HUANG, T. J. - LI, B. Y. - YUAN, Q. - SHI, Z. G. - XIE, Y. J. - SHI, C. J. Rheological behavior of Portland clinker-calcium sulfoaluminate clinker-anhydrite ternary blend. In CEMENT & CONCRETE COMPOSITES. ISSN 0958-9465, 2019, vol. 104, art. no. UNSP 103403., Registrované v: WOS*  
*2. [1.1] KOGA, G. Y. - ALBERT, B. - ROCHE, V. - NOGUEIRA, R. P. On the intrinsic passivating ability of Belite-Ye';elimate-Ferrite towards carbon steel: A straightforward comparison with ordinary Portland cement. In CORROSION SCIENCE. ISSN 0010-938X, 2019, vol. 147, p. 141-151., Registrované v: WOS*  
*3. [1.1] LIN, M. - GUO, Y. C. - TIAN, B. S. - SONG, Y. L. Effect of freezing and thawing cycle properties of cement-stabilized macadam materials with self-prepared early-strength agents. In 7TH GLOBAL CONFERENCE ON MATERIALS SCIENCE AND ENGINEERING (CMSE2018). ISSN 1757-8981, 2019, vol. 474, art. no. 012018., Registrované v: WOS*  
*4. [1.1] NGUYEN, H. - ADESANYA, E. - OHENOJA, K. - KRISKOVA, L. - PONTIKES, Y. - KINNUNEN, P. - ILLIKAINEN, M. Byproduct-based ettringite binder A synergy between ladle slag and gypsum. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 197, p. 143-151., Registrované v: WOS*  
*5. [1.1] NGUYEN, H. - KINNUNEN, P. - CARVELLI, V. - MASTALI, M. - ILLIKAINEN, M. Strain hardening polypropylene fiber reinforced composite from hydrated ladle slag and gypsum. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, 2019, vol. 158, p. 328-338., Registrované v: WOS*
- ADCA42 JANOTKA, Ivan - MADEJOVÁ, Jana - ŠTEVULA, Ladislav - FRĚALOVÁ, D.M. Behaviour of Ca(OH)<sub>2</sub> in the presence of the set styrene-acrylate dispersion. In *Cement and Concrete Research*, 1996, vol. 26, no. 11, p. 1727-1735. Dostupné na: [https://doi.org/10.1016/S0008-8846\(96\)00156-1](https://doi.org/10.1016/S0008-8846(96)00156-1)  
Citácie:  
*1. [1.1] LIU SIFENG - YANG SIYU - KONG YANING - WAN TINGTING - ZHAO GUORONG. Anti-cracking Property of EVA-modified Polypropylene Fiber-reinforced Concrete Under Thermal-cooling Cycling Curing. In JOURNAL OF WUHAN UNIVERSITY OF TECHNOLOGY-MATERIALS SCIENCE EDITION. ISSN 1000-2413, 2019, vol. 34, no. 5, pp. 1109-1118., Registrované v: WOS*
- ADCA43 JANOTKA, Ivan - NÜRNBERGEROVA, Terézia. Effect of temperature on structural quality of the cement paste and high-strength concrete with silica fume. In *Nuclear Engineering and Design*, 2005, vol. 235, no. 17-19, p. 2019-2032. (2004: 0.440 - IF, karentované - CCC). (2005 - Current Contents). ISSN 0029-5493.

Citácie:

1. [1.1] LUHAR, S. - LUHAR, I. *Durability performance of Green Concrete Incorporating Various Wastes: A Review*. In *JOURNAL OF MATERIALS AND ENGINEERING STRUCTURES*. ISSN 2170-127X, 2019, vol. 6, no. 4, p. 469-484., Registrované v: WOS
2. [1.1] MAO, M. J. - ZHANG, D. S. - YANG, Q. N. - ZHANG, W. B. *Study of Durability of Concrete with Fly Ash as Fine Aggregate under Alternative Interactions of Freeze-Thaw and Carbonation*. In *ADVANCES IN CIVIL ENGINEERING*. ISSN 1687-8086, 2019, vol. 2019, art. no. 4693893., Registrované v: WOS
3. [1.1] MOHIT, M. - SHARIFI, Y. *Thermal and microstructure properties of cement mortar containing ceramic waste powder as alternative cementitious materials*. In *CONSTRUCTION AND BUILDING MATERIALS*. ISSN 0950-0618, 2019, vol. 223, p. 643-656., Registrované v: WOS
4. [1.1] MOUSAVIMEHR, M. - NEMATZADEH, M. *Predicting post-fire behavior of crumb rubber aggregate concrete*. In *CONSTRUCTION AND BUILDING MATERIALS*. ISSN 0950-0618, 2019, vol. 229, art. no. 116834., Registrované v: WOS
5. [1.1] NEMATZADEH, M. - MOUSAVIMEHR, M. *Residual Compressive Stress-Strain Relationship for Hybrid Recycled PET-Crumb Rubber Aggregate Concrete after Exposure to Elevated Temperatures*. In *JOURNAL OF MATERIALS IN CIVIL ENGINEERING*. ISSN 0899-1561, 2019, vol. 31, no. 8, art. no. 04019136., Registrované v: WOS
6. [1.1] THANARAJ, D. P. - ANAND, N. - ARULRAJ, P. *Experimental investigation of mechanical properties and physical characteristics of concrete under standard fire exposure*. In *JOURNAL OF ENGINEERING DESIGN AND TECHNOLOGY*. ISSN 1726-0531, 2019, vol. 17, no. 5, p. 878-903., Registrované v: WOS
7. [1.2] SHI, J. - ZHAO, Y. - HAO, S. - WANG, L. *Deformation Behavior of Concrete under Uniaxial Compression after High Temperature by DIC Technology*. In *Jianzhu Cailiao Xuebao/Journal of Building Materials*. ISSN 10079629, 2019, 22, 4, p. 584-591., Registrované v: SCOPUS

ADCA44 JANOTKA, Ivan - MOJUMDAR, Subhash Chandra. *Thermal analysis at the evaluation of concrete damage by high temperatures*. In *Journal of Thermal Analysis and Calorimetry*, 2005, vol. 81, no. 1, p. 197-203. ISSN 1388-6150.

Citácie:

1. [1.1] RAFI, M. M. - AZIZ, T. - LODI, S. H. *Effects of Elevated Temperatures on Residual Properties of Low-Strength Concrete*. In *JOURNAL OF TESTING AND EVALUATION*. ISSN 0090-3973, 2019, vol. 47, no. 5, p. 3448-3469., Registrované v: WOS
2. [1.2] SINGH, R. B. - AGGARWAL, P. - AGGARWAL, Y. *Utilization of super pozzolanic material in the production of self-compacting concrete*. In *Indian Concrete Journal*. ISSN 00194565, 2019, 98, 2, p. 52-60., Registrované v: SCOPUS

ADCA45 JANOTKA, Ivan - KRAJČI, Ľudovít - DZIVÁK, Martin. *Properties and utilization of zeolite-blended portland cements*. In *Clays and Clay Minerals*, 2003, vol. 51, no. 6, p. 616-624. (2002: 1.594 - IF, karentované - CCC). (2003 - Current Contents). ISSN 0009-8604.

Citácie:

1. [1.1] MOLINARI, C. - ZANELLI, C. - DONDI, M. *Zeolites and modified clays in environmentally sustainable building materials*. In *MODIFIED CLAY AND ZEOLITE NANOCOMPOSITE MATERIALS: ENVIRONMENTAL AND*

- PHARMACEUTICAL APPLICATIONS*, 2019, p. 289-307., Registrované v: WOS
2. [1.2] SUSHANTH, M. - CHANDRA SEKHARA REDDY, T. *Mechanical and durability properties of self curing concrete with partial replacement of cement by calcinated zeolite powder. In International Journal of Scientific and Technology Research*, 2019, 8, 11, p. 1444-1447., Registrované v: SCOPUS
- ADCA46 JANOTKA, Ivan - KRAJČI, Ľudovít. An experimental study on the upgrade of sulfoaluminate-belite cement systems by blending with Portland cement. In *Advances in Cement Research*, 1999, vol. 11, no. 1, p. 35-41. (1999 - Current Contents). ISSN 0951-7197.
- Citácie:
1. [1.1] COLONNA, D. - LEONE, M. - AIELLO, M. A. - TORTELLI, S. - MARCHI, M. I. *Short and long-term behaviour of RC beams made with CSA binder. In ENGINEERING STRUCTURES*. ISSN 0141-0296, 2019, vol. 197, art. no. 109370., Registrované v: WOS
2. [1.1] HUANG, T. J. - LI, B. Y. - YUAN, Q. - SHI, Z. G. - XIE, Y. J. - SHI, C. J. *Rheological behavior of Portland clinker-calcium sulphoaluminate clinker-anhydrite ternary blend. In CEMENT & CONCRETE COMPOSITES*. ISSN 0958-9465, 2019, vol. 104, art. no. 103403., Registrované v: WOS
3. [1.1] WANG, L. B. - ZHAN, S. L. - TANG, X. D. - XU, Q. - QIAN, K. L. *Pore Solution Chemistry of Calcium Sulfoaluminate Cement and Its Effects on Steel Passivation. In APPLIED SCIENCES-BASEL*, 2019, vol. 9, no. 6, art. no. 1092., Registrované v: WOS
- ADCA47 JANOTKA, Ivan. Hydration of the cement paste with Na<sub>2</sub>CO<sub>3</sub> addition. In *Ceramics-Silikáty*, 2001, vol. 45, no. 1, p. 16-23. (2001 - Current Contents). ISSN 0862-5468.
- Citácie:
1. [1.2] BOUREGBA, A. - EZ-ZAKI, H. - DIOURI, A. - SASSI, O. *Dicalcium silicate hydration behavior in the presence of Na<sup>+</sup>CO<sup>3-</sup> and water glass. In Asian Journal of Civil Engineering*. ISSN 15630854, 2019, 20, 6, p. 857-867., Registrované v: SCOPUS
- ADCA48 JANOTKA, Ivan - KRAJČI, Ľudovít. Sulphate resistance and passivation ability of the mortar made from pozzolan cement with zeolite. In *Journal of Thermal Analysis and Calorimetry*, 2008, vol. 94, no. 1, p. 7-14. (2007: 1.483 - IF, Q3 - JCR, 0.468 - SJR, Q3 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 1388-6150.
- Citácie:
1. [1.1] MEZIANI, M. - AMIRI, O. - LEKLOU, N. - CHELOUAH, N. *Transport properties study of supplementary cementitious materials: case of tuff, limestone filler and granodiorite. In JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY*. ISSN 0169-4243, 2019, vol. 33, no. 3, p. 286-300., Registrované v: WOS
2. [1.1] MOLINARI, C. - ZANELLI, C. - DONDI, M. *Zeolites and modified clays in environmentally sustainable building materials. In MODIFIED CLAY AND ZEOLITE NANOCOMPOSITE MATERIALS: ENVIRONMENTAL AND PHARMACEUTICAL APPLICATIONS*, 2019, p. 289-307., Registrované v: WOS
3. [1.1] TRAN, Y. T. - LEE, J. - KUMAR, P. - KIM, K. H. - LEE, S. S. *Natural zeolite and its application in concrete composite production. In COMPOSITES PART B-ENGINEERING*. ISSN 1359-8368, 2019, vol. 165, p. 354-364., Registrované v: WOS
- ADCA49 JANOTKA, Ivan - MOJUMDAR, Subhash Chandra. Degree of hydration in cement paste and C3Asodium carbonate-water systems. In *Journal of Thermal Analysis and Calorimetry*, 2007, vol. 90, no. 3, p. 645-652. (2006: 1.438 - IF, Q2 - JCR, 0.435 - SJR, Q3 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 1388-6150.

Citácie:

1. [1.1] JOSEPH, S. - SKIBSTED, J. - CIZER, O. *A quantitative study of the C(3)A hydration. In CEMENT AND CONCRETE RESEARCH. ISSN 0008-8846, 2019, vol. 115, p. 145-159., Registrované v: WOS*
- ADCA50 JANOTKA, Ivan - KRAJČI, Ľudovít - MOJUMDAR, Subhash Chandra. Performance of sulphoaluminate-belite cement with high C4A3 content. In *Ceramics-Silikáty*, 2007, vol. 51, no. 2, p. 74-81. (2006: 0.597 - IF, Q2 - JCR, 0.343 - SJR, Q2 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0862-5468.
- Citácie:
1. [1.1] COLONNA, D. - LEONE, M. - AIELLO, M. A. - TORTELLI, S. - MARCHI, M. I. *Short and long-term behaviour of RC beams made with CSA binder. In ENGINEERING STRUCTURES. ISSN 0141-0296, 2019, vol. 197, art. no. 109370., Registrované v: WOS*
  2. [1.1] SU, D. L. - YUE, G. B. - LI, Q. Y. - GUO, Y. X. - GAO, S. - WANG, L. *Research on the Preparation and Properties of High Belite Sulphoaluminate Cement (HBSAC) Based on Various Industrial Solid Wastes. In MATERIALS. ISSN 1996-1944, 2019, vol. 12, no. 9, art. no. 1510., Registrované v: WOS*
- ADCA51 JUHÁSOVÁ, Emília - HURÁK, M. - ZEMBATY, Z. Assessment of seismic resistance of masonry structures including boundary conditions. In *Soil Dynamics and Earthquake Engineering*, 2002, vol. 22, iss. 9-12, p. 1193-1197. ISSN 0267-7261.
- Citácie:
1. [1.1] FORABOSCHI, P. *Masonry does not limit itself to only one structural material: Interlocked masonry versus cohesive masonry. In JOURNAL OF BUILDING ENGINEERING. ISSN 2352-7102, 2019, vol. 26, art. no. 100831., Registrované v: WOS*
- ADCA52 JUHÁSOVÁ, Emília. Quasi-static versus dynamic space wind response of slender structures. In *Journal of Wind Engineering and Industrial Aerodynamics*, 1997, vol. 71, p. 757-766. ISSN 0167-6105.
- Citácie:
1. [1.1] HUANG, P. - CHEN, S. - GU, M. *Field measurement and aeroelastic wind tunnel test of wind-induced vibrations of lattice tower. In STRUCTURAL DESIGN OF TALL AND SPECIAL BUILDINGS. ISSN 1541-7794, 2019, vol. 28, no. 11, art. no. e1622., Registrované v: WOS*
- ADCA53 JUHÁSOVÁ, Emília - SOFRONIE, R. - BAIRRAO, R. Stone masonry in historical buildings - Ways to increase their resistance and durability. In *Engineering Structures*, 2008, vol. 30, iss. 8, p. 2194-2205. (2007: 0.986 - IF, Q1 - JCR, 1.527 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0141-0296. Dostupné na: <https://doi.org/10.1016/j.engstruct.2007.07.008>
- Citácie:
1. [1.1] SPERANZINI, E. *Effectiveness of new generation fabrics for reinforcement of non-tensile resistant materials. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 227, art. no. UNSP 111315., Registrované v: WOS*
- ADCA54 KITTLER, Richard - DARULA, Stanislav. Parametrization problems of the very bright cloudy sky conditions. In *Solar Energy*, 1998, vol. 62, no. 2, p. 93-100. ISSN 0038-092X.
- Citácie:
1. [1.1] IVANOVA, S. M. - GUEYMARD, C. A. *Simulation and applications of cumulative anisotropic sky radiance patterns. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 178, p. 278-294., Registrované v: WOS*
- ADCA55 KITTLER, Richard - DARULA, Stanislav. Parametric definition of the daylight climate. In *Renewable Energy*, 2002, vol. 26, no. 2, p. 177-187. ISSN 0960-1481.



Citácie:

1. [1.1] KIDER, J. T. - WALTER, B. - FANG, S. - SEKKIN, E. - GREENBERG, D. P. *Transition Portal for daylighting calculations in early phase design. In ENERGY AND BUILDINGS. ISSN 0378-7788, 2019, vol. 198, p. 353-363., Registrované v: WOS*
2. [1.1] LI, L. - LEI, Y. - TANG, L. - YAN, F. - LUO, F. - ZHU, H. H. *A 3D spatial data model of the solar rights associated with individual residential properties. In COMPUTERS ENVIRONMENT AND URBAN SYSTEMS. ISSN 0198-9715, 2019, vol. 74, p. 88-99., Registrované v: WOS*
3. [1.2] PHUONG NGUYEN, T. K. - TAMRAZYAN, A. G. - LE, M. T. *Correction of the Uneven Brightness Coefficient for the Tropical Sky Conditions. In IOP Conference Series: Materials Science and Engineering. ISSN 17578981, 2019, 661, 1, art. no. 012117., Registrované v: SCOPUS*

ADCA56 KITTLER, Richard - DARULA, Stanislav. Determination of time and sun position system. In *Solar Energy*, 2013, vol. 93, p. 72-79. (2012: 2.952 - IF, Q2 - JCR, 1.605 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2013.03.021>

Citácie:

1. [1.1] DEVETAKOVIC, M. S. - DORDEVIC, D. D. - DUKANOVIC, G. D. - FURUNDZIC, A. D. K. - SUDIMAC, B. S. - SCOGNAMIGLIO, A. *Design of Solar Systems for Buildings and Use of BIM Tools: Overview of Relevant Geometric Aspects. In FME TRANSACTIONS. ISSN 1451-2092, 2019, vol. 47, no. 2, p. 387-397., Registrované v: WOS*
2. [1.2] HEIBATI, S. - MAREF, W. - SABER, H. H. *Developing a model for predicting optimum daily tilt angle of a PV solar system at different geometric, physical and dynamic parameters. In Advances in Building Energy Research. ISSN 17512549, 2019., Registrované v: SCOPUS*
3. [1.2] SAIT, U. - GOKUL LAL, K. V. - KUMAR, T. - BHAUMIK, R. - BHALLA, K. *A framework outlining a daylight responsive model for smart buildings. In Journal of Physics: Conference Series. ISSN 17426588, 2019, 1343, 1, art. no. 012166., Registrované v: SCOPUS*

ADCA57 KITTLER, Richard - DARULA, Stanislav. The simultaneous occurrence and relationship of sunlight and skylight under ISO/CIE standard sky types. In *Lighting Research and Technology*, 2015, vol. 47, p. 565-580. (2014: 1.691 - IF, Q1 - JCR, 0.856 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1477-1535. Dostupné na: <https://doi.org/10.1177/1477153514538883>

Citácie:

1. [1.1] KIM, C. H. - KIM, K. S. *Development of Sky Luminance and Daylight Illuminance Prediction Methods for Lighting Energy Saving in Office Buildings. In ENERGIES. ISSN 1996-1073, 2019, vol. 12, no. 4, art. no. 592., Registrované v: WOS*

ADCA58 KITTLER, Richard - DARULA, Stanislav. Scattered sunlight determining sky luminance patterns. In *Renewable and Sustainable Energy Reviews*, 2016, vol. 62, p. 575-584. (2015: 6.798 - IF, Q1 - JCR, 2.921 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1364-0321. Dostupné na: <https://doi.org/10.1016/j.rser.2016.05.012>

Citácie:

1. [1.1] KIM, C. H. - KIM, K. S. *Development of Sky Luminance and Daylight Illuminance Prediction Methods for Lighting Energy Saving in Office Buildings. In ENERGIES. ISSN 1996-1073, 2019, vol. 12, no. 4, article number: 592., Registrované v: WOS*

ADCA59 KLAČKA, Jozef - KOCIFAJ, Miroslav. On the scattering of electromagnetic waves

by a charged sphere. In Progress in Electromagnetics Research, 2010, vol. 109, p. 17-35. (2009: 3.763 - IF, 0.887 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 1559-8985.

Citácie:

1. [1.1] HAMMOND, A. - LIANG, Z. - MENG, H. *Holographic deflection imaging measurement of electric charge on aerosol particles. In EXPERIMENTS IN FLUIDS. ISSN 0723-4864, 2019, vol. 60, no. 6, art. no. 103., Registrované v: WOS*

2. [1.1] HARPER, J. M. - STEFFES, P. - DUFEK, J. - AKINS, A. *The Effect of Electrostatic Charge on the Propagation of GPS (L-band) Signals Through Volcanic Plumes. In JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES, 2019, vol. 124, no. 4, p. 2260-2275., Registrované v: WOS*

3. [1.1] LI, X. C. - GAO, X. - WANG, U. *Electromagnetic scattering of charged particles in a strong wind-blown sand electric field. In CHINESE PHYSICS B. ISSN 1674-1056, 2019, vol. 28, no. 3, art. no. 034208., Registrované v: WOS*

4. [1.1] TALEBI-MOGHADDAM, S. - SIPKENS, T. A. - DAUN, K. J. *Laser-induced incandescence on metal nanoparticles: validity of the Rayleigh approximation. In APPLIED PHYSICS B-LASERS AND OPTICS. ISSN 0946-2171, 2019, vol. 125, no. 11, art. no. 214., Registrované v: WOS*

ADCA60 KLAČKA, Jozef - KOCIFAJ, Miroslav - KUNDRACIK, F. - VIDEEN, Gorden. Optical signatures of electrically charged particles: Fundamental problems and solutions. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2015, vol. 164, p. 45-53. (2014: 2.645 - IF, Q2 - JCR, 1.117 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2015.05.009>

Citácie:

1. [1.1] GAO, X. - WANG, J. - LI, X. C. *Comparative research on two surface conductivity models for the scattering of electromagnetic wave by the charged sphere. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2019, vol. 224, p. 378-382., Registrované v: WOS*

2. [1.1] GHAFAR, A. - HUSSAN, M. M. - ALKANHAL, M. A. S. - KHAN, Y. *Interaction of directive electromagnetic radiation with isotropic plasma-coated PEMC cylinder. In WAVES IN RANDOM AND COMPLEX MEDIA. ISSN 1745-5030, 2019, vol. 29, no. 4, p. 706-721., Registrované v: WOS*

ADCA61 KLAČKA, Jozef - KOCIFAJ, Miroslav - KUNDRACIK, F. - VIDEEN, Gorden - KOHÚT, Igor. Generalization of electromagnetic scattering by charged grains through incorporation of interband and intraband effects. In Optics Letters, 2015, vol. 40, no. 21, p. 5070-5073. (2014: 3.292 - IF, Q1 - JCR, 2.429 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0146-9592. Dostupné na: <https://doi.org/10.1364/OL.40.005070>

Citácie:

1. [1.1] GHAFAR, A. - HUSSAN, M. M. - ALKANHAL, Majeed A. S. - KHAN, Yasin. *Interaction of directive electromagnetic radiation with isotropic plasma-coated PEMC cylinder. In WAVES IN RANDOM AND COMPLEX MEDIA. ISSN 1745-5030, 2019, vol. 29, no. 4, p. 706-721., Registrované v: WOS*

2. [1.1] GUZMAN-SEPULVEDA, Jose Rafael - WU, Ruitao - KALRA, Aarat P. - AMINPOUR, Maral - TUSZYNSKI, Jack A. - DOGARIU, Aristide. *Tubulin Polarizability in Aqueous Suspensions. In ACS OMEGA. ISSN 2470-1343, 2019, vol. 4, no. 5, p. 9144-9149., Registrované v: WOS*

3. [1.2] AN, Hongchang - MATSUSHIMA, Akira. *Electromagnetic wave scattering from an infinite periodic array of hollow conducting circular cylinders of finite length. In Progress In Electromagnetics Research C. ISSN 19378718,*

- ADCA62 *2019, vol. 91, p. 1-13., Registrované v: SCOPUS*  
KOCIFAJ, Miroslav. Angular distribution of scattered radiation under broken cloud arrays: An approximation of successive orders of scattering. In *Solar Energy*, 2012, vol. 86, p. 3575-3586. (2011: 2.475 - IF, Q2 - JCR, 1.283 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2012.06.022>  
 Citácie:  
 1. [1.1] *IVANOVA, S. M. - GUEYMARD, C. A. Simulation and applications of cumulative anisotropic sky radiance patterns. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 178, p. 278-294., Registrované v: WOS*  
 2. [1.1] *LI, Z. R. - XING, H. W. - AUGENBROE, G. Criterion based selection of sky diffuse radiation models. In SUSTAINABLE CITIES AND SOCIETY. ISSN 2210-6707, 2019, vol. 50, art. no. 101692., Registrované v: WOS*  
 3. [1.1] *LOU, S. W. - LI, D. H. W. - CHEN, W. Q. Identifying overcast, partly cloudy and clear skies by illuminance fluctuations. In RENEWABLE ENERGY. ISSN 0960-1481, 2019, vol. 138, p. 198-211., Registrované v: WOS*  
 4. [1.1] *ZANG, H. X. - CHENG, L. L. - DING, T. - CHEUNG, K. W. - WANG, M. M. - WEI, Z. N. - SUN, G. Q. Estimation and validation of daily global solar radiation by day of the year-based models for different climates in China. In RENEWABLE ENERGY. ISSN 0960-1481, 2019, vol. 135, p. 984-1003., Registrované v: WOS*
- ADCA63 KOCIFAJ, Miroslav - DARULA, Stanislav - KITTLER, Richard. HOLIGILM: hollow light guide interior illumination method – an analytic calculation approach for cylindrical light-tubes. In *Solar Energy*, 2008, vol. 82, p. 247-259. (2007: 1.519 - IF, Q2 - JCR, 1.685 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0038-092X.  
 Citácie:  
 1. [1.1] *BAGLIVO, C. - BONOMOLO, M. - CONGEDO, P. M. Modeling of Light Pipes for the Optimal Disposition in Buildings. In ENERGIES, 2019, vol. 12, no. 22, art. no. 4323., Registrované v: WOS*  
 2. [1.1] *OMISHORE, A. - KALOUSEK, M. - MOHELNIK, P. THERMAL TESTING OF THE LIGHT PIPE PROTOTYPE. In ENGINEERING REVIEW. ISSN 1330-9587, 2019, vol. 39, no. 3, p. 283-291., Registrované v: WOS*  
 3. [1.1] *PETRZALA, J. - KOMAR, L. Analytical Prediction of Tubular Light-Pipe Performance Under Arbitrary Sky Conditions. In JOURNAL OF SOLAR ENERGY ENGINEERING-TRANSACTIONS OF THE ASME. ISSN 0199-6231, 2019, vol. 141, no. 5, art. no. 051012., Registrované v: WOS*  
 4. [1.2] *MOHAPATRA, B. N. - RAVI KUMAR, M. - MANDAL, S. K. Analysis of light tubes in interior daylighting system for building. In Indonesian Journal of Electrical Engineering and Computer Science. ISSN 25024752, 2019, 17, 2, p. 710-719., Registrované v: SCOPUS*  
 5. [1.2] *MOHAPATRA, B. N. - RAVI KUMAR, M. - MANDAL, S. K. Analysis of light tubes in interior daylighting system for building. In Indonesian Journal of Electrical Engineering and Computer Science. ISSN 25024752, 2019, 17, 2, p. 710-719., Registrované v: SCOPUS*  
 6. [1.2] *OBRADOVIC, B. - MATUSIAK, B. S. Daylight transport systems for buildings at high latitudes. In Journal of Daylighting. ISSN 23838701, 2019, 6, 2, p. 60-79., Registrované v: SCOPUS*
- ADCA64 KOCIFAJ, Miroslav - KUNDRACIK, F. - DARULA, Stanislav - KITTLER, Richard. Availability of luminous flux below a bended light-pipe: Design modelling under optimal daylight conditions. In *Solar Energy*, 2012, vol. 86, p. 2753-2761. (2011: 2.475 - IF, Q2 - JCR, 1.283 - SJR, Q1 - SJR, karentované - CCC). (2012 -

Current Contents). ISSN 0038-092X. Dostupné na:

<https://doi.org/10.1016/j.solener.2012.06.017>

Citácie:

1. [1.1] MALET-DAMOUR, B. - BIGOT, D. - GUICHARD, S. - BOYER, H. *Photometrical analysis of mirrored light pipe: From state-of-the-art on experimental results (1990-2019) to the proposition of new experimental observations in high solar potential climates. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 193, p. 637-653., Registrované v: WOS*

ADCA65

KOCIFAJ, Miroslav - KLAČKA, Jozef. Scattering of electromagnetic waves by charged spheres: near-field external intensity distribution. In Optics Letters, 2012, vol. 37, p. 265-267. (2011: 3.399 - IF, Q1 - JCR, 2.519 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0146-9592. Dostupné na: <https://doi.org/10.1364/OL.37.000265>

Citácie:

1. [1.1] MURGA, M. S. - WIEBE, D. S. - SIVKOVA, E. E. - AKIMKIN, V. V. *SHIVA: a dust destruction model. In MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY. ISSN 0035-8711, 2019, vol. 488, no. 1, p. 965-977., Registrované v: WOS*

2. [1.2] ZHOU, S. - HU, X. - WANG, B. *Mie scattering coefficient of electromagnetic waves by charged sphere particle. In IEEE International Symposium on Electromagnetic Compatibility. ISSN 10774076, 2019, 2019-November, art. no. 8986146., Registrované v: SCOPUS*

ADCA66

KOCIFAJ, Miroslav - GUEYMARD, CH.A. Aerosol size distribution retrievals from sunphotometer measurements: Theoretical evaluation of errors due to circumsolar and related effects. In Atmospheric Environment, 2012, vol. 51, p. 131-139. (2011: 3.465 - IF, Q1 - JCR, 1.971 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 1352-2310. Dostupné na: <https://doi.org/10.1016/j.atmosenv.2012.01.040>

Citácie:

1. [1.1] HE, Z. Z. - MAO, J. K. - HAN, X. S. - LIU, Z. Y. *Determination of aerosol particle size distribution by a novel ABC-DE hybrid algorithm. In THERMAL SCIENCE. ISSN 0354-9836, 2019, vol. 23, no. 2, p. 1161-1172., Registrované v: WOS*

ADCA67

KOCIFAJ, Miroslav. Sky luminance/radiance model with multiple scattering effect. In Solar Energy, 2009, vol. 83, p. 1914-1922. (2008: 1.607 - IF, Q2 - JCR, 1.684 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 0038-092X.

Citácie:

1. [1.1] IVANOVA, S. M. - GUEYMARD, C. A. *Simulation and applications of cumulative anisotropic sky radiance patterns. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 178, p. 278-294., Registrované v: WOS*

ADCA68

KOCIFAJ, Miroslav. Efficient tubular light guide with two-component glazing with Lambertian diffuser and clear glass. In Applied Energy, 2009, vol. 86, no. 7-8, 1031-1036. (2008: 1.371 - IF, Q2 - JCR, 0.950 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 0306-2619.

Citácie:

1. [1.1] BAGLIVO, C. - BONOMOLO, M. - CONGEDO, P. M. *Modeling of Light Pipes for the Optimal Disposition in Buildings. In ENERGIES, 2019, vol. 12, no. 22, art. no. 4323., Registrované v: WOS*

2. [1.2] OBRADOVIC, B. - MATUSIAK, B. S. *Daylight transport systems for buildings at high latitudes. In Journal of Daylighting. ISSN 23838701, 2019, 6, 2, p. 60-79., Registrované v: SCOPUS*

ADCA69

KOCIFAJ, Miroslav. Analytical solution for daylight transmission via hollow light



pipes with a transparent glazing. In *Solar Energy*, 2009, vol. 83 no. 2, p. 186-192. (2008: 1.607 - IF, Q2 - JCR, 1.684 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 0038-092X.

Citácie:

1. [1.2] *OBRADOVIC, B. - MATUSIAK, B. S. Daylight transport systems for buildings at high latitudes. In Journal of Daylighting. ISSN 23838701, 2019, 6, 2, p. 60-79., Registrované v: SCOPUS*

ADCA70 KOCIFAJ, Miroslav. Night sky luminance under clear sky conditions: Theory vs. experiment. In *Journal of Quantitative Spectroscopy & Radiative Transfer*, 2014, vol. 139, p. 43-51. (2013: 2.288 - IF, Q2 - JCR, 0.955 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2013.12.001>

Citácie:

1. [1.1] *C-SANCHEZ, Eleazar - SANCHEZ-MEDINA, Agustin J. - ALONSO-HERNANDEZ, Jesus B. - VOLTES-DORTA, Augusto. Astrotourism and Night Sky Brightness Forecast: First Probabilistic Model Approach. In SENSORS. ISSN 1424-8220, 2019, vol. 19, no. 13, art. no. 2840., Registrované v: WOS*

ADCA71 KOCIFAJ, Miroslav - SOLANO LAMPHAR, H. A. Angular Emission Function of a City and Skyglow Modeling: A Critical Perspective. In *Publications of the Astronomical Society of the Pacific*, 2016, vol. 128, art. no. 124001. (2015: 4.422 - IF, Q2 - JCR, 2.846 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0004-6280. Dostupné na: <https://doi.org/10.1088/1538-3873/128/970/124001> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest. VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

Citácie:

1. [1.1] *LI, X. - MA, R. Q. - ZHANG, Q. L. - LI, D. R. - LIU, S. S. - HE, T. - ZHAO, L. X. Anisotropic characteristic of artificial light at night Systematic investigation with VIIRS DNB multi-temporal observations. In REMOTE SENSING OF ENVIRONMENT. ISSN 0034-4257, 2019, vol. 233, art. no. UNSP 111357., Registrované v: WOS*

ADCA72 KOCIFAJ, Miroslav - KUNDRACIK, F. - VIDEEN, Gordon - YUFFA, Alex J. - KLAČKA, Jozef. Optical resonances in electrically charged particles and their relation to the Drude model. In *Journal of Quantitative Spectroscopy & Radiative Transfer*, 2016, vol. 178, p. 224-229. (2015: 2.859 - IF, Q1 - JCR, 1.156 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2015.11.021>

Citácie:

1. [1.1] *GAO, Xuan - WANG, Juan - LI, Xingcai. Comparative research on two surface conductivity models for the scattering of electromagnetic wave by the charged sphere. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2019, vol. 224, p. 378-382., Registrované v: WOS*

2. [1.1] *GHAFFAR, A. - HUSSAN, M. M. - ALKANHAL, Majeed A. S. - KHAN, Yasin. Interaction of directive electromagnetic radiation with isotropic plasma-coated PEMC cylinder. In WAVES IN RANDOM AND COMPLEX MEDIA. ISSN 1745-5030, 2019, vol. 29, no. 4, p. 706-721., Registrované v: WOS*

ADCA73 KOCIFAJ, Miroslav - KÓMAR, Ladislav. A role of aerosol particles in forming urban skyglow and skyglow from distant cities. In *Monthly Notices of the Royal Astronomical Society*, 2016, vol. 458, p. 438-448. (2015: 4.952 - IF, Q1 - JCR, 2.701 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents, WOS,

SCOPUS, NASA ADS). ISSN 0035-8711. Dostupné na:  
<https://doi.org/10.1093/mnras/stw293> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest. VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

Citácie:

1. [1.1] PAPALAMBROU, A. - DOULOS, L. T. *Identifying, Examining, and Planning Areas Protected from Light Pollution. The Case Study of Planning the First National Dark Sky Park in Greece. In SUSTAINABILITY, 2019, vol. 11, no. 21, art. no. 5963., Registrované v: WOS*

ADCA74

KOCIFAJ, Miroslav. A review of the theoretical and numerical approaches to modeling skyglow: Iterative approach to RTE, MSOS, and two-stream approximation. In *Journal of Quantitative Spectroscopy & Radiative Transfer*, 2016, vol. 181, p. 2-10. (2015: 2.859 - IF, Q1 - JCR, 1.156 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0022-4073. Dostupné na:  
<https://doi.org/10.1016/j.jqsrt.2015.11.003> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest)

Citácie:

1. [1.1] BARA, S. - RODRIGUEZ-AROS, A. - PEREZ, M. - TOSAR, B. - LIMA, R. C. - SANCHEZ DE MIGUEL, A. - ZAMORANO, J. *Estimating the relative contribution of streetlights, vehicles, and residential lighting to the urban night sky brightness. In LIGHTING RESEARCH & TECHNOLOGY. ISSN 1477-1535, 2019, vol. 51, no. 7, p. 1092-1107., Registrované v: WOS*

2. [1.1] BARA, Salvador - RIGUEIRO, Lago - LIMA, Raul C. *Monitoring transition: Expected night sky brightness trends in different photometric bands. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2019, vol. 239, art. no. UNSP 106644., Registrované v: WOS*

3. [1.1] BARA, Salvador - TAPIA, Carlos E. - ZAMORANO, Jaime. *Absolute Radiometric Calibration of TESS-W and SQM Night Sky Brightness Sensors. In SENSORS. ISSN 1424-8220, 2019, vol. 19, no. 6, art. no. 1336., Registrované v: WOS*

4. [1.1] BARA, Salvador. *Black-body luminance and magnitudes per square arcsecond in the Johnson-Cousins BVR photometric bands. In PHOTONICS LETTERS OF POLAND. ISSN 2080-2242, 2019, vol. 11, no. 3, p. 63-65., Registrované v: WOS*

ADCA75

KOCIFAJ, Miroslav - KUNDRACIK, F. Luminous intensity solid of tubular light guide and its characterization using "asymmetry parameter". In *Solar Energy*, 2011, vol. 85, no. 9, p. 2003-2010. (2010: 2.172 - IF, Q2 - JCR, 1.369 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0038-092X. Dostupné na:  
<https://doi.org/10.1016/j.solener.2011.05.010>

Citácie:

1. [1.2] MOHAPATRA, B. N. - RAVI KUMAR, M. - MANDAL, S. K. *Analysis of light tubes in interior daylighting system for building. In Indonesian Journal of Electrical Engineering and Computer Science. ISSN 25024752, 2019, 17, 2, p. 710-719., Registrované v: SCOPUS*

2. [1.2] OBRADOVIC, B. - MATUSIAK, B. S. *Daylight transport systems for buildings at high latitudes. In Journal of Daylighting. ISSN 23838701, 2019, 6, 2, p. 60-79., Registrované v: SCOPUS*

ADCA76

KOCIFAJ, Miroslav. Approximate analytical scattering phase function dependent on microphysical characteristics of dust particles. In *Applied Optics*, 2011, vol. 50, no. 17, p. 2493-2499. (2010: 1.707 - IF, Q2 - JCR, 1.079 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0003-6935. Dostupné na:

<https://doi.org/10.1364/AO.50.002493>

Citácie:

1. [1.1] ROY, A. K. - SHARMA, S. K. *Methods for constructing analytic phase function for small spherical particle polydispersions. In JOURNAL OF MODERN OPTICS. ISSN 0950-0340, 2019, vol. 66, no. 4, p. 448-454., Registrované v: WOS*

ADCA77 KOCIFAJ, Miroslav. CIE standard sky model with reduced number of scaling parameters. In *Solar Energy*, 2011, vol. 85, p. 553-559. (2010: 2.172 - IF, Q2 - JCR, 1.369 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2010.12.024>

Citácie:

1. [1.1] IVANOVA, S. M. - GUEYMARD, C. A. *Simulation and applications of cumulative anisotropic sky radiance patterns. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 178, p. 278-294., Registrované v: WOS*

ADCA78 KOCIFAJ, Miroslav - KUNDRACIK, F. - DARULA, Stanislav - KITTLER, Richard. Theoretical solution for light transmission of a bended hollow light guide. In *Solar Energy*, 2010, vol. 84, no. 8, p. 1422-1432. (2009: 2.011 - IF, Q2 - JCR, 1.265 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2010.05.002>

Citácie:

1. [1.1] HE, K. Y. - CHEN, Z. Q. - ZHONG, S. K. - QIAN, Y. D. - LIU, H. Y. - YIN, J. H. - ZHOU, B. D. *A solar fiber daylighting system without tracking component. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 194, p. 461-470., Registrované v: WOS*

2. [1.2] OBRADOVIC, B. - MATUSIAK, B. S. *Daylight transport systems for buildings at high latitudes. In Journal of Daylighting. ISSN 23838701, 2019, 6, 2, p. 60-79., Registrované v: SCOPUS*

ADCA79 KOCIFAJ, Miroslav - SOLANO LAMPHAR, H. A. Quantitative analysis of night skyglow amplification under cloudy conditions. In *Monthly Notices of the Royal Astronomical Society*, 2014, vol. 443, p. 3665-3674. (2013: 5.226 - IF, Q1 - JCR, 3.113 - SJR, karentované - CCC). (2014 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 0035-8711. Dostupné na: <https://doi.org/10.1093/mnras/stu1301>

Citácie:

1. [1.2] KIENAST, F. - WEISS, M. *How light emissions have been lighting up the Swiss forest since 1992. In Schweizerische Zeitschrift fur Forstwesen. ISSN 00367818, 2019, 170, 1, p. 18-23., Registrované v: SCOPUS*

ADCA80 KOCIFAJ, Miroslav - HORVATH, Helmut - GANGL, M. Retrieval of aerosol aspect ratio from optical measurements in Vienna. In *Atmospheric Environment*, 2008, vol. 42, no. 11, p. 2582-2592. (2007: 2.549 - IF, Q1 - JCR, 1.999 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 1352-2310.

Citácie:

1. [1.1] CORREIA, A. - HANSELAER, P. - MEURET, Y. *Accurate and robust characterization of volume scattering materials using the intensity-based inverse adding-doubling method. In MODELING ASPECTS IN OPTICAL METROLOGY VII. ISSN 0277-786X, 2019, vol. 11057, art. no. UNSP 110570N., Registrované v: WOS*

ADCA81 KOCIFAJ, Miroslav. Light-pollution model for cloudy and cloudless night skies with ground-based light sources. In *Applied Optics*, 2007, vol. 46, no. 15, p. 3013-3022. (2006: 1.717 - IF, Q1 - JCR, 1.151 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0003-6935.

Citácie:

1. [1.1] AUBE, M. - SIMONEAU, A. - WAINSCOAT, R. - NELSON, L. *Modelling the effects of phosphor converted LED lighting to the night sky of the Haleakala*

- Observatory, Hawaii. In MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY. ISSN 0035-8711, 2018, vol. 478, no. 2, p. 1776-1783., Registrované v: WOS*
2. [1.1] BARA, S. - RIGUEIRO, L. - LIMA, R. C. Monitoring transition: Expected night sky brightness trends in different photometric bands. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2019, vol. 239, art. no. UNSP 106644., Registrované v: WOS
3. [1.1] BARA, S. - RODRIGUEZ-AROS, A. - PEREZ, M. - TOSAR, B. - LIMA, R. C. - SANCHEZ DE MIGUEL, A. - ZAMORANO, J. Estimating the relative contribution of streetlights, vehicles, and residential lighting to the urban night sky brightness. In LIGHTING RESEARCH & TECHNOLOGY. ISSN 1477-1535, 2019, vol. 51, no. 7, p. 1092-1107., Registrované v: WOS
4. [1.1] BARA, S. Characterizing the zenithal night sky brightness in large territories: how many samples per square kilometre are needed? In MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY. ISSN 0035-8711, 2018, vol. 473, no. 3, p. 4164-4173., Registrované v: WOS
5. [1.1] BARENTINE, J. C. Methods for Assessment and Monitoring of Light Pollution around Ecologically Sensitive Sites. In JOURNAL OF IMAGING. ISSN 2313-433X, 2019, vol. 5, no. 5, art. no. 54., Registrované v: WOS
6. [1.1] C-SANCHEZ, E. - SANCHEZ-MEDINA, A. J. - ALONSO-HERNANDEZ, J. B. - VOLTES-DORTA, A. Astrotourism and Night Sky Brightness Forecast: First Probabilistic Model Approach. In SENSORS. ISSN 1424-8220, 2019, vol. 19, no. 13, art. no. 2840., Registrované v: WOS
7. [1.1] GES, X. - BARA, S. - GARCIA-GIL, M. - ZAMORANO, J. - RIBAS, S. J. - MASANA, E. Light pollution offshore: Zenithal sky glow measurements in the mediterranean coastal waters. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2018, vol. 210, p. 91-100., Registrované v: WOS
8. [1.1] KARPINSKA, D. - KUNZ, M. Light pollution in the night sky of Torun in the summer season. In BULLETIN OF GEOGRAPHY-PHYSICAL GEOGRAPHY SERIES. ISSN 2080-7686, 2019, vol. 17, no. 1, p. 91-100., Registrované v: WOS
9. [1.1] LINARES, H. - MASANA, E. - RIBAS, S. J. - GARCIA-GIL, M. - FIGUERAS, F. - AUBE, M. Modelling the night sky brightness and light pollution sources of Montsec protected area. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2018, vol. 217, p. 178-188., Registrované v: WOS
10. [1.1] SOLANO LAMPHAR, H. A. The emission function of ground-based light sources: State of the art and research challenges. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2018, vol. 211, p. 35-43., Registrované v: WOS
11. [1.1] WALLNER, S. Usage of Vertical Fisheye-Images to Quantify Urban Light Pollution on Small Scales and the Impact of LED Conversion. In JOURNAL OF IMAGING, 2019, vol. 5, no. 11, art. no. 86., Registrované v: WOS
12. [1.1] ZIOU, D. - KEROUH, F. Estimation of light source colours for light pollution assessment. In ENVIRONMENTAL POLLUTION. ISSN 0269-7491, 2018, vol. 236, p. 844-849., Registrované v: WOS

ADCA82

KOCIFAJ, Miroslav. Towards a comprehensive city emission function (CCEF). In Journal of Quantitative Spectroscopy & Radiative Transfer, 2018, vol. 205, p. 253-266. (2017: 2.600 - IF, Q2 - JCR, 0.779 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2017.10.006> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest. VEGA



2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

Citácie:

1. [1.1] LI, X. J. - DUARTE, F. - RATTI, C. *Analyzing the obstruction effects of obstacles on light pollution caused by street lighting system in Cambridge, Massachusetts. In ENVIRONMENT AND PLANNING B-URBAN ANALYTICS AND CITY SCIENCE. ISSN 2399-8083, 2019, art. no. UNSP 2399808319861645., Registrované v: WOS*

2. [1.1] WANG, C. - QIN, H. M. - ZHAO, K. G. - DONG, P. L. - YANG, X. B. - ZHOU, G. Q. - XI, X. H. *Assessing the Impact of the Built-Up Environment on Nighttime Lights in China. In REMOTE SENSING. ISSN 2072-4292, 2019, vol. 11, no. 14, art. no. 1712., Registrované v: WOS*

ADCA83 KOCIFAJ, Miroslav\*\* - KÓMAR, Ladislav - KUNDRACIK, F. PePSS - A portable sky scanner for measuring extremely low night-sky brightness. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2018, vol. 210, p. 74-81. (2017: 2.600 - IF, Q2 - JCR, 0.779 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2018.02.017> (APVV-14-0017 : Zovšeobecnený model jasu/žiaru nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest. VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

Citácie:

1. [1.1] C-SANCHEZ, E. - SANCHEZ-MEDINA, A. J. - ALONSO-HERNANDEZ, J. B. - VOLTES-DORTA, A. *Astrotourism and Night Sky Brightness Forecast: First Probabilistic Model Approach. In SENSORS. ISSN 1424-8220, 2019, vol. 19, no. 13, art. no. 2840., Registrované v: WOS*

2. [1.1] GARCIA, I. - GARCIA, A. - LUIS TORRES, J. *A GIS-based methodology for assigning experimental measurements of angular distribution of sky radiance and luminance to selected sky sectors. In RENEWABLE ENERGY. ISSN 0960-1481, 2019, vol. 130, p. 1207-1215., Registrované v: WOS*

ADCA84 KOCIFAJ, Miroslav\*\* - SOLANO LAMPFAR, H. A. - VIDEEN, Gorden. Night-sky radiometry can revolutionize the characterization of light-pollution sources globally. In Proceedings of the National Academy of Sciences of the United States of America, 2019, vol. 116, no. 16, p. 7712-7717. (2018: 9.580 - IF, Q1 - JCR, 5.601 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 0027-8424. Dostupné na: <https://doi.org/10.1073/pnas.1900153116> (APVV-18-0014 : Globálna charakterizácia svetelného znečistenia. VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

Citácie:

1. [1.1] JECHOW, A. - HOELKER, F. *How dark is a river? Artificial light at night in aquatic systems and the need for comprehensive night-time light measurements. In WILEY INTERDISCIPLINARY REVIEWS-WATER. ISSN 2049-1948, 2019, vol. 6, no. 6, art. no. e1388., Registrované v: WOS*

2. [1.1] WANG, C. - QIN, H. M. - ZHAO, K. G. - DONG, P. L. - YANG, X. B. - ZHOU, G. Q. - XI, X. H. *Assessing the Impact of the Built-Up Environment on Nighttime Lights in China. In REMOTE SENSING. ISSN 2072-4292, 2019, vol. 11, no. 14, art. no. 1712., Registrované v: WOS*

ADCA85 KOCIFAJ, Miroslav. Retrieval of angular emission function from whole-city light sources using night-sky brightness measurements. In Optica, 2017, vol. 4, no. 2, p. 255-262. (2016: 7.727 - IF, Q1 - JCR, 4.761 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 2334-2536. Dostupné na:

<https://doi.org/10.1364/OPTICA.4.000255> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest. VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

Citácie:

1. [1.1] C-SANCHEZ, Eleazar - SANCHEZ-MEDINA, Agustin J. - ALONSO-HERNANDEZ, Jesus B. - VOLTES-DORTA, Augusto. *Astrotourism and Night Sky Brightness Forecast: First Probabilistic Model Approach*. In *SENSORS*. ISSN 1424-8220, 2019, vol. 19, no. 13, art. no. 2840., Registrované v: WOS

ADCA86

KOCIFAJ, Miroslav - SOLANO LAMPBAR, H. A. - KUNDRACIK, F. Retrieval of Garstang's emission function from all-sky camera images. In *Monthly Notices of the Royal Astronomical Society*, 2015, vol. 453, p. 819-827. (2014: 5.107 - IF, Q1 - JCR, 3.230 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 0035-8711. Dostupné na:

<https://doi.org/10.1093/mnras/stv1645> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest)

Citácie:

1. [1.1] JECHOW, Andreas - KYBA, Christopher C. M. - HOELKER, Franz. *Beyond All-Sky: Assessing Ecological Light Pollution Using Multi-Spectral Full-Sphere Fisheye Lens Imaging*. In *JOURNAL OF IMAGING*. ISSN 2313-433X, 2019, vol. 5, no. 4, art. no. 46., Registrované v: WOS

ADCA87

KOCIFAJ, Miroslav - KLAČKA, Jozef - KUNDRACIK, F. - VIDEEN, Gorden. Charge-induced electromagnetic resonances in nanoparticles. In *Annalen der Physik*, 2015, vol. 527, no. 11-12, p. 765-769. (2014: 3.048 - IF, Q1 - JCR, 1.403 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0003-3804. Dostupné na: <https://doi.org/10.1002/andp.201500202>

Citácie:

1. [1.1] EKDIHA, Y. - MOUNIRH, K. - KHALLADI, M. - EL ADRAOUI, S. *New TLM Formulation for Modeling Epstein Plasma*. In *PROGRESS IN ELECTROMAGNETICS RESEARCH LETTERS*. ISSN 1937-6480, 2019, vol. 83, p. 59-64., Registrované v: WOS

2. [1.1] GHAFAR, A. - HUSSAN, M. M. - ALKANHAL, M. A. S. - KHAN, Y. *Interaction of directive electromagnetic radiation with isotropic plasma-coated PEMC cylinder*. In *WAVES IN RANDOM AND COMPLEX MEDIA*. ISSN 1745-5030, 2019, vol. 29, no. 4, p. 706-721., Registrované v: WOS

3. [1.1] OZZAIM, C. *A MoM solution for TM scattering by dielectric cylinders above an infinite flat surface*. In *JOURNAL OF MODERN OPTICS*. ISSN 0950-0340, 2019, vol. 66, no. 15, p. 1550-1557., Registrované v: WOS

4. [1.1] PAN, J. J. - REN, S. - SEKAR, P. K. - PENG, J. - SHU, Z. Q. - ZHAO, G. - DING, W. P. - CHEN, M. - GAO, D. Y. *Investigation of Electromagnetic Resonance Rewarming Enhanced by Magnetic Nanoparticles for Cryopreservation*. In *LANGMUIR*. ISSN 0743-7463, 2019, vol. 35, no. 23, p. 7560-7570., Registrované v: WOS

ADCA88

KOCIFAJ, Miroslav - POSCH, Thomas - SOLANO LAMPBAR, H. A. On the relation between zenith sky brightness and horizontal illuminance. In *Monthly Notices of the Royal Astronomical Society*, 2015, vol. 446, p. 2895-2901. (2014: 5.107 - IF, Q1 - JCR, 3.230 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 0035-8711. Dostupné na: <https://doi.org/10.1093/mnras/stu2265>

Citácie:

1. [1.1] GRUBISIC, M. - HAIM, A. - BHUSAL, P. - DOMINONI, D. M. - GABRIEL, K. M. A. - JECHOW, A. - KUPPRAT, F. - LERNER, A. - MARCHANT,

- P. - RILEY, W. - STEBELOVA, K. - VAN GRUNSVEN, R. H. A. - ZEMAN, M. - ZUBIDAT, A. E. - HOELKER, F. Light Pollution, Circadian Photoreception, and Melatonin in Vertebrates. In SUSTAINABILITY, 2019, vol. 11, no. 22, art. no. 6400., Registrované v: WOS*
2. [1.1] JECHOW, A. - HOELKER, F. - KYBA, C. C. M. Using all-sky differential photometry to investigate how nocturnal clouds darken the night sky in rural areas. In SCIENTIFIC REPORTS. ISSN 2045-2322, 2019, vol. 9, art. no. 1391., Registrované v: WOS
3. [1.1] SCHIRMER, A. E. - GALLEMORE, C. - LIU, T. - MAGLE, S. - DINELLO, E. - AHMED, H. - GILDAY, T. Mapping behaviorally relevant light pollution levels to improve urban habitat planning. In SCIENTIFIC REPORTS. ISSN 2045-2322, 2019, vol. 9, art. no. 11925., Registrované v: WOS
4. [1.2] BAHALI, K. - SAMIAN, A. L. - MUSLIM, N. - HAMID, N. S. A. Measuring luminance and sun depression angle of dawn. In International Journal of Mechanical Engineering and Technology. ISSN 09766340, 2019, 10, 2, p. 1136-1150., Registrované v: SCOPUS

ADCA89 KOCIFAJ, Miroslav - VIDEEN, Gorden - KLAČKA, Jozef. Backscatter in a cloudy atmosphere as a lightning-threat indicator. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2015, vol. 150, p. 175-180. (2014: 2.645 - IF, Q2 - JCR, 1.117 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2014.03.004>

Citácie:

1. [1.1] HARPER, J. M. - STEFFES, P. - DUFEK, J. - AKINS, A. The Effect of Electrostatic Charge on the Propagation of GPS (L-band) Signals Through Volcanic Plumes. In JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES, 2019, vol. 124, no. 4, p. 2260-2275., Registrované v: WOS

ADCA90 KOCIFAJ, Miroslav. Unified model of radiance patterns under arbitrary sky conditions. In Solar Energy, 2015, vol. 115, p. 40-51. (2014: 3.469 - IF, Q1 - JCR, 1.962 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2015.02.019>

Citácie:

1. [1.1] GARCIA, I. - GARCIA, A. - LUIS TORRES, J. A GIS-based methodology for assigning experimental measurements of angular distribution of sky radiance and luminance to selected sky sectors. In RENEWABLE ENERGY. ISSN 0960-1481, 2019, vol. 130, p. 1207-1215., Registrované v: WOS
2. [1.1] IVANOVA, S. M. - GUEYMARD, C. A. Simulation and applications of cumulative anisotropic sky radiance patterns. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 178, p. 278-294., Registrované v: WOS

ADCA91 KOCIFAJ, Miroslav. Multiple scattering contribution to the diffuse light of a night sky: A model which embraces all orders of scattering. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2018, vol. 206, p. 260-272. (2017: 2.600 - IF, Q2 - JCR, 0.779 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents, WOS, SCOPUS). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2017.11.020> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest. VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

Citácie:

1. [1.1] BARA, Salvador - RIGUEIRO, Lago - LIMA, Raul C. Monitoring transition: Expected night sky brightness trends in different photometric bands. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2019, vol. 239, art. no. UNSP 106644., Registrované v: WOS

2. [1.1] BARENTINE, John C. *Methods for Assessment and Monitoring of Light Pollution around Ecologically Sensitive Sites*. In *JOURNAL OF IMAGING*. ISSN 2313-433X, 2019, vol. 5, no. 5, art. no. 54., Registrované v: WOS
- ADCA92 KOCIFAJ, Miroslav - KÓMAR, Ladislav. Modeling diffuse irradiance under arbitrary and homogeneous skies : Comparison and validation. In *Applied Energy*, 2016, vol. 166, p. 117-127. (2015: 5.746 - IF, Q1 - JCR, 2.835 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0306-2619. Dostupné na: <https://doi.org/10.1016/j.apenergy.2016.01.024> (APVV-14-0017 : Zovšeobecnený model jasů/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest. VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)
- Citácie:
1. [1.1] AMARO E SILVA, R. - BRITO, M. C. *Spatio-temporal PV forecasting sensitivity to modules'; tilt and orientation*. In *APPLIED ENERGY*. ISSN 0306-2619, 2019, vol. 255, art. no. UNSP 113807., Registrované v: WOS
2. [1.1] WANG, L. C. - LU, Y. B. - ZOU, L. - FENG, L. - WEI, J. - QIN, W. M. - NIU, Z. G. *Prediction of diffuse solar radiation based on multiple variables in China*. In *RENEWABLE & SUSTAINABLE ENERGY REVIEWS*. ISSN 1364-0321, 2019, vol. 103, p. 151-216., Registrované v: WOS
3. [1.1] ZANG, H. X. - CHENG, L. L. - DING, T. - CHEUNG, K. W. - WANG, M. M. - WEI, Z. N. - SUN, G. Q. *Estimation and validation of daily global solar radiation by day of the year-based models for different climates in China*. In *RENEWABLE ENERGY*. ISSN 0960-1481, 2019, vol. 135, p. 984-1003., Registrované v: WOS
- ADCA93 KÓMAR, Ladislav - KOCIFAJ, Miroslav. Optics of hemispherical top dome and its effect on tubular light guide efficiency: diffuse light case. In *Applied Optics*, 2013, vol. 52 no. 5, p. 1100-1109. (2012: 1.689 - IF, Q2 - JCR, 1.042 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0003-6935. Dostupné na: <https://doi.org/10.1364/AO.52.001100>
- Citácie:
1. [1.1] NEKVAPIL, J. - SKODA, J. - MOTYCKA, M. *Influence of Changes of Material's BRDF on a Skylight Performance under Various Exterior Conditions*. In *PROCEEDINGS OF THE 2019 20TH INTERNATIONAL SCIENTIFIC CONFERENCE ON ELECTRIC POWER ENGINEERING (EPE)*. ISSN 2376-5623, 2019, p. 150-154., Registrované v: WOS
- ADCA94 KÓMAR, Ladislav - RUSNÁK, Anton - DUBNIČKA, Roman. Analysis of diffuse irradiance from two parts of sky vault divided by solar meridian using portable spectral sky-scanner. In *Solar Energy*, 2013, vol. 96, p. 1-9. (2012: 2.952 - IF, Q2 - JCR, 1.605 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2013.07.003>
- Citácie:
1. [1.1] GARCIA, I. - GARCIA, A. - LUIS TORRES, J. *A GIS-based methodology for assigning experimental measurements of angular distribution of sky radiance and luminance to selected sky sectors*. In *RENEWABLE ENERGY*. ISSN 0960-1481, 2019, vol. 130, p. 1207-1215., Registrované v: WOS
2. [1.1] LI, Z. R. - XING, H. W. - AUGENBROE, G. *Criterion based selection of sky diffuse radiation models*. In *SUSTAINABLE CITIES AND SOCIETY*. ISSN 2210-6707, 2019, vol. 50, art. no. 101692., Registrované v: WOS
- ADCA95 KÓMAR, Ladislav - DARULA, Stanislav. Determination of the light tube efficiency for selected overcast sky types. In *Solar Energy*, 2012, vol. 86, p. 157-163. (2011: 2.475 - IF, Q2 - JCR, 1.283 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0038-092X. Dostupné na:



<https://doi.org/10.1016/j.solener.2011.09.023>

Citácie:

1. [1.2] MOHAPATRA, B. N. - RAVI KUMAR, M. - MANDAL, S. K. *Analysis of light tubes in interior daylighting system for building. In Indonesian Journal of Electrical Engineering and Computer Science. ISSN 25024752, 2019, 17, 2, p. 710-719., Registrované v: SCOPUS*

- ADCA96 KÓMAR, Ladislav - KOCIFAJ, Miroslav. Uncertainty of daylight illuminance on vertical building facades when determined from sky scanner data: A numerical study. In *Solar Energy*, 2014, vol. 110, p. 15-21. (2013: 3.541 - IF, Q1 - JCR, 2.058 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2014.09.010>

Citácie:

1. [1.1] CAGNO, E. - MOSCHETTA, D. - TRIANNI, A. *Only non-energy benefits from the adoption of energy efficiency measures? A novel framework. In JOURNAL OF CLEANER PRODUCTION. ISSN 0959-6526, 2019, vol. 212, p. 1319-1333., Registrované v: WOS*

- ADCA97 KÓMAR, Ladislav - KOCIFAJ, Miroslav. Statistical cloud coverage as determined from sunshine duration: a model applicable in daylighting and solar energy forecasting. In *Journal of Atmospheric and Solar-Terrestrial Physics*, 2016, vol. 150, p. 1-8. (2015: 1.463 - IF, Q3 - JCR, 0.913 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents, WOS, SCOPUS). ISSN 1364-6826. Dostupné na: <https://doi.org/10.1016/j.jastp.2016.10.011> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest. VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

Citácie:

1. [1.1] ZANG, H. X. - CHENG, L. L. - DING, T. - CHEUNG, K. W. - WANG, M. M. - WEI, Z. N. - SUN, G. Q. *Estimation and validation of daily global solar radiation by day of the year-based models for different climates in China. In RENEWABLE ENERGY. ISSN 0960-1481, 2019, vol. 135, p. 984-1003., Registrované v: WOS*

- ADCA98 KOMLOŠ, Karol - POPOVICS, S. - NÜRNBERGEROVÁ, Terézia - BABÁL, Bohumil - POPOVICS, J. S. Ultrasonic pulse velocity test of concrete properties as specified in various standards. In *Cement and Concrete Composites*, 1996, vol. 18, p. 357-364. ISSN 0958-9465.

Citácie:

1. [1.1] ABDELRAHMAN, M. A. - ELBATANOUNY, M. K. - ROSE, J. R. - ZIEHL, P. H. *Signal processing techniques for filtering acoustic emission data in prestressed concrete. In RESEARCH IN NONDESTRUCTIVE EVALUATION. ISSN 0934-9847, 2019, vol. 30, no. 3, p. 127-148., Registrované v: WOS*

2. [1.1] ARORA, A. - YAO, Y. M. - MOBASHER, B. - NEITHALATH, N. *Fundamental insights into the compressive and flexural response of binder-and aggregate-optimized ultra-high performance concrete (UHPC). In CEMENT & CONCRETE COMPOSITES. ISSN 0958-9465, 2019, vol. 98, p. 1-13., Registrované v: WOS*

3. [1.1] HOU, S. - KONG, Z. H. - HE, J. M. - WU, B. *Geometry-independent attenuation and randomness of ultrasound wave propagation in concrete measured by embedded PZT transducers. In SMART MATERIALS AND STRUCTURES. ISSN 0964-1726, 2019, vol. 28, no. 7, art. no. 075004., Registrované v: WOS*

4. [1.1] HUANG, Y. J. - HE, X. J. - WANG, Q. - XIAO, J. Z. *Deformation field and crack analyses of concrete using digital image correlation method. In*

- FRONTIERS OF STRUCTURAL AND CIVIL ENGINEERING. ISSN 2095-2430, 2019, vol. 13, no. 5, p. 1183-1199., Registrované v: WOS*
5. [1.1] KAUR, N. P. - SHAH, J. K. - MAJHI, S. - MUKHERJEE, A. *Healing and simultaneous ultrasonic monitoring of cracks in concrete. In MATERIALS TODAY COMMUNICATIONS. ISSN 2352-4928, 2019, vol. 18, p. 87-99., Registrované v: WOS*
6. [1.1] LAURETI, S. - RIZWAN, M. K. - MALEKMOHAMMADI, H. - BURRASANO, P. - NATALI, M. - TORRE, L. - RALLINI, M. - PURI, I. - HUTCHINS, D. - RICCI, M. *Delamination Detection in Polymeric Ablative Materials Using Pulse-Compression Thermography and Air-Coupled Ultrasound. In SENSORS, 2019, vol. 19, no. 9, art. no. 2198., Registrované v: WOS*
7. [1.1] LIU, L. Z. - MIRAMINI, S. - HAJIMOHAMMADI, A. *Characterising fundamental properties of foam concrete with a non-destructive technique. In NONDESTRUCTIVE TESTING AND EVALUATION. ISSN 1058-9759, 2019, vol. 34, no. 1, p. 54-69., Registrované v: WOS*
8. [1.1] OBERMANN, Anne - HILLERS, Gregor. *Seismic time-lapse interferometry across scales. In RECENT ADVANCES IN SEISMOLOGY. ISSN 0065-2687, 2019, vol. 60, p. 65-143., Registrované v: WOS*
9. [1.1] SOLEIMANIAN, E. - TOUFIGH, V. *Assessment of Plain and Glass Fiber-Reinforced Concrete Under Impact Loading: A New Approach via Ultrasound Evaluation. In JOURNAL OF NONDESTRUCTIVE EVALUATION. ISSN 0195-9298, 2019, vol. 38, no. 4, art. no. 103., Registrované v: WOS*
10. [1.1] STAWISKI, B. - KANIA, T. *Examining the Distribution of Strength across the Thickness of Reinforced Concrete Elements Subject to Sulphate Corrosion Using the Ultrasonic Method. In MATERIALS, 2019, vol. 12, no. 16, art. no. 2519., Registrované v: WOS*
11. [1.1] TSANGOURI, E. - LELON, J. - MINNENBO, P. - AGGELIS, D. G. - VAN HEMELRIJCK, D. *Ultrasound pulse velocity to measure repair efficiency of concrete containing a self-healing vascular network. In LIFE-CYCLE ANALYSIS AND ASSESSMENT IN CIVIL ENGINEERING: TOWARDS AN INTEGRATED VISION, 2019, p. 2427-2432., Registrované v: WOS*
12. [1.1] ZHANG J. H. - CHEN, H. K. - WANG, H. - ZHOU, Z. *Experimental Study on Damage Evolution Characteristics of Rock-Like Material. In ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING. ISSN 2193-567X, 2019, vol. 44, no. 10, p. 8503-8513., Registrované v: WOS*

- ADCA99 KOSTRÁB, G. - LOVIČ, M. - JANOTKA, Ivan - BAJUS, M. - MRAVEC, D. *tert-Butylation of diphenylamine over zeolite catalysts – Part 1: Catalyst screening and optimization of reaction conditions. In Applied Catalysis A: General, 2008, vol. 335, p. 74-81. (2007: 3.166 - IF, Q1 - JCR, 1.857 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0926-860X.*

Citácie:

1. [1.1] GUO, Y. - ZHAO, Z. *Hierarchical H beta zeolite as a highly efficient solid acid catalyst for alkenylation of p-xylene with phenylacetylene. In CHEMICAL ENGINEERING SCIENCE. ISSN 0009-2509, 2019, vol. 201, p. 25-33., Registrované v: WOS*
2. [1.1] WANG, X. - ZHAO, Z. *Spherical hollow mesoporous silica supported phosphotungstic acid as a promising catalyst for alpha-arylstyrenes synthesis via Friedel-Crafts Chock for alkenylation. In CHINESE CHEMICAL LETTERS. ISSN 1001-8417, 2019, vol. 30, no. 3, p. 729-734., Registrované v: WOS*

- ADCA100 KOSTRÁB, G. - MRAVEC, D. - BAJUS, M. - JANOTKA, Ivan - SUGI, Y. - CHO, S. J. - KIM, J. H. *tert-Butylation of toluene over mordenite and cerium-modified mordenite catalysts. In Applied Catalysis A: General, 2006, vol. 299, p. 122-130.*

(2005: 2.728 - IF, Q1 - JCR, 1.696 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 0926-860X.

Citácie:

1. [1.1] GONG, K. - JIAO, F. - CHEN, Y. - LIU, X. - PAN, X. - HAN, X. - BAO, X. - HOU, G. *Insights into the Site-Selective Adsorption of Methanol and Water in Mordenite Zeolite by Xe-129 NMR Spectroscopy. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, 2019, vol. 123, no. 28, p. 17368-17374.,*

Registrované v: WOS

ADCA101 KOSTRÁB, G. - LOVIČ, M. - JANOTKA, Ivan - BAJUS, M. - MRAVEC, D. *tert-Butylation of toluene with isobutylene over zeolite catalysts: Influence of water. In Applied Catalysis A: General, 2007, vol. 323, no. 30, p. 210-218. (2006: 2.630 - IF, Q1 - JCR, 1.679 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0926-860X.*

Citácie:

1. [1.1] WANG, Y. Y. - HAN, Y. X. - SUN, X. L. - SONG, H. *tert-Butylation of Toluene Catalyzed by Phosphotungstic Acid Supported on HBEA Zeolite. In RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A. ISSN 0036-0244, 2019, vol. 93, no. 2, p. 250-254.,* Registrované v: WOS

ADCA102 KRAHULEC, Slavomír - SLÁDEK, Ján - SLÁDEK, Vladimír - HON, Y.C. *Meshless analyses for time-fractional heat diffusion in functionally graded materials. In Engineering Analysis with Boundary Elements, 2016, vol. 62, p. 57-64. (2015: 1.862 - IF, Q1 - JCR, 1.180 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2015.09.008>*

Citácie:

1. [1.1] ASTAKHOVA, E. - GLUSHKO, A. - LOGINOVA, E. A. *Effect of Heat on Deformations in Material with a Defect. In COMPUTATIONAL MATHEMATICS AND MATHEMATICAL PHYSICS. ISSN 0965-5425, 2019, vol. 59, no. 9, p. 1470-1474.,* Registrované v: WOS

2. [1.1] FAHMY, M. A. *A new LRBFCM-GBEM modeling algorithm for general solution of time fractional-order dual phase lag bioheat transfer problems in functionally graded tissues. In NUMERICAL HEAT TRANSFER PART A-APPLICATIONS. ISSN 1040-7782, 2019, vol. 75, no. 9, p. 616-626.,* Registrované v: WOS

3. [1.1] GHEHSAREH, H. R. - RAEI, M. - ZAGHIAN, A. *Application of meshless local Petrov-Galerkin technique to simulate two-dimensional time-fractional Tricomi-type problem. In JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING. ISSN 1678-5878, 2019, vol. 41, no. 6, art. no. UNSP 252.,* Registrované v: WOS

4. [1.1] WANG, J. F. - SUN, F. X. *An interpolating meshless method for the numerical simulation of the time-fractional diffusion equations with error estimates. In ENGINEERING COMPUTATIONS. ISSN 0264-4401, 2019, vol. 37, no. 2, p. 730-752.,* Registrované v: WOS

5. [1.1] XI, Q. - FU, Z. J. - RABCZUK, T. *An efficient boundary collocation scheme for transient thermal analysis in large-size-ratio functionally graded materials under heat source load. In COMPUTATIONAL MECHANICS. ISSN 0178-7675, 2019, vol. 64, no. 5, p. 1221-1235.,* Registrované v: WOS

6. [1.1] ZHANG, X. Y. - CHEN, Z. T. - LI, X. F. *Generalized Fractional Heat Conduction in a One-Dimensional Functionally Graded Material Layer. In JOURNAL OF THERMOPHYSICS AND HEAT TRANSFER. ISSN 0887-8722, 2019, vol. 33, no. 4, p. 946-956.,* Registrované v: WOS

ADCA103 KRAJČI, Ľudovít - JANOTKA, Ivan - PUERTAS, F. - PALACIOS, M. -

KULIFFAYOVÁ, Marta. Long - term properties of cement composites with various metakaolinite content. In *Ceramics-Silikáty*, 2013, vol. 57, no. 1, p. 74-81. (2012: 0.418 - IF, Q3 - JCR, 0.280 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0862-5468.

Citácie:

1. [1.1] PALOU, M. T. - KUZIELOVA, E. - ZEMLICKA, M. - TKACZ, J. - MASILKO, J. Insights into the hydration of Portland cement under hydrothermal curing. In *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*. ISSN 1388-6150, 2019, vol. 138, no. 6, p. 4155-4165., Registrované v: WOS

ADCA104 KRAJČI, Ľudovít - MOJUMDAR, Subhash Chandra - JANOTKA, Ivan - PUERTAS, F. - PALACIOS, M. - KULIFFAYOVÁ, Marta. Performance of composites with metakaolin-blended cements. In *Journal of Thermal Analysis and Calorimetry*, 2015, vol. 119, no. 2, p. 851-863. (2014: 2.042 - IF, Q2 - JCR, 0.643 - SJR, Q2 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-014-4119-2>

Citácie:

1. [1.1] ANTONOVIC, V. - SIKARSKAS, D. - MALAISKIENE, J. - BORIS, R. - STONYS, R. Effect of pozzolanic waste materials on hydration peculiarities of Portland cement and granulated expanded glass-based plaster. In *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*. ISSN 1388-6150, 2019, vol. 138, no. 6, p. 4127-4137., Registrované v: WOS

2. [1.2] SUDHEER, S. - RAGHU BABU, U. - KONDRAIVENDHAN, B. Influence of metakaolin and red mud blended cement on reinforcement corrosion in presence of chloride and sulfate ions. In *Lecture Notes in Civil Engineering*. ISSN 23662557, 2019, 25, p. 717-725., Registrované v: SCOPUS

ADCA105 KULIFFAYOVÁ, Marta - KRAJČI, Ľudovít - JANOTKA, Ivan - ŠMATKO, Vasiliy. Thermal behaviour and characterization of cement composites with burnt kaolin sand. In *Journal of Thermal Analysis and Calorimetry*, 2012, vol. 108, p. 425-432. (2011: 1.604 - IF, Q3 - JCR, 0.532 - SJR, Q2 - SJR). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-011-1964-0>

Citácie:

1. [1.1] PALOU, M. T. - KUZIELOVA, E. - ZEMLICKA, M. - TKACZ, J. - MASILKO, J. Insights into the hydration of Portland cement under hydrothermal curing. In *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*. ISSN 1388-6150, 2019, vol. 138, no. 6, p. 4155-4165., Registrované v: WOS

ADCA106 KUNDRACIK, F. - KOCIFAJ, Miroslav - VIDEEN, Gorden - KLAČKA, Jozef. Effect of charged-particle surface excitations on near-field optics. In *Applied Optics*, 2015, vol. 54 no. 22, p. 6674-6681. (2014: 1.784 - IF, Q2 - JCR, 1.047 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0003-6935. Dostupné na: <https://doi.org/10.1364/AO.54.006674>

Citácie:

1. [1.1] GHAFFAR, A. - HUSSAN, M. M. - ALKANHAL, M. A. S. - KHAN, Y. Interaction of directive electromagnetic radiation with isotropic plasma-coated PEMC cylinder. In *WAVES IN RANDOM AND COMPLEX MEDIA*. ISSN 1745-5030, 2019, vol. 29, no. 4, p. 706-721., Registrované v: WOS

2. [1.1] PAN, J. J. - REN, S. - SEKAR, P. K. - PENG, J. - SHU, Z. Q. - ZHAO, G. - DING, W. P. - CHEN, M. - GAO, D. Y. Investigation of Electromagnetic Resonance Rewarming Enhanced by Magnetic Nanoparticles for Cryopreservation. In *LANGMUIR*. ISSN 0743-7463, 2019, vol. 35, no. 23, p. 7560-7570., Registrované v: WOS

3. [1.2] AN, H. - MATSUSHIMA, A. Electromagnetic wave scattering from an infinite periodic array of hollow conducting circular cylinders of finite length. In



*Progress In Electromagnetics Research C. ISSN 19378718, 2019, 91, p. 1-13.,  
Registrované v: SCOPUS*

- ADCA107 KUZIELOVÁ, Eva\*\* - ŽEMLIČKA, Matúš - MÁSILKO, Jiří - PALOU, Martin T.  
Development of G-oil well cement phase composition during long term  
hydrothermal curing. In *Geothermics*, 2019, vol. 80, p. 129-137. (2018: 3.470 - IF,  
Q1 - JCR, 1.523 - SJR, Q1 - SJR, karentované - CCC). (2019 - Current Contents).  
ISSN 0375-6505. Dostupné na: <https://doi.org/10.1016/j.geothermics.2019.03.002>  
(APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za  
hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. VEGA  
1/0696/15 : Vysokoporézne anorganické materiály pre tepelno-izolačné aplikácie)

*Citácie:*

1. [1.1] FRAGA, E. - CUESTA, A. - ZEA-GARCIA, J. D. - DE LA TORRE, A. G. -  
YANEZ-CASAL, A. - ARANDA, M. A. G. *Rietveld Quantitative Phase Analysis of  
Oil Well Cement: In Situ Hydration Study at 150 Bars and 150 degrees C. In  
MATERIALS. ISSN 1996-1944, 2019, vol. 12, no. 12, art. no. 1897., Registrované  
v: WOS*

- ADCA108 KUZIELOVÁ, Eva\*\* - ŽEMLIČKA, Matúš - NOVOTNÝ, Radoslav - PALOU, Martin T.  
Simultaneous effect of silica fume, metakaolin and ground granulated  
blast-furnace slag on the hydration of multicomponent cementitious binders. In  
*Journal of Thermal Analysis and Calorimetry*, 2019, vol. 136, iss. 4, p. 1527–1537.  
(2018: 2.471 - IF, Q2 - JCR, 0.634 - SJR, Q2 - SJR, karentované - CCC). (2019 -  
Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-018-7813-7> (APVV-15-0631 : Výskum vysokohodnotných cementových  
kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových  
vrtoch. VEGA 2/0097/17 : Štúdium procesov hydratácie a vývoja mikroštruktúry v  
mnohozložkových cementových spojivách)

*Citácie:*

1. [1.1] ANTONOVIC, V. - SIKARSKAS, D. - MALAISKIENE, J. - BORIS, R. -  
STONYS, R. *Effect of pozzolanic waste materials on hydration peculiarities of  
Portland cement and granulated expanded glass-based plaster. In JOURNAL OF  
THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, 2019, vol. 138,  
no. 6, p. 4127-4137., Registrované v: WOS*

2. [1.1] CHAIPANICH, A. - WIANGLOR, K. - PIYAWORAPAIBOON, M. -  
SINTHUPINYO, S. *Thermogravimetric analysis and microstructure of alkali-  
activated metakaolin cement pastes. In JOURNAL OF THERMAL ANALYSIS  
AND CALORIMETRY. ISSN 1388-6150, 2019, vol. 138, no. 3, p. 1965-1970.,  
Registrované v: WOS*

3. [1.1] CHIDIAC, S. E. - SHAFIKHANI, M. *Cement degree of hydration in  
mortar and concrete. In JOURNAL OF THERMAL ANALYSIS AND  
CALORIMETRY. ISSN 1388-6150, 2019, vol. 138, no. 3, p. 2305-2313.,  
Registrované v: WOS*

4. [1.1] GYURKO, Z. - SZIJARTO, A. - NEMES, R. *Cellular concrete waste as an  
economical alternative to traditional supplementary cementitious materials. In  
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150,  
2019, vol. 138, no. 2, p. 947-961., Registrované v: WOS*

5. [1.1] WONGKEO, W. - THONGSANITGARN, P. - POON, C. S. -  
CHAIPANICH, A. *Heat of hydration of cement pastes containing high-volume fly  
ash and silica fume. In JOURNAL OF THERMAL ANALYSIS AND  
CALORIMETRY. ISSN 1388-6150, 2019, vol. 138, no. 3, p. 2065-2075.,  
Registrované v: WOS*

- ADCA109 KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - MÁSILKO, Jiří - PALOU, Martin T.  
Pore structure development of blended G-oil well cement submitted to hydrothermal

curing conditions. In *Geothermics*, 2017, vol. 68, p. 86–93. (2016: 2.553 - IF, Q2 - JCR, 1.010 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0375-6505. Dostupné na: <https://doi.org/10.1016/j.geothermics.2017.03.001> (APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. VEGA 1/0696/15 : Vysokoporézne anorganické materiály pre tepelno-izolačné aplikácie)

Citácie:

1. [1.1] FRAGA, E. - CUESTA, A. - ZEA-GARCIA, J. D. - DE LA TORRE, A. G. - YANEZ-CASAL, A. - ARANDA, M. A. G. *Rietveld Quantitative Phase Analysis of Oil Well Cement: In Situ Hydration Study at 150 Bars and 150 degrees C. In MATERIALS*. ISSN 1996-1944, 2019, vol. 12, no. 12, art. no. 1897., Registrované v: WOS

2. [1.1] FRAGA, E. - ZEA-GARCIA, J. D. - YANEZ, A. - DE LA TORRE, A. G. - CUESTA, A. - VALCARCEL-FERNANDEZ, R. - FARRE-PARIS, F. - MALFOIS, M. - ARANDA, M. A. G. *High-pressure and temperature spinning capillary cell for in situ synchrotron X-ray powder diffraction. In JOURNAL OF SYNCHROTRON RADIATION*. ISSN 0909-0495, 2019, vol. 26, p. 1238-1244., Registrované v: WOS

3. [1.1] PANDURO, E. A. C. - TORSATER, M. - GAWEL, K. - BJORGE, R. - GIBAUD, A. - BONNIN, A. - SCHLEPUETZ, C. M. - BREIBY, D. W. *Computed X-ray Tomography Study of Carbonate Precipitation in Large Portland Cement Pores. In CRYSTAL GROWTH & DESIGN*. ISSN 1528-7483, 2019, vol. 19, no. 10, p. 5850-5857., Registrované v: WOS

ADCA110 KUZIELOVÁ, Eva\*\* - ŽEMLIČKA, Matúš - MÁŠILKO, Jiří - PALOU, Martin T. Effect of additives on the performance of Dyckerhoff cement, Class G, submitted to simulated hydrothermal curing. In *Journal of Thermal Analysis and Calorimetry*, 2018, vol. 133, no. 1, p. 63-76. (2017: 2.209 - IF, Q2 - JCR, 0.587 - SJR, Q2 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-017-6806-2> (APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. VEGA 2/0097/17 : Štúdium procesov hydratácie a vývoja mikroštruktúry v mnohozložkových cementových spojivách)

Citácie:

1. [1.1] LORENZONI, R. - PACIORNIK, S. - SILVA, F. A. *Characterization by microcomputed tomography of class G oil well cement paste exposed to elevated temperatures. In JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING*. ISSN 0920-4105, 2019, vol. 175, p. 896-904., Registrované v: WOS

2. [1.1] MUNJAL, P. - HAU, K. K. - PRABHAKAR, A. - ARTHUR, C. C. H. *Oil Well Cement for high temperature-A review. In 4TH INTERNATIONAL CONFERENCE ON CIVIL ENGINEERING AND MATERIALS SCIENCE (ICCEMS 2019)*. ISSN 1757-8981, 2019, vol. 652, art. no. 012055., Registrované v: WOS

ADCA111 LALINSKÝ, Tibor - BURIAN, Eduard - DRŽÍK, Milan - HAŠČÍK, Štefan - MOZOLOVÁ, Želmíra - KUZMÍK, Ján. Thermal actuation of a GaAs cantilever beam. In *Journal of Micromechanics and Microengineering*, 2000, vol. 10, p. 293-298. (1999: 1.270 - IF, karentované - CCC). (2000 - Current Contents). ISSN 0960-1317.

Citácie:

1. [1.1] BROWN, Keith A. - HEDRICK, James L. - EICHELSDOERFER, Daniel J. - MIRKIN, Chad A. *Nanocombinatorics with Cantilever-Free Scanning Probe Arrays. In ACS NANO*. ISSN 1936-0851, 2019, vol. 13, no. 1, pp. 8-17., Registrované v: WOS

- ADCA112 LALINSKÝ, Tibor - HAŠČÍK, Štefan - MOZOLOVÁ, Želmíra - BURIAN, Eduard - DRŽÍK, Milan. The improved performance of GaAs micromachined power sensor microsystem. In *Sensors and Actuators A*, 1999, vol. 76, p. 241-246. (1998: 1.130 - IF, karentované - CCC). (1999 - Current Contents).  
Citácie:  
1. [1.1] ANDO, Taeko - FU, Xiao-An. *Materials: Silicon and beyond*. In *SENSORS AND ACTUATORS A-PHYSICAL*. ISSN 0924-4247, 2019, vol. 296, no., pp. 340-351., Registrované v: WOS
- ADCA113 LIN, C. Y. - GU, M. H. - YOUNG, D. L. - SLÁDEK, Ján - SLÁDEK, Vladimír. The localized method of approximated particular solutions for solving two-dimensional incompressible viscous flow field. In *Engineering Analysis with Boudary Elements*, 2015, vol. 57, p. 23-36. (2014: 1.392 - IF, Q2 - JCR, 1.032 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2014.11.035>  
Citácie:  
1. [1.1] TABBAKH, Z. - SEAID, M. - ELLAIA, R. - OUAZAR, D. - BENKHALDOUN, F. *A local radial basis function projection method for incompressible flows in water eutrophication*. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 106, p. 528-540., Registrované v: WOS
- ADCA114 LU, H. H. H. - YOUNG, D. L. - SLÁDEK, Ján - SLÁDEK, Vladimír. Three-dimensional analysis for functionally graded piezoelectric semiconductors. In *Journal of Intelligent Material Systems and Structures*, 2017, vol. 28, no. 11, p. 1391-1406. (2016: 2.255 - IF, Q2 - JCR, 0.711 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1045-389X. Dostupné na: <https://doi.org/10.1177/1045389X16672566> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch)  
Citácie:  
1. [1.1] NAEIMI, H. - KOWSARY, F. *Finite Volume Monte Carlo (FVMC) method for the analysis of conduction heat transfer*. In *JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING*. ISSN 1678-5878, 2019, vol. 41, no. 6, art. no. UNSP 260., Registrované v: WOS
- ADCA115 MIKHAS'KIV, V.V. - SLÁDEK, Ján - SLÁDEK, Vladimír - STEPANYUK, A.I. Stress concentration near an elliptic crack in the interface between elastic bodies under steady-state vibrations. In *International Applied Merchanics*, 2004, vol. 40, no. 6, p. 664-671. ISSN 1063-7095.  
Citácie:  
1. [1.1] GUZ, A. N. *Nonclassical Problems of Fracture/Failure Mechanics: On the Occasion of the 50th Anniversary of Research (Review). III*. In *INTERNATIONAL APPLIED MECHANICS*. ISSN 1063-7095, 2019, vol. 55, no. 4, p. 343-415., Registrované v: WOS
- ADCA116 MORAVČÍKOVÁ, Henrieta. Monumentality in Slovak architecture of the 1960s and 1970s: authoritarian, national, great and abstract. In *Journal of Architecture*, 2009, vol. 14, no. 1, p. 45-65. (2008: 0.187 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 1360-2365.  
Citácie:  
1. [1.1] KVITKOVA, N. *Heritage Obscured: Undesirable Legacies of the Prior Department Stores in Slovakia*. In *STUDIES IN HISTORY AND THEORY OF ARCHITECTURE-STUDII DE ISTORIA SI TEORIA ARHITECTURII*. ISSN 2344-6544, 2019, vol. 7, p. 171-188., Registrované v: WOS  
2. [2.2] ŠUŠKA, P. *Historical industrial structures in the changing urban landscape of the city of Bratislava*. In *Geograficky Casopis*. ISSN 00167193,

- 2019, 71, 3, p. 241-262., Registrované v: SCOPUS
- ADCA117 MRAVEC, D. - HUDEC, J. - JANOTKA, Ivan. Some possibilities of catalytic and noncatalytic utilization of zeolites. In Chemical Papers - Chemické zvesti, 2005, vol. 59, no.1, p. 62-69. ISSN 0366-6352.
- Citácie:
- [1.1] LI, Y. - KHIVANTSEV, K. - TANG, Y. - NGUYEN, L. - FATHIZADEH, M. - LIU, J. - YU, M. - TAO, F. Synthesis of Na@nanoFAU Zeolite Catalyst and Catalysis for Production of Formic Acid with Na@nanoFAU. In CATALYSIS LETTERS. ISSN 1011-372X, 2019, vol. 149, no. 7, p. 1965-1974., Registrované v: WOS
  - [1.1] SALAHUDEEN, N. Effect of ZSM5 in the catalytic activity of a fluid catalytic cracking catalyst. In JOURNAL OF INCLUSION PHENOMENA AND MACROCYCLIC CHEMISTRY. ISSN 1388-3127, 2019, vol. 93, no. 3-4, p. 173-181., Registrované v: WOS
  - [1.1] SHAHMANSOURI, Amir Ali - BENGAR, Habib Akbarzadeh - JAHANI, Ehsan. Predicting compressive strength and electrical resistivity of eco-friendly concrete containing natural zeolite via GEP algorithm. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 229, art. no. 116883., Registrované v: WOS
  - [1.1] SZULEJ, Jacek - OGRODNIK, Pawel - KLIMEK, Beata. Zeolite Tuff and Recycled Ceramic Sanitary Ware Aggregate in Production of Concrete. In SUSTAINABILITY. ISSN 2071-1050, 2019, vol. 11, no. 6, art. no. 1782., Registrované v: WOS
- ADCA118 OCHIAI, Y. - SLÁDEK, Vladimír - SLÁDEK, Ján. Three-dimensional unsteady thermal stress analysis by triple-reciprocity boundary element method. In Engineering Analysis with Boudary Elements, 2013, vol. 37, no. 1, p. 116-127. (2012: 1.596 - IF, Q1 - JCR, 1.244 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2012.09.002>
- Citácie:
- [1.1] BRISCHETTO, S. - TORRE, R. 3D shell model for the thermo-mechanical analysis of FGM structures via imposed and calculated temperature profiles. In AEROSPACE SCIENCE AND TECHNOLOGY. ISSN 1270-9638, 2019, vol. 85, p. 125-149., Registrované v: WOS
- ADCA119 OCHIAI, Y. - SLÁDEK, Vladimír - SLÁDEK, Ján. Transient heat conduction analysis by triple-reciprocity boundary element method. In Engineering Analysis with Boudary Elements, 2006, vol. 30, no. 3, p. 194-204. (2005: 0.894 - IF, Q1 - JCR, 1.174 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 0955-7997.
- Citácie:
- [1.1] CARRER, J. A. M. - SEAID, M. - TREVELYAN, J. - SOLHEID, B. S. The boundary element method applied to the solution of the anomalous diffusion problem. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 109, p. 129-142., Registrované v: WOS
  - [1.1] GUO, S. P. - WU, Q. Q. - GU, J. L. - WANG, W. - LI, X. J. An improved implementation of triple reciprocity boundary element method for three-dimensional steady state heat conduction problems. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 107, p. 1-11., Registrované v: WOS
  - [1.1] YANG, K. - JIANG, G. H. - PENG, H. F. - GAO, X. W. A new modified Levenberg-Marquardt algorithm for identifying the temperature-dependent conductivity of solids based on the radial integration boundary element method.



- In INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, 2019, vol. 144, art. no. 118615., Registrované v: WOS*
- ADCA120 PALOU, Martin T. - BÁGEL, Ľubomír - ŽIVICA, Vladimír - KULIFFAYOVÁ, Marta - KOZÁNKOVÁ, Jana. Influence of hydrothermal curing regimes on the hydration of fiber-reinforced cement composites. In Journal of Thermal Analysis and Calorimetry, 2013, vol. 113, no 1, p. 219-229. (2012: 1.982 - IF, Q2 - JCR, 0.596 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-013-2943-4>
- Citácie:*
- 1. [1.1] RALEGAONKAR, R. V. - ASWATH, P. B. - ABOLMAALI, A. Design investigations of basalt-fibre-reinforced mortar. In PROCEEDINGS OF THE INSTITUTION OF CIVIL ENGINEERS-CONSTRUCTION MATERIALS. ISSN 1747-650X, 2019, vol. 172, no. 6, p. 296-304., Registrované v: WOS*
- ADCA121 PALOU, Martin T. - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - BOHÁČ, Martin - NOVOTNÝ, Radoslav. The effect of curing temperature on the hydration of binary Portland cement. In Journal of Thermal Analysis and Calorimetry, 2016, vol. 125, no. 3, p. 1301-1310. (2015: 1.781 - IF, Q2 - JCR, 0.591 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-016-5395-9>
- Citácie:*
- 1. [1.1] WANG, S. - JIAN, L. M. - SHU, Z. H. - WANG, J. F. - HUA, X. - CHEN, L. Y. Preparation, properties and hydration process of low temperature nano-composite cement slurry. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 205, p. 434-442., Registrované v: WOS*
- ADCA122 PALOU, Martin T. - KUZIELOVÁ, Eva - NOVOTNÝ, Radoslav - ŠOUKAL, František - ŽEMLIČKA, Matúš. Blended cements consisting of Portland cement-slag-silica fume-metakaolin system. In Journal of Thermal Analysis and Calorimetry, 2016, vol. 125, no. 3, p. 1025-1034. (2015: 1.781 - IF, Q2 - JCR, 0.591 - SJR, Q2 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-016-5399-5>
- Citácie:*
- 1. [1.1] KUBATOVA, D. - ZEZULOVA, A. - RYBOVA, A. - BOHAC, M. Synthesis of beta-C2S-based binder from limestone and calcium silicate wastes. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, 2019, vol. 138, no. 3, p. 1901-1912., Registrované v: WOS*
- 2. [1.1] REDDY, P. N. - NAQASH, J. A. Experimental Study on TGA, XRD and SEM Analysis of Concrete with Ultra-fine Slag. In INTERNATIONAL JOURNAL OF ENGINEERING. ISSN 1025-2495, 2019, vol. 32, no. 5, p. 679-684., Registrované v: WOS*
- 3. [1.1] ZEZULOVA, A. - RYBOVA, A. - STANEK, T. Hydration of clinkers doped with baryte with and without addition of gypsum. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, 2019, vol. 138, no. 3, p. 1945-1952., Registrované v: WOS*
- ADCA123 PALOU, Martin T. - ŠOUKAL, František - BOHÁČ, Martin - ŠILER, Pavel - IFKA, Tomáš - ŽIVICA, Vladimír. Performance of G-Oil Well cement exposed to elevated hydrothermal curing conditions. In Journal of Thermal Analysis and Calorimetry, 2014, vol. 118, no. 2, p. 865-874. (2013: 2.206 - IF, Q2 - JCR, 0.458 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-014-3917-x>
- Citácie:*
- 1. [1.1] FRAGA, E. - CUESTA, A. - ZEA-GARCIA, J. D. - DE LA TORRE, A. G. - YANEZ-CASAL, A. - ARANDA, M. A. G. Rietveld Quantitative Phase Analysis of*

*Oil Well Cement: In Situ Hydration Study at 150 Bars and 150 degrees C. In MATERIALS. ISSN 1996-1944, 2019, vol. 12, no. 12, art. no. 1897., Registrované v: WOS*

2. [1.1] MEI, K. Y. - CHENG, X. W. - ZHANG, L. W. - GUO, X. Y. - ZHUANG, J. - ZHANG, C. *Self-healing mechanism of Zn-enhanced cement stone: An application for sour natural gas field. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 227, art. no. UNSP 116651., Registrované v: WOS*

ADCA124 PALOU, Martin T. - ŽIVICA, Vladimír - IFKA, Tomáš - BOHÁČ, Martin - ZMRZLÝ, Martin. Effect of hydrothermal curing on early hydration of G-Oil well cement. In Journal of Thermal Analysis and Calorimetry, 2014, vol.116, no 2, p. 597-603. (2013: 2.206 - IF, Q2 - JCR, 0.458 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-013-3511-7>

Citácie:

1. [1.1] FRAGA, E. - CUESTA, A. - ZEA-GARCIA, J. D. - DE LA TORRE, A. G. - YANEZ-CASAL, A. - ARANDA, M. A. G. *Rietveld Quantitative Phase Analysis of Oil Well Cement: In Situ Hydration Study at 150 Bars and 150 degrees C. In MATERIALS. ISSN 1996-1944, 2019, vol. 12, no. 12, art. no. 1897., Registrované v: WOS*

2. [1.1] FRAGA, E. - ZEA-GARCIA, J. D. - YANEZ, A. - DE LA TORRE, A. G. - CUESTA, A. - VALCARCEL-FERNANDEZ, R. - FARRE-PARIS, F. - MALFOIS, M. - ARANDA, M. A. G. *High-pressure and temperature spinning capillary cell for in situ synchrotron X-ray powder diffraction. In JOURNAL OF SYNCHROTRON RADIATION. ISSN 0909-0495, 2019, vol. 26, p. 1238-1244., Registrované v: WOS*

3. [1.1] HUO, J. H. - PENG, Z. G. - YE, Z. B. - FENG, Q. - ZHENG, Y. - ZHANG, J. *Characterization of the Initial Hydration Process of Ordinary Portland Cement Based on Low-Field NMR. In APPLIED MAGNETIC RESONANCE. ISSN 0937-9347, 2019, vol. 50, no. 1-3, p. 187-198., Registrované v: WOS*

4. [1.1] VELISSARIOU, D. - KATSIOTIS, N. - TSAKIRIDIS, P. - KATSIOTIS, M. - PISTOFIDIS, N. - KOLOVOS, K. - BEAZI, M. *A combined study of the performance and hydration of a Class G oil-well cement derived from Greek raw materials. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 197, p. 63-71., Registrované v: WOS*

ADCA125 PALOU, Martin T.\*\* - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - NOVOTNÝ, Radoslav - MÁŠILKO, Jiří. The effect of metakaolin upon the formation of ettringite in metakaolin–lime–gypsum ternary systems. In Journal of Thermal Analysis and Calorimetry, 2018, vol. 133, no. 1, p. 77–86. (2017: 2.209 - IF, Q2 - JCR, 0.587 - SJR, Q2 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-017-6885-0> (APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch)

Citácie:

1. [1.1] ANTONOVIC, V. - SIKARSKAS, D. - MALAIKIENE, J. - BORIS, R. - STONYS, R. *Effect of pozzolanic waste materials on hydration peculiarities of Portland cement and granulated expanded glass-based plaster. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, 2019, vol. 138, no. 6, p. 4127-4137., Registrované v: WOS*

2. [1.1] CHAIPANICH, A. - WIANGLOR, K. - PIYAWORAPAIBOON, M. - SINTHUPINYO, S. *Thermogravimetric analysis and microstructure of alkali-activated metakaolin cement pastes. In JOURNAL OF THERMAL ANALYSIS*

*AND CALORIMETRY. ISSN 1388-6150, 2019, vol. 138, no. 3, p. 1965-1970., Registrované v: WOS*

3. [1.1] KRISHNAN, S. - EMMANUEL, A. C. - BISHNOI, S. Hydration and phase assemblage of ternary cements with calcined clay and limestone. In *CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 222, p. 64-72., Registrované v: WOS*

4. [1.1] LOU, Y. K. - YE, Z. M. - WANG, S. X. - LIU, S. X. - CHENG, X. Influence of synthesis methods on ettringite dehydration. In *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, 2019, vol. 135, no. 4, p. 2031-2038., Registrované v: WOS*

5. [1.1] YANG, L. - JING, M. - LU, L. C. - SONG, X. T. - DONG, X. B. Properties and micro-structure assessment of building materials based on flue gas desulfurisation gypsum modified by cement and industrial waste. In *CERAMICS-SILIKATY. ISSN 0862-5468, 2019, vol. 63, no. 2, p. 174-184., Registrované v: WOS*

ADCA126 PALOU, Martin T.\*\* - KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - TKÁČZ, Jakub - MÁŠILKO, Jiří. Insights into the hydration of Portland cement under hydrothermal curing. In *Journal of Thermal Analysis and Calorimetry*, 2019, vol. 138, iss. 6, p. 4155–4165. (2018: 2.471 - IF, Q2 - JCR, 0.634 - SJR, Q2 - SJR, karentované - CCC). (2019 - Current Contents). ISSN 1388-6150. Dostupné na: <https://doi.org/10.1007/s10973-019-08542-9> (APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch. VEGA 2/0097/17 : Štúdium procesov hydratácie a vývoja mikroštruktúry v mnohozložkových cementových spojivách. V4-KOREA\_RADCON : Vplyv chemického zloženia betónu na jeho dlhodobú trvanlivosť v (ionizujúcom) ionizovanom prostredí)

*Citácie:*

1. [1.1] CHIDIAC, S. E. - SHAFIKHANI, M. Cement degree of hydration in mortar and concrete. In *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, 2019, vol. 138, no. 3, p. 2305-2313., Registrované v: WOS*

ADCA127 PETRŽALA, Jaromír - KÓMAR, Ladislav - KOCIFAJ, Miroslav. An advanced clear-sky model for more accurate irradiance and illuminance predictions for arbitrarily oriented inclined surfaces. In *Renewable Energy*, 2017, vol. 106, p. 212-221. (2016: 4.357 - IF, Q1 - JCR, 1.661 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0960-1481. Dostupné na: <https://doi.org/10.1016/j.renene.2017.01.025> (VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

*Citácie:*

1. [1.1] ZHANG, X. D. - LV, J. - DAWUDA, M. M. - XIE, J. M. - YU, J. H. - GAN, Y. T. - ZHANG, J. - TANG, Z. Q. - LI, J. Innovative passive heat-storage walls improve thermal performance and energy efficiency in Chinese solar greenhouses for non-arable lands. In *SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 190, p. 561-575., Registrované v: WOS*

ADCA128 PETRŽALA, Jaromír\*\* - KOCIFAJ, Miroslav - KÓMAR, Ladislav. Accurate tool for express optical efficiency analysis of cylindrical light-tubes with arbitrary aspect ratios. In *Solar Energy*, 2018, vol. 169, p. 264-269. (2017: 4.374 - IF, Q1 - JCR, 1.615 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2018.04.053> (VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)

Citácie:

1. [1.1] HE, K. Y. - CHEN, Z. Q. - ZHONG, S. K. - QIAN, Y. D. - LIU, H. Y. - YIN, J. H. - ZHOU, B. D. A solar fiber daylighting system without tracking component. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 194, p. 461-470., Registrované v: WOS

2. [1.2] OBRADOVIC, Biljana - MATUSIAK, Barbara Szybinska. Daylight transport systems for buildings at high latitudes. In Journal of Daylighting. ISSN 23838701, 2019, 6, 2, p. 60-79., Registrované v: SCOPUS

- ADCA129 ROUSEKOVÁ, I. - BAJZA, A. - ŽIVICA, Vladimír. Silica fume-basic blast furnace slag systems activated by an alkali silica fume activator. In Cement and concrete research, 1997, vol. 27, no. 12, . p. 1825-1828. ISSN 0008-8846.

Citácie:

1. [1.1] BATISTA, Raquel P. - TRINDADE, Ana Carolina C. - BORGES, Paulo H. R. - SILVA, Flavio de A. Silica Fume as Precursor in the Development of Sustainable and High-Performance MK-Based Alkali-Activated Materials Reinforced With Short PVA Fibers. In FRONTIERS IN MATERIALS. ISSN 2296-8016, 2019, vol. 6, art. no. 77., Registrované v: WOS

2. [1.1] KANG, S. H. - KWON, Y. H. - HONG, S. G. - CHUN, S. - MOON, J. Hydrated lime activation on byproducts for eco-friendly production of structural mortars. In JOURNAL OF CLEANER PRODUCTION. ISSN 0959-6526, 2019, vol. 231, p. 1389-1398., Registrované v: WOS

3. [1.2] PROVIS, J. L. - VAN DEVENTER, J. S. J. Geopolymers and other alkali-activated materials. In Lea's Chemistry of Cement and Concrete, 2019, p. 779-805., Registrované v: SCOPUS

- ADCA130 SADOVSKÝ, Zoltán - BALÁŽ, I. Tolerances of initial deflections of steel plates and strength of I-cross section in compression and bending. In Journal of Constructional Steel Research, 1996, vol. 38, no. 3, p. 219-238. ISSN 0143-974X. Dostupné na: [https://doi.org/10.1016/0143-974X\(96\)00020-X](https://doi.org/10.1016/0143-974X(96)00020-X)

Citácie:

1. [1.1] COUTO, C. - REAL, P. V. Numerical investigation on the influence of imperfections in the local buckling of thin-walled I-shaped sections. In THIN-WALLED STRUCTURES. ISSN 0263-8231, 2019, vol. 135, p. 89-108., Registrované v: WOS

- ADCA131 SADOVSKÝ, Zoltán. Discussion on: An inverse reliability method and its application. In Structural Safety, 2000, vol. 22, no. 1, . p. 97-102. ISSN 0167-4730.

Citácie:

1. [1.1] HUANG, X. F. - YANG, Z. T. - CHEN, Y. Q. - FANG, G. H. - YANG, H. W. Risk Assessment Method and Application of Embankment Engineering Based on Cloud Model. In JOURNAL OF COASTAL RESEARCH. ISSN 0749-0208, 2019, p. 310-319., Registrované v: WOS

- ADCA132 SADOVSKÝ, Zoltán - DRDÁČKÝ, Miloš. Buckling of plate strip subjected to localised corrosion - a stochastic model. In Thin-Walled Structures, 2001, vol. 39, no. 3, p. 247-259. ISSN 0263-8231.

Citácie:

1. [1.1] SU, S. J. - WANG, T. L. - ZHEN, C. B. - ZHANG, F. Ultimate Strength of Pit Corrosion Damification on Pressure-Resistant Shells of Underwater Glider. In MATHEMATICAL PROBLEMS IN ENGINEERING. ISSN 1024-123X, 2019, vol. 2019, art. no. 4323127., Registrované v: WOS

- ADCA133 SADOVSKÝ, Zoltán - TEIXEIRA, A. P. - GUEDES SOARES, C. Degradation of the compressive strength of rectangular plates due to initial deflections. In Thin-Walled Structures, 2005, vol. 43, no. 1, p. 65-82. (2004: 0.517 - IF, karentované - CCC). (2005 - Current Contents). ISSN 0263-8231.



Citácie:

1. [1.1] SHEN, J. J. - WADEE, M. A. Sensitivity to local imperfections in inelastic thin-walled rectangular hollow section struts. In *STRUCTURES*. ISSN 2352-0124, 2019, vol. 17, p. 43-57., Registrované v: WOS

ADCA134 SADOVSKÝ, Zoltán. Stochastic resistance of square plate under uniaxial compression. In *Engineering Structures*, 1997, vol. 19, no. 10, p. 827-833. ISSN 0141-0296.

Citácie:

1. [1.1] COUTO, C. - REAL, P. V. Numerical investigation on the influence of imperfections in the local buckling of thin-walled I-shaped sections. In *THIN-WALLED STRUCTURES*. ISSN 0263-8231, 2019, vol. 135, p. 89-108., Registrované v: WOS

ADCA135 SADOVSKÝ, Zoltán - KRIVÁČEK, Jozef - IVANČO, V. - ĎURICOVÁ, Antónia. Computational modelling of geometric imperfections and buckling strength of cold-formed steel. In *Journal of Constructional Steel Research*, 2012, vol. 78, p. 1-7. (2011: 1.251 - IF, Q1 - JCR, 1.442 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0143-974X. Dostupné na: <https://doi.org/10.1016/j.jcsr.2012.06.005>

Citácie:

1. [1.1] ERKAL, B. G. - AKTEPE, R. - ALKOYAK, A. C. - BAYRAKTAR, M. - DEMIR, B. - UNSAL, Z. Camera-Based Imperfection Determination of Cold-Formed Steel Members. In *STRUCTURES CONGRESS 2019: BLAST, IMPACT LOADING, AND RESEARCH AND EDUCATION*, 2019, p. 395-404., Registrované v: WOS

2. [1.1] HAI-BANG LY - LU MINH LE - HUAN THANH DUONG - THONG CHUNG NGUYEN - TUAN ANH PHAM - TIEN-THINH LE - VUONG MINH LE - LONG NGUYEN-NGOC - BINH THAI PHAM. Hybrid Artificial Intelligence Approaches for Predicting Critical Buckling Load of Structural Members under Compression Considering the Influence of Initial Geometric Imperfections. In *APPLIED SCIENCES-BASEL*, 2019, vol. 9, no. 11, art. no. UNSP 2258., Registrované v: WOS

3. [1.1] LIU, J. - LI, Z. - DING, F. X. Experimental Investigation on the Axially Loaded Performance of Notched Hexagonal Concrete-Filled Steel Tube (CFST) Column. In *ADVANCES IN CIVIL ENGINEERING*. ISSN 1687-8086, 2019, vol. 2019, art. no. 2612536., Registrované v: WOS

4. [1.1] NEGA, B. F. - WOO, K. - LEE, H. Test and Analysis of Triaxially Braided Composite Circular Arch under Three-Point Bending. In *COMPOSITES RESEARCH*. ISSN 2288-2103, 2019, vol. 32, no. 5, p. 249-257., Registrované v: WOS

5. [1.1] SHEN, J. J. - WADEE, M. A. Sensitivity to local imperfections in inelastic thin-walled rectangular hollow section struts. In *STRUCTURES*. ISSN 2352-0124, 2019, vol. 17, p. 43-57., Registrované v: WOS

ADCA136 SADOVSKÝ, Zoltán - GUEDES SOARES, C. Artificial neural network model of the strength of thin rectangular plates with weld induced initial imperfections. In *Reliability Engineering and System Safety*, 2011, vol. 96, p. 713-717. (2010: 1.899 - IF, Q1 - JCR, 1.270 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0951-8320. Dostupné na: <https://doi.org/10.1016/j.ress.2011.02.010>

Citácie:

1. [1.1] LY, H. B. - LE, T.T. - LE, L. M. - TRAN, V. Q. - LE, V. M. - VU, H. L. T. - NGUYEN, Q. H. - PHAM, B. T. Development of Hybrid Machine Learning Models for Predicting the Critical Buckling Load of I-Shaped Cellular Beams. In *APPLIED SCIENCES-BASEL*, 2019, vol. 9, no. 24, art. no. 5458., Registrované v:

WOS

- ADCA137 SADOVSKÝ, Zoltán - KORONTHÁLYOVÁ, Oľga - MATIAŠOVSKÝ, Peter - MIKULOVÁ, Katarína. Probabilistic modelling of mould growth in buildings. In *Journal of Building Physics*, 2014, vol. 37, no. 4, p. 348-366. (2013: 1.027 - IF, Q2 - JCR, 0.682 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 1744-2591. Dostupné na: <https://doi.org/10.1177/1744259113496370>
- Citácie:
1. [1.1] *DE MELLO, L. A. - MOURA, L. M. - MENDES, N. A model for assessment of heat and moisture transfer through hollow porous buildings elements. In CASE STUDIES IN THERMAL ENGINEERING. ISSN 2214-157X, 2019, vol. 14, art. no. UNSP 100446., Registrované v: WOS*
  2. [1.1] *GRADECI, K. - BERARDI, U. Application of probabilistic approaches to the performance evaluation of building envelopes to withstand mould growth. In JOURNAL OF BUILDING PHYSICS. ISSN 1744-2591, 2019, vol. 43, no. 3, p. 187-207., Registrované v: WOS*
- ADCA138 SADOVSKÝ, Zoltán - KORONTHÁLYOVÁ, Oľga. Exploration of probabilistic mould growth assessment. In *Applied Mathematical Modeling*, 2017, vol. 42, p. 566-575. (2016: 2.350 - IF, Q1 - JCR, 1.139 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0307-904X. Dostupné na: <https://doi.org/10.1016/j.apm.2016.10.049> (VEGA 2/0154/15 : Modelovanie pokritického pôsobenia tenkostenných za studena tvarovaných prvkov)
- Citácie:
1. [1.1] *GRADECI, K. - BERARDI, U. Application of probabilistic approaches to the performance evaluation of building envelopes to withstand mould growth. In JOURNAL OF BUILDING PHYSICS. ISSN 1744-2591, 2019, vol. 43, no. 3, p. 187-207., Registrované v: WOS*
- ADCA139 SÁNCHEZ DE MIGUEL, A. - AUBÉ, Martin - ZAMORANO, J. - KOCIFAJ, Miroslav - ROBY, Johanne - TAPIA, C. Sky Quality Meter measurements in a colour-changing world. In *Monthly Notices of the Royal Astronomical Society*, 2017, vol. 476, p. 2966-2979. (2016: 4.961 - IF, Q1 - JCR, 2.388 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents, WOS, SCOPUS, NASA ADS). ISSN 0035-8711. Dostupné na: <https://doi.org/10.1093/mnras/stx145> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest)
- Citácie:
1. [1.1] *BARA, S. - RIGUEIRO, L. - LIMA, R. C. Monitoring transition: Expected night sky brightness trends in different photometric bands. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2019, vol. 239, art. no. UNSP 106644., Registrované v: WOS*
  2. [1.1] *BARA, S. Black-body luminance and magnitudes per square arcsecond in the Johnson-Cousins BVR photometric bands. In PHOTONICS LETTERS OF POLAND. ISSN 2080-2242, 2019, vol. 11, no. 3, p. 63-65., Registrované v: WOS*
  3. [1.1] *BARENTINE, J. C. Methods for Assessment and Monitoring of Light Pollution around Ecologically Sensitive Sites. In JOURNAL OF IMAGING. ISSN 2313-433X, 2019, vol. 5, no. 5, art. no. 54., Registrované v: WOS*
  4. [1.1] *BERTOLO, A. - BINOTTO, R. - ORTOLANI, S. - SAPIENZA, S. Measurements of Night Sky Brightness in the Veneto Region of Italy: Sky Quality Meter Network Results and Differential Photometry by Digital Single Lens Reflex. In JOURNAL OF IMAGING. ISSN 2313-433X, 2019, vol. 5, no. 5, art. no. 56., Registrované v: WOS*
  5. [1.1] *C-SANCHEZ, E. - SANCHEZ-MEDINA, A. J. - ALONSO-HERNANDEZ, J. B. - VOLTES-DORTA, A. Astrotourism and Night Sky Brightness Forecast:*

- First Probabilistic Model Approach. In SENSORS. ISSN 1424-8220, 2019, vol. 19, no. 13, art. no. 2840., Registrované v: WOS*
6. [1.1] FIORENTIN, P. - BETTANINI, C. - BOGONI, D. Calibration of an Autonomous Instrument for Monitoring Light Pollution from Drones. In SENSORS, 2019, vol. 19, no. 23, art. no. 5091., Registrované v: WOS
7. [1.1] GRAUER, A. D. - GRAUER, P. A. - DAVIES, N. - DAVIES, G. Impact of Space Weather on the Natural Night Sky. In PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF THE PACIFIC. ISSN 0004-6280, 2019, vol. 131, no. 1005, art. no. 114508., Registrované v: WOS
8. [1.1] HERDIWIJAYA, D. Light pollution at Bosscha Observatory, Indonesia. In 9TH INTERNATIONAL CONFERENCE ON PHYSICS AND ITS APPLICATIONS (ICOPIA). ISSN 1742-6588, 2019, vol. 1153, art. no. 012133., Registrované v: WOS
9. [1.1] JECHOW, A. - HOELKER, F. - KYBA, C. C. M. Using all-sky differential photometry to investigate how nocturnal clouds darken the night sky in rural areas. In SCIENTIFIC REPORTS. ISSN 2045-2322, 2019, vol. 9, art. no. 1391., Registrované v: WOS
10. [1.1] KOTARBA, A. Z. - CHACEWICZ, S. - ZMUDZKA, E. Night sky photometry over Warsaw (Poland) evaluated simultaneously with surface-based and satellite-based cloud observations. In JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER. ISSN 0022-4073, 2019, vol. 235, p. 95-107., Registrované v: WOS
11. [1.2] AZMAN, M. I. - DALIMIN, M. N. - MOHAMED, M. - ABU BAKAR, M. F. A Brief Overview on Light Pollution. In IOP Conference Series: Earth and Environmental Science. ISSN 17551307, 2019-08-05, 269, 1, art. no. 012014., Registrované v: SCOPUS
12. [1.2] BAHALI, Kassim - SAMIAN, Abdul Latif - MUSLIM, Nazri - HAMID, Nurul Shazana Abdul. Measuring luminance and sun depression angle of dawn. In International Journal of Mechanical Engineering and Technology. ISSN 09766340, 2019-02-01, 10, 2, pp. 1136-1150., Registrované v: SCOPUS
- ADCA140 SAPUTRA, A. A.\*\* - SLÁDEK, Vladimír - SLÁDEK, Ján - SONG, Chongmin. Micromechanics determination of effective material coefficients of cement-based piezoelectric ceramic composites. In Journal of Intelligent Material Systems and Structures, 2018, vol. 29, no. 5, p. 845-862. (2017: 2.211 - IF, Q2 - JCR, 0.828 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1045-389X. Dostupné na: <https://doi.org/10.1177/1045389X17721047> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch. VEGA 2/0046/16 : Viazané úlohy tepelných a elektromechanických polí v piezoelektrických materiáloch s poréznuou mikroštruktúrou)
- Citácie:**
1. [1.1] HE, Y. Q. - DONG, X. C. - YANG, H. T. A new adaptive algorithm for phase change heat transfer problems based on quadtree SBFEM and smoothed effective heat capacity method. In NUMERICAL HEAT TRANSFER PART B-FUNDAMENTALS. ISSN 1040-7790, 2019, vol. 75, no. 2, p. 111-126., Registrované v: WOS
2. [1.1] KRISHNASWAMY, J. A. - BURONI, F. C. - GARCIA-SANCHEZ, F. - MELNIK, R. - RODRIGUEZ-TEMBLEQUE, L. - SAEZ, A. Improving the performance of lead-free piezoelectric composites by using polycrystalline inclusions and tuning the dielectric matrix environment. In SMART MATERIALS AND STRUCTURES. ISSN 0964-1726, 2019, vol. 28, no. 7, art. no. 075032., Registrované v: WOS
3. [1.1] KRISHNASWAMY, J. A. - BURONI, F. C. - GARCIA-SANCHEZ, F. -

MELNIK, R. - RODRIGUEZ-TEMBLEQUE, L. - SAEZ, A. *Lead-free piezocomposites with CNT-modified matrices: Accounting for agglomerations and molecular defects. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 224, art. no. UNSP 111033., Registrované v: WOS*

4. [1.1] TALEBI, H. - SILANI, O. - KLUSEMANN, B. *The scaled boundary finite element method for computational homogenization of heterogeneous media. In INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING. ISSN 0029-5981, 2019, vol. 118, no. 1, p. 1-17., Registrované v: WOS*

5. [1.1] ZHANG, T. T. - CHEN, J. - INGABIRE, A. - LIAO, Y. C. *Dynamic response of a 2-2 multi-layered cement-based piezoelectric composite under arbitrary mechanical load. In JOURNAL OF INTELLIGENT MATERIAL SYSTEMS AND STRUCTURES. ISSN 1045-389X, 2019, vol. 30, no. 20, p. 3080-3099., Registrované v: WOS*

6. [2.2] NOVÁK, P. - BISHAY, P. - ZMINDÁK, M. *Computational homogenization of cement-based porous piezoelectric composites with random structure. In Strojnický Casopis. ISSN 00392472, 2019, 69, 2, p. 77-88., Registrované v: SCOPUS*

ADCA141 SÁTOR, Ladislav\*\* - SLÁDEK, Vladimír - SLÁDEK, Ján. Bending of FGM plates under thermal load: Classical thermoelasticity analysis by a meshless method. In Composites Part B: Engineering, 2018, vol. 146, p. 176-188. (2017: 4.920 - IF, Q1 - JCR, 2.039 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 1359-8368. Dostupné na: <https://doi.org/10.1016/j.compositesb.2018.04.004> (APVV-14-0440 : Multifyzikálne problémy v doskách z funkcionálne gradientných materiálov)

Citácie:

1. [1.1] MEMARI, A. - AZAR, M. R. K. - VAKILI-TAHAMI, F. *Meshless fracture analysis of 3D planar cracks with generalized thermo-mechanical stress intensity factors. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 169-194., Registrované v: WOS*

2. [1.1] MEMARI, A. - AZAR, M. R. K. *Thermo-mechanical shock fracture analysis by meshless method. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 102, p. 171-192., Registrované v: WOS*

3. [1.1] MEMARI, A. *Computational Analysis of Linear Elastic Crack Growth in Functionally Graded Bodies Using Non-Uniform Steps Integrated in the MLPG. In INTERNATIONAL JOURNAL OF APPLIED MECHANICS. ISSN 1758-8251, 2019, vol. 11, no. 8, art. no. 1950080., Registrované v: WOS*

4. [1.1] ZHANG, J. H. - ZHOU, C. - ULLAH, S. - ZHONG, Y. - LI, R. *Two-dimensional generalized finite integral transform method for new analytic bending solutions of orthotropic rectangular thin foundation plates. In APPLIED MATHEMATICS LETTERS. ISSN 0893-9659, 2019, vol. 92, p. 8-14., Registrované v: WOS*

5. [1.1] ZHOU, H. M. - ZHANG, X. M. - WANG, Z. Y. *Thermal Analysis of 2D FGM Beam Subjected to Thermal Loading Using Meshless Weighted Least-Square Method. In MATHEMATICAL PROBLEMS IN ENGINEERING. ISSN 1024-123X, 2019, vol. 2019, art. no. 2541707., Registrované v: WOS*

ADCA142 SHIRZADI, A. - SLÁDEK, Vladimír - SLÁDEK, Ján. A local integral equation formulation to solve coupled nonlinear reaction- diffusion equations by using moving least square approximation. In Engineering Analysis with Boundary Elements, 2013, vol. 37, p. 8-14. (2012: 1.596 - IF, Q1 - JCR, 1.244 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0955-7997. Dostupné na:



<https://doi.org/10.1016/j.enganabound.2012.08.007>

Citácie:

1. [1.1] KARAMI, A. - ABBASBANDY, S. - SHIVANIAN, E. *Meshless Local Petrov-Galerkin Formulation of Inverse Stefan Problem via Moving Least Squares Approximation. In MATHEMATICAL AND COMPUTATIONAL APPLICATIONS. ISSN 1300-686X, 2019, vol. 24, no. 4, art. no. 101., Registrované v: WOS*
2. [1.1] LI, J. W. - FENG, X. L. - HE, Y. N. *RBF-based meshless local Petrov Galerkin method for the multi-dimensional convection-diffusion-reaction equation. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 98, p. 46-53., Registrované v: WOS*
3. [1.1] MIRZAEI, F. - SAMADYAR, N. *Numerical Solution of Time Fractional Stochastic Korteweg-de Vries Equation via Implicit Meshless Approach. In IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION A-SCIENCE. ISSN 1028-6276, 2019, vol. 43, no. A6, p. 2905-2912., Registrované v: WOS*
4. [1.1] YADAV, O. P. - JIWARI, R. *A finite element approach to capture Turing patterns of autocatalytic Brusselator model. In JOURNAL OF MATHEMATICAL CHEMISTRY. ISSN 0259-9791, 2019, vol. 57, no. 3, p. 769-789., Registrované v: WOS*

- ADCA143 SHIRZADI, A. - SLÁDEK, Vladimír - SLÁDEK, Ján. A meshless simulations for 2D nonlinear reaction-diffusion Brusselator system. In CMES: Computer Modeling in Engineering & Sciences, 2013, vol. 95, no. 4, p. 259-282. (2012: 0.849 - IF, Q2 - JCR, 0.727 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 1526-1492.

Citácie:

1. [1.2] MITTAL, A. K. - BALYAN, L. K. *A Highly Accurate Time-Space Pseudospectral Approximation and Stability Analysis of Two Dimensional Brusselator Model for Chemical Systems. In International Journal of Applied and Computational Mathematics. ISSN 23495103, 2019, 5, 5, art. no. 140., Registrované v: SCOPUS*

- ADCA144 SCHMIDT, F. - ANDRIEU, F. - COSTARD, F. - KOCIFAJ, Miroslav - MERESSECU, A. G. Formation of recurring slope lineae on Mars by rarefied gas-triggered granular flows. In Nature geoscience, 2017, vol. 10, p. 1-5. (2016: 13.941 - IF, Q1 - JCR, 7.274 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 1752-0894. Dostupné na: <https://doi.org/10.1038/NGEO2917> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest)

Citácie:

1. [1.1] ABOTALIB, A. Z. - HEGGY, E. *A deep groundwater origin for recurring slope lineae on Mars. In NATURE GEOSCIENCE. ISSN 1752-0894, 2019, vol. 12, no. 4, p. 235-241., Registrované v: WOS*
2. [1.1] BHARDWAJ, A. - SAM, L. - JAVIER MARTIN-TORRES, E. - ZORZANO, M. P. - LUQUE, J. A. R. *UAV Imaging of a Martian Brine Analogue Environment in a Fluvio-Aeolian Setting. In REMOTE SENSING, 2019, vol. 11, no. 18, art. no. 2104., Registrované v: WOS*
3. [1.1] BHARDWAJ, A. - SAM, L. - JAVIER MARTIN-TORRES, F. - ZORZANO, M. P. *Are Slope Streaks Indicative of Global-Scale Aqueous Processes on Contemporary Mars? In REVIEWS OF GEOPHYSICS. ISSN 8755-1209, 2019, vol. 57, no. 1, p. 48-77., Registrované v: WOS*
4. [1.1] BHARDWAJ, A. - SAM, L. - JAVIER MARTIN-TORRES, F. - ZORZANO, M. P. *Discovery of recurring slope lineae candidates in Mawrth Vallis, Mars. In SCIENTIFIC REPORTS. ISSN 2045-2322, 2019, vol. 9, art. no. 2040.,*

*Registrované v: WOS*

5. [1.1] GULICK, V. C. - GLINES, N. - HART, S. - FREEMAN, P.

*Geomorphological analysis of gullies on the central peak of Lyot Crater, Mars. In MARTIAN GULLIES AND THEIR EARTH ANALOGUES. ISSN 0305-8719, 2019, vol. 467, p. 233-265., Registrované v: WOS*

6. [1.1] HAUBER, E. - SASSENROTH, C. - DE VERA, J. P. - SCHMITZ, N. -

JAUMANN, R. - REISS, D. - HIESINGER, H. - JOHNSON, A. *Debris flows and water tracks in northern Victoria Land, continental East Antarctica: a new terrestrial analogue site for gullies and recurrent slope lineae on Mars. In MARTIAN GULLIES AND THEIR EARTH ANALOGUES. ISSN 0305-8719, 2019, vol. 467, p. 267-287., Registrované v: WOS*

7. [1.1] HEYER, T. - KRESLAJSKY, M. - HIESINGER, H. - REISS, D. -

BERNHARDT, H. - JAUMANN, R. *Seasonal formation rates of martian slope streaks. In ICARUS. ISSN 0019-1035, 2019, vol. 323, p. 76-86., Registrované v: WOS*

8. [1.1] KRAEMER, A. - TEISER, J. - STEINPILZ, T. - KOESTER, M. - WURM, G. *Analog experiments on thermal creep gas flow through Martian soil. In PLANETARY AND SPACE SCIENCE. ISSN 0032-0633, 2019, vol. 166, p. 131-134., Registrované v: WOS*

9. [1.1] LASUE, J. - CLIFFORD, S. M. - CONWAY, S. J. - MANGOLD, N. -

BUTCHER, F. E. G. *The hydrology of Mars including a potential cryosphere. In VOLATILES IN THE MARTIAN CRUST, 2019, p. 185-246., Registrované v: WOS*

10. [1.1] MCEWEN, A. S. *Are Recurring Slope Lineae Habitable? In FROM HABITABILITY TO LIFE ON MARS, 2018, p. 249-274., Registrované v: WOS*

11. [1.1] SCHAEFER, E. I. - MCEWEN, A. S. - SUTTON, S. S. *A case study of recurring slope lineae (RSL) at Tivat crater: Implications for RSL origins. In ICARUS. ISSN 0019-1035, 2019, vol. 317, p. 621-648., Registrované v: WOS*

12. [1.1] VINCENDON, M. - PILORGET, C. - CARTER, J. - STCHERBININE, A. *Observational evidence for a dry dust-wind origin of Mars seasonal dark flows. In ICARUS. ISSN 0019-1035, 2019, vol. 325, p. 115-127., Registrované v: WOS*

13. [1.1] WANG, Alian - LING, Zongcheng - YAN, Yuanchao - MCEWEN, Alfred S. - MELLON, Michael T. - SMITH, Michael D. - JOLLIFF, Bradley L. - HEAD, James. *Subsurface Cl-bearing salts as potential contributors to recurring slope lineae (RSL) on Mars. In ICARUS. ISSN 0019-1035, 2019, vol. 333, p. 464-480., Registrované v: WOS*

ADCA145 SLÁDEK, Ján - SLÁDEK, Vladimír - KRIVÁČEK, Jozef - ZHANG, C. *Local BIEM for transient heat conduction analysis in 3-D axisymmetric functionally graded solids. In Computational Mechanics, 2003, vol. 32, no. 3, p. 169-176. (2003 - Current Contents). ISSN 0178-7675.*

*Citácie:*

1. [1.1] JIN, J. - HUANG, T. - ZHENG, J. L. - WEN, P. H. *Dimension reduction analysis with mapping and direct integration algorithm. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 122-130., Registrované v: WOS*

2. [1.1] WANG, Z. X. - YU, T. B. - WANG, X. Z. - ZHANG, T. Q. - ZHAO, J. - WEN, P. H. *Grinding temperature field prediction by meshless finite block method with double infinite element. In INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES. ISSN 0020-7403, 2019, vol. 153, p. 131-142., Registrované v: WOS*

ADCA146 SLÁDEK, Ján - SLÁDEK, Vladimír. *A meshless method for large deflection of plates. In Computational Mechanics, 2003, vol. 30, no. 2, p. 155-163. (2003 - Current Contents). ISSN 0178-7675. Dostupné na: <https://doi.org/10.1007/s00466-002-0375-2>*

Citácie:

1. [1.1] LIU, F. B. - WU, Q. - CHENG, Y. M. A Meshless Method Based on the Nonsingular Weight Functions for Elastoplastic Large Deformation Problems. In *INTERNATIONAL JOURNAL OF APPLIED MECHANICS*. ISSN 1758-8251, 2019, vol. 11, no. 1, art. no. 1950006., Registrované v: WOS
2. [1.1] ORUC, O. Numerical solution to the deflection of thin plates using the two-dimensional Berger equation with a meshless method based on multiple-scale Pascal polynomials. In *APPLIED MATHEMATICAL MODELLING*. ISSN 0307-904X, 2019, vol. 74, p. 441-456., Registrované v: WOS

ADCA147 SLÁDEK, Ján - SLÁDEK, Vladimír - KRIVÁČEK, Jozef - ZHANG, C. Meshless local Petrov-Galerkin method for stress and rack analysis in 3-D axisymmetric FGM bodies. In *CMES: Computer Modeling in Engineering & Sciences*, 2005, vol. 8, no. 3, p. 259-270. (2004: 2.210 - IF, karentované - CCC). (2005 - Current Contents). ISSN 1526-1492.

Citácie:

1. [1.1] BRISCHETTO, S. Exponential matrix method for the solution of exact 3D equilibrium equations for free vibrations of functionally graded plates and shells. In *JOURNAL OF SANDWICH STRUCTURES & MATERIALS*. ISSN 1099-6362, 2019, vol. 21, no. 1, p. 77-114., Registrované v: WOS
2. [1.1] ZHOU, J. C. - WANG, K. Y. - LI, P. C. A hybrid fundamental-solution-based 8-node element for axisymmetric elasticity problems. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 101, p. 297-309., Registrované v: WOS

ADCA148 SLÁDEK, Ján - SLÁDEK, Vladimír - ATLURI, S. N. A pure contour formulation for the meshless local boundary integral equation method in thermoelasticity. In *CMES: Computer Modeling in Engineering & Sciences*, 2001, vol. 2, no. 4, p. 423-433. ISSN 1526-1492.

Citácie:

1. [1.1] HASSLINGER, P. - KURFUEST, A. - HAMMER, T. - FISCHMEISTER, E. - HELLMICH, C. - SCHEINER, S. Shear stress concentrations in tramway rails: Results from beam theory-based cross-sectional 2D Finite Element analyses. In *ENGINEERING STRUCTURES*. ISSN 0141-0296, 2019, vol. 195, p. 579-590., Registrované v: WOS

ADCA149 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, C. An advanced numerical method for computing elastodynamic fracture parameters in functionally graded materials. In *Computational Materials Science*, 2005, vol. 32, no. 3-4, p. 532-543. (2005 - Current Contents). ISSN 0927-0256.

Citácie:

1. [1.1] BOUCHIKHI, A. S. - BOUIDA, N. - BOUKHOULDA, F. B. 3D Numerical Analysis of Cracked Ti-TiB FGM Plate with a Semicircular Notch Subjected to Different Modes Load Conditions. In *PERIODICA POLYTECHNICA-MECHANICAL ENGINEERING*. ISSN 0324-6051, 2019, vol. 63, no. 2, p. 123-131., Registrované v: WOS

ADCA150 SLÁDEK, Ján - SLÁDEK, Vladimír - ATLURI, S. N. Meshless local Petrov-Galerkin method in anisotropic elasticity. In *CMES: Computer Modeling in Engineering & Sciences*, 2004, vol. 6, no. 5, p. 477-489. (2003: 1.957 - IF, karentované - CCC). (2004 - Current Contents). ISSN 1526-1492.

Citácie:

1. [1.1] MOARREFZADEH, A. - SHAHROOI, S. - AZIZPOUR, M. J. The application of the meshless local Petrov-Galerkin method for the analysis of heat conduction and residual stress due to welding. In *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*. ISSN 0268-3768, 2019,

- vol. 104, no. 1-4, p. 723-742., Registrované v: WOS
- ADCA151 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, C. Stress analysis in anisotropic functionally graded materials by the MLPG method. In Engineering Analysis with Boudary Elements, 2005, vol. 29, no. 6, p. 597-609. (2004: 1.000 - IF, karentované - CCC). (2005 - Current Contents). ISSN 0955-7997.
- Citácie:
1. [1.1] ANG, W. T. A boundary element approach for solving plane elastostatic equations of anisotropic functionally graded materials. In NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS. ISSN 0749-159X, 2019, vol. 35, no. 4, p. 1396-1411., Registrované v: WOS
  2. [1.1] CHENG, Z. Q. - SUI, Z. B. - YIN, H. - FENG, H. Numerical simulation of dynamic fracture in functionally graded materials using peridynamic modeling with composite weighted bonds. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 105, p. 31-46., Registrované v: WOS
- ADCA152 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, C. A local BIEM for analysis of transient heat conduction with nonlinear source terms in FGMs. In Engineering Analysis with Boudary Elements, 2004, vol. 28, no. 1, p. 1-11. (2003: 0.951 - IF, karentované - CCC). (2004 - Current Contents). ISSN 0955-7997.
- Citácie:
1. [1.1] FENG, W. Z. - LI, H. Y. - GAO, L. F. - QIAN, W. - YANG, K. Hypersingular flux interface integral equation for multi-medium heat transfer analysis. In INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, 2019, vol. 138, p. 852-865., Registrované v: WOS
  2. [1.1] MOHAMMADI, Mehrdad. The Method of Fundamental Solutions for Two- and Three-Dimensional Transient Heat Conduction Problems Involving Point and Curved Line Heat Sources. In IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF MECHANICAL ENGINEERING. ISSN 2228-6187, 2019., Registrované v: WOS
  3. [1.1] XI, Q. - FU, Z. J. - RABCZUK, T. An efficient boundary collocation scheme for transient thermal analysis in large-size-ratio functionally graded materials under heat source load. In COMPUTATIONAL MECHANICS. ISSN 0178-7675, 2019, vol. 64, no. 5, p. 1221-1235., Registrované v: WOS
- ADCA153 SLÁDEK, Ján - SLÁDEK, Vladimír - MARKECHOVÁ, I. Boundary element method analysis of stationary thermoelasticity problems in nonhomogeneous media. In International Journal for Numerical Methods in Engineering, 1990, vol. 30, no. 3, p. 505-516. ISSN 0029-5981.
- Citácie:
1. [1.1] HWU, C. - HSU, C. L. - HSU, C. W. - SHIAH, Y. C. Fundamental solutions for two-dimensional anisotropic thermo-magneto-electro-elasticity. In MATHEMATICS AND MECHANICS OF SOLIDS. ISSN 1081-2865, 2019, vol. 24, no. 11, p. 3575-3596., Registrované v: WOS
  2. [1.1] SHIAH, Y. C. - TUAN, N. A. - HEMATIYAN, M. R. Thermal Stress Analysis of 3D Anisotropic Materials Involving Domain Heat Source by the Boundary Element Method. In JOURNAL OF MECHANICS. ISSN 1727-7191, 2019, vol. 35, no. 6, p. 839-850., Registrované v: WOS
- ADCA154 SLÁDEK, Ján - SLÁDEK, Vladimír. Application of local boundary integral equation method into micropolar elasticity. In Engineering Analysis with Boudary Elements, 2003, vol. 27, no. 1, p. 81-90. (2003 - Current Contents). ISSN 0955-7997.
- Citácie:
1. [1.1] GORI, L. - PENNA, S. S. - DA SILVA PITANGUEIRA, R. L. G-space



- theory and weakened-weak form for micropolar media: Application to smoothed point interpolation methods. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 101, p. 318-329., Registrované v: WOS*
- ADCA155 SLÁDEK, Ján - SLÁDEK, Vladimír. Evaluations of the T-stresses for interface cracks by the boundary element method. In Engineering Fracture Mechanics, 1997, vol. 56, p. 813-825. ISSN 0013-7944.
- Citácie:
- [1.1] *MIRSAYAR, M. M. T-strain effects in kinked interfacial fracture of bonded composites. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 104, art. no. 102381., Registrované v: WOS*
  - [1.1] *ZHANG, H. H. - LIU, S. M. - HAN, S. Y. - FAN, L. F. Computation of T-stresses for multiple-branched and intersecting cracks with the numerical manifold method. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 107, p. 149-158., Registrované v: WOS*
- ADCA156 SLÁDEK, Ján - SLÁDEK, Vladimír - ATLURI, S. N. Application of the local boundary integral equation method to boundary-value problems. In International Applied Mechanics, 2002, vol. 38, no. 9, p. 1025-1047. ISSN 1063-7095.
- Citácie:
- [1.1] *DOGAN, H. - OCHMANN, M. A New Test Function for Acoustic Computations with Meshless Methods. In JOURNAL OF THEORETICAL AND COMPUTATIONAL ACOUSTICS. ISSN 2591-7285, 2019, vol. 27, no. 1, art. no. 1940001., Registrované v: WOS*
- ADCA157 SLÁDEK, Ján - SLÁDEK, Vladimír. Evaluation of T-stresses and stress intensity factors in stationary thermoelasticity by the conservation integral method. In International Journal of Fracture, 1997, vol. 86, no. 3, p. 199-219. ISSN 0376-9429.
- Citácie:
- [1.1] *BIRD, R. - COOMBS, W. M. - GIANI, S. Accurate configuration force evaluation via hp-adaptive discontinuous Galerkin finite element analysis. In ENGINEERING FRACTURE MECHANICS. ISSN 0013-7944, 2019, vol. 216, art. no. 106370., Registrované v: WOS*
  - [1.1] *MEMARI, A. - AZAR, M. R. K. Thermo-mechanical shock fracture analysis by meshless method. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 102, p. 171-192., Registrované v: WOS*
  - [1.1] *ZHANG, H. H. - LIU, S. M. - HAN, S. Y. - FAN, L. F. Computation of T-stresses for multiple-branched and intersecting cracks with the numerical manifold method. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 107, p. 149-158., Registrované v: WOS*
- ADCA158 SLÁDEK, Ján - SLÁDEK, Vladimír - MANG, HA. Meshless LBIE formulations for simply supported and clamped plates under dynamic load. In Computers & Structures, 2003, vol. 81, no. 16, p. 1643-1651. ISSN 0045-7949. Dostupné na: [https://doi.org/10.1016/S0045-7949\(03\)00166-4](https://doi.org/10.1016/S0045-7949(03)00166-4)
- Citácie:
- [1.1] *SUN, L. L. - WEI, X. A frequency domain formulation of the singular boundary method for dynamic analysis of thin elastic plate. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 98, p. 77-87., Registrované v: WOS*
- ADCA159 SLÁDEK, Ján - SLÁDEK, Vladimír. Evaluation of the elastic T-stress in three-dimensional crack problems using an integral formula. In International Journal of Fracture, 2000, vol. 101, no. 4, p. L47-L52. ISSN 0376-9429.
- Citácie:

- ADCA160 1. [1.2] KADRI, M. - SAHLI, A. - SAHLI, S. *Fracture parameters for cracked cylindrical shells. In Journal of Solid Mechanics. ISSN 20083505, 2019, 11, 1, p. 91-104., Registrované v: SCOPUS*
- ADCA160 SLÁDEK, Ján - SLÁDEK, Vladimír - ATLURI, S. N. Local boundary integral equation (LBIE) method for solving problems of elasticity with nonhomogeneous material properties. In *Computational Mechanics*, 2000, vol. 24, no. 6, p. 456-462. ISSN 0178-7675.
- Citácie:
1. [1.1] ABDOLLAHIFAR, A. - SABET, B. - NAMI, M. R. *Transient Dynamic Stress Intensity Factor of FGM Plates Using the State Space and MLPG Methods. In IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF MECHANICAL ENGINEERING. ISSN 2228-6187, 2019, vol. 43, p. 733-748., Registrované v: WOS*
2. [1.1] ASSARI, P. - DEHGHAN, M. A meshless local Galerkin method for solving Volterra integral equations deduced from nonlinear fractional differential equations using the moving least squares technique. In *APPLIED NUMERICAL MATHEMATICS. ISSN 0168-9274, 2019, vol. 143, p. 276-299., Registrované v: WOS*
3. [1.1] ASSARI, P. - DEHGHAN, M. A meshless local discrete Galerkin (MLDG) scheme for numerically solving two-dimensional nonlinear Volterra integral equations. In *APPLIED MATHEMATICS AND COMPUTATION. ISSN 0096-3003, 2019, vol. 350, p. 249-265., Registrované v: WOS*
4. [1.1] ASSARI, P. On the numerical solution of two-dimensional integral equations using a meshless local discrete Galerkin scheme with error analysis. In *ENGINEERING WITH COMPUTERS. ISSN 0177-0667, 2019, vol. 35, no. 3, p. 893-916., Registrované v: WOS*
5. [1.1] FRESNEDA-PORTILLO, C. - MIKHAILOV, S. E. Analysis of boundary-domain integral equations to the mixed BVP for a compressible Stokes system with variable viscosity. In *COMMUNICATIONS ON PURE AND APPLIED ANALYSIS. ISSN 1534-0392, 2019, vol. 18, no. 6, p. 3059-3088., Registrované v: WOS*
6. [1.1] GUO, X. F. An improved local boundary integral equation method implemented by the transformed MLS approximation with the delta property. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 101, p. 48-55., Registrované v: WOS*
7. [1.1] SELLOUNTOS, E. J. - TIAGO, J. - SEQUEIRA, A. Meshless velocity vorticity local boundary integral equation (LBIE) method for two dimensional incompressible Navier-Stokes equations. In *INTERNATIONAL JOURNAL OF NUMERICAL METHODS FOR HEAT & FLUID FLOW. ISSN 0961-5539, 2019, vol. 29, no. 11, p. 4034-4073., Registrované v: WOS*
- ADCA161 SLÁDEK, Ján - SLÁDEK, Vladimír - MANG, HA. Meshless local boundary integral equation method for simply supported and clamped plates resting on elastic foundation. In *Computer Methods in Applied Mechanics and Engineering*, 2002, vol. 191, no. 51-52, p. 5943-5959. ISSN 0045-7825.
- Citácie:
1. [1.1] WANG, B. H. - MA, Y. Q. - CHENG, Y. M. *The Improved Complex Variable Element-Free Galerkin Method for Bending Problem of Thin Plate on Elastic Foundations. In INTERNATIONAL JOURNAL OF APPLIED MECHANICS. ISSN 1758-8251, 2019, vol. 11, no. 10, art. no. 1950105., Registrované v: WOS*
2. [1.2] WANG, H. - QIN, Q. H. *Methods of fundamental solutions in solid mechanics. In Methods of Fundamental Solutions in Solid Mechanics, 2019, p. 1-*

- ADCA162 *312., Registrované v: SCOPUS*  
SLÁDEK, Ján - SLÁDEK, Vladimír - MYKHASKIV, V.V. - STANKEVYCH, V.Z.  
 Application of mapping theory to boundary integral formulation of 3D dynamic crack problems. In Engineering Analysis with Boudary Elements, 2003, vol. 27, no. 3, p. 203-213. (2003 - Current Contents). ISSN 0955-7997.  
 Citácie:  
 1. [1.2] RAN, R. - QIN, T. Y. Analysis of hypersingular integral equation method to 3d dynamic crack. In Jisuan Lixue Xuebao/Chinese Journal of Computational Mechanics. ISSN 10074708, 2019, 36, 3, p. 358-363., Registrované v: SCOPUS
- ADCA163 SLÁDEK, Ján - SLÁDEK, Vladimír - BAZANT, ZP. Non-local boundary integral formulation for softening damage. In International Journal for Numerical Methods in Engineering, 2003, vol. 57, no. 1, p. 103-116. ISSN 0029-5981.  
 Citácie:  
 1. [1.1] PEIXOTO, R. G. - PENNA, S. S. - PITANGUEIRA, R. L. S. - RIBEIRO, G. O. A non-local damage approach for the boundary element method. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-904X, 2019, vol. 69, p. 63-76., Registrované v: WOS  
 2. [1.2] ZIRAKASHVILI, N. On the numerical solution of some two-dimensional non-classical elasticity problems by boundary element method. In WSEAS Transactions on Applied and Theoretical Mechanics. ISSN 19918747, 2019, 14, p. 17-27., Registrované v: SCOPUS
- ADCA164 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, C. Transient heat conduction analysis in functionally graded materials by the meshless local boundary integral equation method. In Computational Materials Science, 2003, vol. 28, no. 3-4, p. 494-504. (2003 - Current Contents). ISSN 0927-0256.  
 Citácie:  
 1. [1.1] CAO, B. Y. - DI DOMENICO, M. - NIE, B. D. - SELLITTO, A. Influence of the composition gradient on the propagation of heat pulses in functionally graded nanomaterials. In PROCEEDINGS OF THE ROYAL SOCIETY A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES. ISSN 1364-5021, 2019, vol. 475, no. 2221, art. no. 20180499., Registrované v: WOS  
 2. [1.1] CHEN, H. L. - ZHOU, H. L. Identification of boundary conditions for non-Fourier heat conduction problems by differential transformation DRBEM and improved cuckoo search algorithm. In NUMERICAL HEAT TRANSFER PART B-FUNDAMENTALS. ISSN 1040-7790, 2018, vol. 74, no. 6, p. 818-839., Registrované v: WOS  
 3. [1.1] DELOUEI, A. A. - EMAMIAN, A. - KARIMNEJAD, S. - SAJJADI, H. A closed-form solution for axisymmetric conduction in a finite functionally graded cylinder. In INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER. ISSN 0735-1933, 2019, vol. 108, art. no. UNSP 104280., Registrované v: WOS  
 4. [1.1] FENG, W. Z. - LI, H. Y. - GAO, L. F. - QIAN, W. - YANG, K. Hypersingular flux interface integral equation for multi-medium heat transfer analysis. In INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, 2019, vol. 138, p. 852-865., Registrované v: WOS  
 5. [1.1] FU, Z. J. - SHI, J. H. - CHEN, W. - YANG, L. W. Three-dimensional transient heat conduction analysis by boundary knot method. In MATHEMATICS AND COMPUTERS IN SIMULATION. ISSN 0378-4754, 2019, vol. 165, p. 306-317., Registrované v: WOS  
 6. [1.1] HASSLINGER, P. - KURFUERST, A. - HAMMER, T. - FISCHMEISTER, E. - HELLMICH, C. - SCHEINER, S. Shear stress concentrations in tramway rails: Results from beam theory-based cross-sectional 2D Finite Element

- analyses. In *ENGINEERING STRUCTURES*. ISSN 0141-0296, 2019, vol. 195, p. 579-590., Registrované v: WOS
7. [1.1] HYUN, J. - WANG, S. Systematically engineered thermal metastructure for rapid heat dissipation/diffusion by considering the thermal eigenvalue. In *APPLIED THERMAL ENGINEERING*. ISSN 1359-4311, 2019, vol. 157, art. no. UNSP 113487., Registrované v: WOS
8. [1.1] JIN, J. - HUANG, T. - ZHENG, J. L. - WEN, P. H. Dimension reduction analysis with mapping and direct integration algorithm. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 99, p. 122-130., Registrované v: WOS
9. [1.1] QU, W. Z. - FAN, C. M. - ZHANG, Y. M. Analysis of three-dimensional heat conduction in functionally graded materials by using a hybrid numerical method. In *INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER*. ISSN 0017-9310, 2019, vol. 145, art. no. 118771., Registrované v: WOS
10. [1.1] SUN, Lei - GRASSELLI, Giovanni - LIU, Quansheng - TANG, Xuhai. Thermal cracking simulation of functionally graded materials using the combined finite-discrete element method. In *COMPUTATIONAL PARTICLE MECHANICS*. ISSN 2196-4378, 2019., Registrované v: WOS
11. [1.1] WANG, Z. X. - LI, Y. - YU, T. B. - ZHAO, J. - WEN, P. H. Prediction of 3D grinding temperature field based on meshless method considering infinite element. In *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*. ISSN 0268-3768, 2019, vol. 100, no. 9-12, p. 3067-3084., Registrované v: WOS
12. [1.1] WANG, Z. X. - YU, T. B. - WANG, X. Z. - ZHANG, T. Q. - ZHAO, J. - WEN, P. H. Grinding temperature field prediction by meshless finite block method with double infinite element. In *INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES*. ISSN 0020-7403, 2019, vol. 153, p. 131-142., Registrované v: WOS
13. [1.1] YANG, J. J. - WANG, Z. X. - ADETORO, O. B. - WEN, P. H. - BAILEY, C. G. The thermal analysis of cutting/grinding processes by meshless finite block method. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 100, p. 68-79., Registrované v: WOS
14. [1.2] WANG, H. - QIN, Q. H. Methods of fundamental solutions in solid mechanics. In *Methods of Fundamental Solutions in Solid Mechanics*, 2019, p. 1-312., Registrované v: SCOPUS

ADCA165

SLÁDEK, Ján - SLÁDEK, Vladimír - ATLURI, S. N. Meshless local Petrov-Galerkin method for heat conduction problem in an anisotropic medium. In *CMES: Computer Modeling in Engineering & Sciences*, 2004, vol. 6, no. 3, p. 309-318. (2003: 1.957 - IF, karentované - CCC). (2004 - Current Contents). ISSN 1526-1492.

Citácie:

1. [1.1] GAO, X. W. - DING, J. X. - CUI, M. - YANG, K. Global-element-based free element method for solving non-linear and inhomogeneous heat conduction problems. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 109, p. 117-128., Registrované v: WOS
2. [1.1] HUANG, T. - PAN, Q. X. - JIN, J. - ZHENG, J. L. - WEN, P. H. Continuous constitutive model for bimodulus materials with meshless approach. In *APPLIED MATHEMATICAL MODELLING*. ISSN 0307-904X, 2019, vol. 66, p. 41-58., Registrované v: WOS
3. [1.1] LI, Z. Y. - CHEN, Z. J. - WU, X. H. - TAO, W. Q. Coupled MLPG-FVM simulation of steady state heat conduction in irregular geometry. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 100, p. 265-275., Registrované v: WOS
4. [1.1] LIU, C. Y. - KU, C. Y. - XIAO, J. E. - YEIH, W. C. A Novel Spacetime



*Collocation Meshless Method for Solving TwoDimensional Backward Heat Conduction Problems. In CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES. ISSN 1526-1492, 2019, vol. 118, no. 1, p. 229-252., Registrované v: WOS*

5. [1.2] MOARREFZADEH, A. - SHAHROOI, S. - AZIZPOUR, M. J. *The application of the meshless local Petrov-Galerkin method for the analysis of heat conduction and residual stress due to welding. In International Journal of Advanced Manufacturing Technology. ISSN 02683768, 2019, 104, 1-4, p. 723-742., Registrované v: SCOPUS*

ADCA166 SLÁDEK, Ján - SLÁDEK, Vladimír - FEDELINSKI, P. Contour integrals for mixed-mode crack analysis: Effect of nonsingular terms. In Theoretical and Applied Fracture Mechanics, 1997, vol. 27, no. 2, p. 115-127. ISSN 0167-8442.

Citácie:

1. [1.1] MOHTARAMI, E. - BAGHBANAN, A. - HASHEMOLHOSSEINI, H. - BORDAS, S. P. A. *Fracture mechanism simulation of inhomogeneous anisotropic rocks by extended finite element method. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 104, art. no. 102359., Registrované v: WOS*

2. [1.1] RUNGAMORNAT, J. - SUKULTHANASORN, N. - MEAR, M. E. *Analysis for T-stress of cracks in 3D anisotropic elastic media by weakly singular integral equation method. In COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING. ISSN 0045-7825, 2019, vol. 347, p. 1004-1029., Registrované v: WOS*

3. [1.2] KADRI, M. - SAHLI, A. - SAHLI, S. *Fracture parameters for cracked cylindrical shells. In Journal of Solid Mechanics. ISSN 20083505, 2019, 11, 1, p. 91-104., Registrované v: SCOPUS*

ADCA167 SLÁDEK, Ján - SLÁDEK, Vladimír - PAN, E. Bending analyses of 1D orthorhombic quasicrystal plates. In International Journal of Solids and Structures, 2013, vol. 50, no. 24, p. 3975-3983. (2012: 1.871 - IF, Q1 - JCR, 1.534 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0020-7683. Dostupné na: <https://doi.org/10.1016/j.ijsolstr.2013.08.006>

Citácie:

1. [1.1] HUANG, Y. Z. - LI, Y. - YANG, L. Z. - GAO, Y. *Static response of functionally graded multilayered one-dimensional hexagonal piezoelectric quasicrystal plates using the state vector approach. In JOURNAL OF ZHEJIANG UNIVERSITY-SCIENCE A. ISSN 1673-565X, 2019, vol. 20, no. 2, p. 133-147., Registrované v: WOS*

2. [1.1] LI, X. F. - GUO, J. H. - SUN, T. Y. *Bending Deformation of Multilayered One-Dimensional Quasicrystal Nanoplates Based on the Modified Couple Stress Theory. In ACTA MECHANICA SOLIDA SINICA. ISSN 0894-9166, 2019, vol. 32, no. 6, p. 785-802., Registrované v: WOS*

3. [1.1] LI, Y. - YANG, L. Z. - GAO, Y. *An exact solution for a functionally graded multilayered one-dimensional orthorhombic quasicrystal plate. In ACTA MECHANICA. ISSN 0001-5970, 2019, vol. 230, no. 4, p. 1257-1273., Registrované v: WOS*

4. [1.1] LI, Y. - YANG, L. Z. - ZHANG, L. L. - GAO, Y. *Nonlocal free and forced vibration of multilayered two-dimensional quasicrystal nanoplates. In MECHANICS OF ADVANCED MATERIALS AND STRUCTURES. ISSN 1537-6494, 2019., Registrované v: WOS*

5. [1.1] LI, Y. - YANG, L. Z. - ZHANG, L. L. - GAO, Y. *Static response of functionally graded multilayered one-dimensional quasicrystal cylindrical shells. In MATHEMATICS AND MECHANICS OF SOLIDS. ISSN 1081-2865, 2019, vol.*

- 24, no. 6, p. 1908-1921., Registrované v: WOS
6. [1.1] ZHANG, B. - YU, J. G. - ZHANG, X. M. - ELMAIMOUNI, L. Guided wave characteristics in the functionally graded two-dimensional hexagonal quasi-crystal plate. In ZAMM-ZEITSCHRIFT FÜR ANGEWANDTE MATHEMATIK UND MECHANIK. ISSN 0044-2267, 2019, art. no. UNSP e201900210., Registrované v: WOS
7. [1.1] ZHANG, L. - GUO, J. H. - XING, Y. M. Nonlocal analytical solution of functionally graded multilayered one-dimensional hexagonal piezoelectric quasicrystal nanoplates. In ACTA MECHANICA. ISSN 0001-5970, 2019, vol. 230, no. 5, p. 1781-1810., Registrované v: WOS
8. [1.2] GAO, Y. - LIU, G. Analytical solutions to problems of elliptical holes with 4 edge cracks in 1D orthorhombic quasicrystals. In Applied Mathematics and Mechanics. ISSN 10000887, 2019, 40, 2, p. 210-222., Registrované v: SCOPUS
- ADCA168 SLÁDEK, Ján - SLÁDEK, Vladimír - WÜNSCHE, Michael - ZHANG, Chuanzeng. Analysis of an interface crack between two dissimilar piezoelectric solids. In Engineering Fracture Mechanics, 2012, vol. 89, p. 114-127. (2011: 1.353 - IF, Q2 - JCR, 1.718 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0013-7944. Dostupné na: <https://doi.org/10.1016/j.engfracmech.2012.04.032>
- Citácie:
1. [1.1] BENEDETTI, I. - GULIZZI, V. - MILAZZO, A. A microstructural model for homogenisation and cracking of piezoelectric polycrystals. In COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING. ISSN 0045-7825, 2019, vol. 357, art. no. UNSP 112595., Registrované v: WOS
2. [1.1] HRSTKA, M. - PROFANT, T. - KOTOUL, M. Electro-mechanical singularities of piezoelectric bi-material notches and cracks. In ENGINEERING FRACTURE MECHANICS. ISSN 0013-7944, 2019, vol. 216, art. no. 106484., Registrované v: WOS
3. [1.1] PAMNANI, G. - BHATTACHARYA, S. - SANYAL, S. Analysis of interface crack in piezoelectric materials using extended finite element method. In MECHANICS OF ADVANCED MATERIALS AND STRUCTURES. ISSN 1537-6494, 2019, vol. 26, no. 17, p. 1447-1457., Registrované v: WOS
4. [1.1] ZHOU, L. M. - LI, M. - ZHAO, H. W. - TIAN, W. J. Cell-Based Smoothed Finite Element Method for the Intensity Factors of Piezoelectric Bimaterials with Interfacial Crack. In INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS. ISSN 0219-8762, 2019, vol. 16, no. 7, art. no. 1850107., Registrované v: WOS
- ADCA169 SLÁDEK, Ján - SLÁDEK, Vladimír - KRAHULEC, Slavomír - PAN, E. Enhancement of the magnetoelectric coefficient in functionally graded multiferroic composites. In Journal of Intelligent Material Systems and Structures, 2012, vol. 23, p. 1649-1658. (2011: 1.953 - IF, Q2 - JCR, 1.019 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 1045-389X. Dostupné na: <https://doi.org/10.1177/1045389X12449921>
- Citácie:
1. [1.1] GAO, J. - LYU, Y. - ZHENG, M. F. - LIU, M. K. - LIU, H. Y. - WU, B. - HE, C. F. Modeling guided wave propagation in functionally graded plates by state-vector formalism and the Legendre polynomial method. In ULTRASONICS. ISSN 0041-624X, 2019, vol. 99, art. no. UNSP 105953., Registrované v: WOS
- ADCA170 SLÁDEK, Ján - SLÁDEK, Vladimír - STAŇÁK, Peter - ZHANG, Chuanzeng - WÜNSCHE, Michael. Analysis of the bending of circular piezoelectric plates with functionally graded material properties by a MLPG method. In Engineering Structures, 2013, vol. 47, special iss. SI, p. 81-89. (2012: 1.713 - IF, Q1 - JCR, 1.786 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0141-0296.

Dostupné na: <https://doi.org/10.1016/j.engstruct.2012.02.034>

Citácie:

1. [1.1] LARKIN, K. - ABDELKEFI, A. *Neutral axis modeling and effectiveness of functionally graded piezoelectric energy harvesters. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 213, p. 25-36., Registrované v: WOS*
2. [1.1] LV, J. - SHAO, M. J. - CUI, M. - GAO, X. W. *An efficient collocation approach for piezoelectric problems based on the element differential method. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 230, art. no. UNSP 111483., Registrované v: WOS*
3. [1.1] NOURMOHAMMADI, H. - BEHJAT, B. *Geometrically nonlinear analysis of functionally graded piezoelectric plate using mesh-free RPIM. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 131-141., Registrované v: WOS*

ADCA171 SLÁDEK, Ján - SLÁDEK, Vladimír - KRAHULEC, Slavomír - PAN, E. Analyses of functionally graded plates with a magneto-electroelastic layer. In Smart Materials & Structures, 2013, vol. 22, no. 3, art. no. 035003. (2012: 2.024 - IF, Q1 - JCR, 0.991 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0964-1726. Dostupné na: <https://doi.org/10.1088/0964-1726/22/3/035003>

Citácie:

1. [1.1] ADHIKARI, B. - SINGH, B. N. *Dynamic response of functionally graded plates resting on two-parameter-based elastic foundation model using a quasi-3D theory. In MECHANICS BASED DESIGN OF STRUCTURES AND MACHINES. ISSN 1539-7734, 2019, vol. 47, no. 4, p. 399-429., Registrované v: WOS*
2. [1.1] GAO, J. - LYU, Y. - ZHENG, M. F. - LIU, M. K. - LIU, H. Y. - WU, B. - HE, C. F. *Modeling guided wave propagation in functionally graded plates by state-vector formalism and the Legendre polynomial method. In ULTRASONICS. ISSN 0041-624X, 2019, vol. 99, art. no. UNSP 105953., Registrované v: WOS*

ADCA172 SLÁDEK, Ján - SLÁDEK, Vladimír - KRAHULEC, Slavomír - PAN, E. The MLPG analyses of large deflections of magneto-electroelastic plates. In Engineering Analysis with Boundary Elements, 2013, vol. 37, no. 4, p. 673-682. (2012: 1.596 - IF, Q1 - JCR, 1.244 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2013.02.001>

Citácie:

1. [1.1] ANSARI, R. - GHOLAMI, R. - ROUHI, H. *Geometrically nonlinear free vibration analysis of shear deformable magneto-electro-elastic plates considering thermal effects based on a novel variational approach. In THIN-WALLED STRUCTURES. ISSN 0263-8231, 2019, vol. 135, p. 12-20., Registrované v: WOS*
2. [1.1] CHEN, C. L. - HSU, C. H. *An element free Galerkin method for static behavior of a magneto-electro-elastic beam in thermal environments. In SMART MATERIALS AND STRUCTURES. ISSN 0964-1726, 2019, vol. 28, no. 11, art. no. 115034., Registrované v: WOS*
3. [1.1] MAHESH, V. - KATTIMANI, S. - HARURSAMPATH, D. - TRUNG, N. T. *Coupled evaluation of the free vibration characteristics of magneto-electro-elastic skew plates in hygrothermal environment. In SMART STRUCTURES AND SYSTEMS. ISSN 1738-1584, 2019, vol. 24, no. 2, p. 267-292., Registrované v: WOS*
4. [1.1] VINYAS, M. - NISCHITH, G. - LOJA, M. A. R. - EBRAHIMI, F. - DUC, N. D. *Numerical analysis of the vibration response of skew magneto-electro-elastic plates based on the higher-order shear deformation theory. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 214, p. 132-142., Registrované v: WOS*
5. [1.1] VINYAS, M. - SANDEEP, A. S. - NGUYEN-THOI, T. - EBRAHIMI, F. -

*DUC, D. N. A finite element-based assessment of free vibration behaviour of circular and annular magneto-electro-elastic plates using higher order shear deformation theory. In JOURNAL OF INTELLIGENT MATERIAL SYSTEMS AND STRUCTURES. ISSN 1045-389X, 2019, vol. 30, no. 16, p. 2478-2501., Registrované v: WOS*

6. [1.1] VINYAS, M. A higher-order free vibration analysis of carbon nanotube-reinforced magneto-electro-elastic plates using finite element methods. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, 2019, vol. 158, p. 286-301., Registrované v: WOS

7. [1.1] VINYAS, M. Interphase effect on the controlled frequency response of three-phase smart magneto-electro-elastic plates embedded with active constrained layer damping: FE study. In MATERIALS RESEARCH EXPRESS. ISSN 2053-1591, 2019, vol. 6, no. 12, art. no. 125707., Registrované v: WOS

8. [1.1] VINYAS, M. Vibration control of skew magneto-electro-elastic plates using active constrained layer damping. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 208, p. 600-617., Registrované v: WOS

ADCA173 SLÁDEK, Ján - SLÁDEK, Vladimír - KRAHULEC, Slavomír - ZHANG, Chuanzeng - WÜNSCHE, Michael. Crack analysis in decagonal quasicrystals by the MLPG. In International Journal of Fracture, 2013, vol. 181, no. 1, p. 115-126. (2012: 1.250 - IF, Q2 - JCR, 1.015 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0376-9429. Dostupné na: <https://doi.org/10.1007/s10704-013-9825-4>

Citácie:

1. [1.1] LI, Y. - FAN, C. Y. - QIN, Q. H. - ZHAO, M. H. Closed-form solutions of an elliptical crack subjected to coupled phonon-phason loadings in two-dimensional hexagonal quasicrystal media. In MATHEMATICS AND MECHANICS OF SOLIDS. ISSN 1081-2865, 2019, vol. 24, no. 6, p. 1821-1848., Registrované v: WOS

2. [1.1] LI, Y. - YANG, L. Z. - ZHANG, L. L. - GAO, Y. Static response of functionally graded multilayered one-dimensional quasicrystal cylindrical shells. In MATHEMATICS AND MECHANICS OF SOLIDS. ISSN 1081-2865, 2019, vol. 24, no. 6, p. 1908-1921., Registrované v: WOS

3. [1.1] LI, Y. - ZHAO, M. H. - QIN, Q. H. - FAN, C. Y. Analysis solution method for 3D planar crack problems of two-dimensional hexagonal quasicrystals with thermal effects. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-904X, 2019, vol. 69, p. 648-664., Registrované v: WOS

4. [1.1] ZHOU, Z. H. - YANG, Z. T. - XU, W. - YU, X. - XU, C. H. - XU, X. S. Evaluation of electroelastic singularity of finite-size V-notched one-dimensional hexagonal quasicrystalline bimetals with piezoelectric effect. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 100, p. 139-153., Registrované v: WOS

ADCA174 SLÁDEK, Ján - STAŇÁK, Peter - HAN, Z. - SLÁDEK, Vladimír - ATLURI, S. N. Applications of the MLPG Method in Engineering & Sciences: A Review. In CMES: Computer Modeling in Engineering & Sciences, 2013, vol. 92, no. 5, p. 423-475. (2012: 0.849 - IF, Q2 - JCR, 0.727 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 1526-1492.

Citácie:

1. [1.1] GAO, X. W. - GAO, L. F. - ZHANG, Y. - CUI, M. - LV, J. Free element collocation method: A new method combining advantages of finite element and mesh free methods. In COMPUTERS & STRUCTURES. ISSN 0045-7949, 2019, vol. 215, p. 10-26., Registrované v: WOS

2. [1.1] GAO, X. W. - LIANG, Y. - XU, B. B. - YANG, K. - PENG, H. F. Cross-line



*elements for free element method in thermal and mechanical analyses of functionally gradient materials. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 108, p. 422-437., Registrované v: WOS*

3. [1.1] LI, L. - ALIABADI, M. H. Elastic property prediction and damage mechanics analysis of 3D braided composite. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 104, art. no. 102338., Registrované v: WOS

4. [1.1] MOARREFZADEH, A. - SHAHROOI, S. - AZIZPOUR, M. J. Predicting fatigue crack propagation in residual stress field due to welding by meshless local Petrov-Galerkin method. In JOURNAL OF MANUFACTURING PROCESSES. ISSN 1526-6125, 2019, vol. 45, p. 379-391., Registrované v: WOS

5. [1.1] NOURMOHAMMADI, H. - BEHJAT, B. Geometrically nonlinear analysis of functionally graded piezoelectric plate using mesh-free RPIM. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 131-141., Registrované v: WOS

6. [1.1] SINGH, R. - SINGH, K. M. Interpolating meshless local Petrov-Galerkin method for steady state heat conduction problem. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 101, p. 56-66., Registrované v: WOS

7. [1.1] XU, B. B. - GAO, X. W. - JIANG, W. W. - CUI, M. - LV, J. Galerkin free element method and its application in Fracture Mechanics. In ENGINEERING FRACTURE MECHANICS. ISSN 0013-7944, 2019, vol. 218, art. no. UNSP 106575., Registrované v: WOS

ADCA175 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, Chuanzeng - WÜNSCHE, Michael. Semi-permeable crack analysis in magneto-electroelastic solids. In Smart Materials & Structures, 2012, vol. 21, iss. 2, art. no. 025003. (2011: 2.089 - IF, Q1 - JCR, 1.149 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0964-1726. Dostupné na: <https://doi.org/10.1088/0964-1726/21/2/025003>

Citácie:

1. [1.1] ZHENG, R. F. - WU, T. H. - LI, X. Y. Elliptic crack in transversely isotropic magneto-electro-elasticity under shear loading. In INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE. ISSN 0020-7225, 2019, vol. 134, p. 47-65., Registrované v: WOS

2. [1.1] ZHENG, R. F. - WU, T. H. - LI, X. Y. Three-dimensional coupling field for an electromagnetically semi-permeable elliptical crack in multiferroic composite media. In ENGINEERING FRACTURE MECHANICS. ISSN 0013-7944, 2019, vol. 205, p. 418-438., Registrované v: WOS

ADCA176 SLÁDEK, Ján - SLÁDEK, Vladimír - KRAHULEC, Slavomír - WÜNSCHE, Michael - ZHANG, Chuanzeng. MLPG Analysis of Layered Composites with Piezoelectric and Piezomagnetic Phases. In CMC - Computers Materials & Continua, 2012, vol. 29, iss. 1, p. 75-101. (2011: 0.972 - IF, Q2 - JCR, 0.599 - SJR, Q2 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 1546-2218.

Citácie:

1. [2.2] NOVÁK, P. - BISHAY, P. - ZMINDÁK, M. Computational homogenization of cement-based porous piezoelectric composites with random structure. In Strojnícky Casopis. ISSN 00392472, 2019, 69, 2, p. 77-88., Registrované v: SCOPUS

ADCA177 SLÁDEK, Ján - SLÁDEK, Vladimír - KRIVÁČEK, Jozef - WEN, P. H. - ZHANG, Chuanzeng. Meshless local Petrov-Galerkin (MLPG) method for Reissner-Mindlin plates under dynamics load. In CMES-Computer Methods in Applied Mechanics and Engineering, 2007, vol. 196, no. 25-28, p. 2681-2691. (2006: 2.015 - IF, Q1 - JCR,

2.084 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0045-7825.

Citácie:

1. [1.1] LI, J. - KHODAEI, Z. S. - ALIABADI, M. H. *Modelling of the high-frequency fundamental symmetric Lamb wave using a new boundary element formulation. In INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES. ISSN 0020-7403, 2019, vol. 155, p. 235-247., Registrované v: WOS*
2. [1.1] MELLOULI, H. - JRAD, H. - WALI, M. - DAMMAK, F. *Geometrically nonlinear meshfree analysis of 3D-shell structures based on the double directors shell theory with finite rotations. In STEEL AND COMPOSITE STRUCTURES. ISSN 1229-9367, 2019, vol. 31, no. 4, p. 397-408., Registrované v: WOS*
3. [1.1] MELLOULI, H. - JRAD, H. - WALI, M. - DAMMAK, F. *Meshfree implementation of the double director shell model for FGM shell structures analysis. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 111-121., Registrované v: WOS*

ADCA178 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, Chuanzeng - SOLEK, Peter. Static and dynamic analysis of shallow shells with functionally graded and orthotropic material properties. In *Mechanics of Advanced Materials and Structures*, 2008, vol. 15, iss. 2, p. 142-156. (2007: 0.883 - IF, Q1 - JCR, 0.765 - SJR, Q1 - SJR). ISSN 1537-6494.

Citácie:

1. [1.1] MELLOULI, H. - JRAD, H. - WALI, M. - DAMMAK, F. *Meshless implementation of arbitrary 3D-shell structures based on a modified first order shear deformation theory. In COMPUTERS & MATHEMATICS WITH APPLICATIONS. ISSN 0898-1221, 2019, vol. 77, no. 1, p. 34-49., Registrované v: WOS*
2. [1.1] PUNERA, D. - KANT, T. *A critical review of stress and vibration analyses of functionally graded shell structures. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 210, p. 787-809., Registrované v: WOS*

ADCA179 SLÁDEK, Ján - SLÁDEK, Vladimír - TAN, C. L. - ATLURI, S. N. Analysis of transient heat conduction in 3D anisotropic functionally graded solids, by the MLPG method. In *CMES: Computer Modeling in Engineering & Sciences*, 2008, vol. 32, iss. 3, p. 161-174. (2007: 1.653 - IF, Q1 - JCR, 1.016 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 1526-1492.

Citácie:

1. [1.1] BRISCHETTO, S. *Exponential matrix method for the solution of exact 3D equilibrium equations for free vibrations of functionally graded plates and shells. In JOURNAL OF SANDWICH STRUCTURES & MATERIALS. ISSN 1099-6362, 2019, vol. 21, no. 1, p. 77-114., Registrované v: WOS*
2. [1.1] FU, Z. J. - SHI, J. H. - CHEN, W. - YANG, L. W. *Three-dimensional transient heat conduction analysis by boundary knot method. In MATHEMATICS AND COMPUTERS IN SIMULATION. ISSN 0378-4754, 2019, vol. 165, p. 306-317., Registrované v: WOS*
3. [1.1] MOARREFZADEH, A. - SHAHROOI, S. - AZIZPOUR, M. J. *The application of the meshless local Petrov-Galerkin method for the analysis of heat conduction and residual stress due to welding. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2019, vol. 104, no. 1-4, p. 723-742., Registrované v: WOS*

ADCA180 SLÁDEK, Ján - SLÁDEK, Vladimír - SOLEK, Peter - WEN, P. H. Thermal bending of Reissner-Mindlin plates by the MLPG. In *CMES: Computer Modeling in Engineering & Sciences*, 2008, vol. 28, iss. 1, p. 57-76. (2007: 1.653 - IF, Q1 - JCR, 1.016 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 1526-

1492.

Citácie:

1. [1.1] *MOARREFZADEH, A. - SHAHROOI, S. - AZIZPOUR, M. J. The application of the meshless local Petrov-Galerkin method for the analysis of heat conduction and residual stress due to welding. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2019, vol. 104, no. 1-4, p. 723-742., Registrované v: WOS*

ADCA181 SLÁDEK, Ján - SLÁDEK, Vladimír - SOLEK, Peter - PAN, E. Fracture analysis of cracks in magneto-electro-elastic solids by the MLPG. In Computational Mechanics, 2008, vol. 42, iss. 5, p. 697-714. (2007: 1.060 - IF, Q2 - JCR, 0.992 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0178-7675.

Citácie:

1. [1.1] *VANDATI, A. - SALEHI, M. - VAHABI, M. - FESHARAKI, J. J. - GHASSEMI, A. Fracture analysis of piezoelectromagnetic medium with axisymmetric cracks. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 104, art. no. 102337., Registrované v: WOS*

2. [1.1] *YAN, Z. - FENG, W. J. - ZHANG, Ch. - LIU, J. X. The extended finite element method with novel crack-tip enrichment functions for dynamic fracture analysis of interfacial cracks in piezoelectric-piezomagnetic bi-layered structures. In COMPUTATIONAL MECHANICS. ISSN 0178-7675, 2019, vol. 64, no. 5, p. 1303-1319., Registrované v: WOS*

3. [1.1] *ZHOU, L. M. - REN, S. H. - NIE, B. - YANG, H. R. - LIU, P. Magneto-electro-elastic node-based smoothed point interpolation method for micromechanical analysis of natural frequencies of nanobeams. In ACTA MECHANICA. ISSN 0001-5970, 2019, vol. 230, no. 10, p. 3645-3666., Registrované v: WOS*

4. [1.2] *STOYNOV, Y. 2D crack problems in functionally graded magneto-electro-elastic materials. In Advanced Structured Materials. ISSN 18698433, 2019, 92, p. 255-265., Registrované v: SCOPUS*

ADCA182 SLÁDEK, Ján - SLÁDEK, Vladimír - SOLEK, Peter - WEN, P. H. - ATLURI, S. N. Thermal analysis of Reissner-Mindlin shallow shells with FGM properties by the MLPG. In CMES: Computer Modeling in Engineering & Sciences, 2008, vol. 30, iss. 2, p. 77-97. (2007: 1.653 - IF, Q1 - JCR, 1.016 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 1526-1492.

Citácie:

1. [1.1] *QIAN, H. - LO, S. H. - ZHOU, D. - YANG, Y. 3-D Thermo-Stress Field in Laminated Cylindrical Shells. In CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES. ISSN 1526-1492, 2019, vol. 121, no. 1, p. 215-247., Registrované v: WOS*

ADCA183 SLÁDEK, Ján - SLÁDEK, Vladimír - SOLEK, Peter. Elastic analysis in 3D anisotropic functionally graded solids by the MLPG. In CMES: Computer Modeling in Engineering & Sciences, 2009, vol. 43, no. 3, p. 223-251. (2008: 4.785 - IF, Q1 - JCR, 1.116 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 1526-1492.

Citácie:

1. [1.1] *BRISCHETTO, S. Exponential matrix method for the solution of exact 3D equilibrium equations for free vibrations of functionally graded plates and shells. In JOURNAL OF SANDWICH STRUCTURES & MATERIALS. ISSN 1099-6362, 2019, vol. 21, no. 1, p. 77-114., Registrované v: WOS*

2. [1.1] *DINEVA, P. S. - MANOLIS, G. D. - WUTTKE, F. Fundamental solutions in 3D elastodynamics for the BEM: A review. In ENGINEERING ANALYSIS*

*WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 105, p. 47-69.,*

*Registrované v: WOS*

3. [1.1] KARAMI, B. - JANGHORBAN, M. - TOUNSI, A. *On pre-stressed functionally graded anisotropic nanoshell in magnetic field. In JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING. ISSN 1678-5878, 2019, vol. 41, no. 11, art. no. UNSP 495.,*

*Registrované v: WOS*

- ADCA184 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, C. - KRIVÁČEK, Jozef - WEN, P. H. Analysis of orthotropic thick plates by meshless local Petrov-Galerkin (MLPG) method. In International Journal for Numerical Methods in Engineering, 2006, vol. 67, no. 13, p. 1830-1850. (2005: 1.203 - IF, Q1 - JCR, 2.010 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 0029-5981.

*Citácie:*

1. [1.1] KARKON, M. - REZAIEE-PAJAND, M. *Finite Element Analysis of Orthotropic Thin Plates Using Analytical Solution. In IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF CIVIL ENGINEERING. ISSN 2228-6160, 2019, vol. 43, no. 2, p. 125-135., Registrované v: WOS*

2. [1.1] KONDA, D. H. - SANTIAGO, J. A. F. - TELLES, J. C. F. - MELLO, J. P. F. - COSTA, E. G. A. *A meshless Reissner plate bending procedure using local radial point interpolation with an efficient integration scheme. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 46-59., Registrované v: WOS*

- ADCA185 SLÁDEK, Ján - SLÁDEK, Vladimír - HON, Y.C. Inverse heat conduction problems by meshless local Petrov-Galerkin method. In Engineering Analysis with Boundary Elements, 2006, vol. 30, no. 8, p. 650-661. (2005: 0.894 - IF, Q1 - JCR, 1.174 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 0955-7997.

*Citácie:*

1. [1.1] ABBASZADEH, M. - DEHGHAN, M. *The reproducing kernel particle Petrov-Galerkin method for solving two-dimensional nonstationary incompressible Boussinesq equations. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 106, p. 300-308., Registrované v: WOS*

2. [1.1] GHIASI, N. - KHOSRAVIFARD, A. *A novel method for estimation of intensity and location of multiple point heat sources based on strain measurement. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 98, p. 203-216., Registrované v: WOS*

3. [1.1] GU, Y. - FAN, C. M. - QU, W. Z. - WANG, F. J. *Localized method of fundamental solutions for large-scale modelling of three-dimensional anisotropic heat conduction problems Theory and MATLAB code. In COMPUTERS & STRUCTURES. ISSN 0045-7949, 2019, vol. 220, p. 144-155., Registrované v: WOS*

4. [1.1] QU, W. Z. - FAN, C. M. - GU, Y. *Localized method of fundamental solutions for interior Helmholtz problems with high wave number. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 107, p. 25-32., Registrované v: WOS*

- ADCA186 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, C. - SCHANZ, M. Meshless local Petrov-Galerkin method for continuously nonhomogeneous linear viscoelastic solids. In Computational Mechanics, 2006, vol. 37, no. 3, p. 279-289. (2005: 0.933 - IF, Q2 - JCR, 1.256 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 0178-7675.

*Citácie:*

1. [1.1] JAMSHIDI, B. - HEMATIYAN, M. R. - MAHZOON, M. *An improved time*



- domain meshfree method for analysis of quasi-static and dynamic inhomogeneous viscoelastic problems. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 106, p. 59-67., Registrované v: WOS*
2. [1.1] YANG, W. Z - CHEN, Z. T. Fractional single-phase lag heat conduction and transient thermal fracture in cracked viscoelastic materials. In ACTA MECHANICA. ISSN 0001-5970, 2019, vol. 230, no. 10, p. 3723-3740., Registrované v: WOS
3. [1.1] YANG, W. Z. - CHEN, Z. T. Thermo-viscoelastic response of a cracked, functionally graded half-plane under a thermal shock. In ENGINEERING FRACTURE MECHANICS. ISSN 0013-7944, 2019, vol. 206, p. 267-277., Registrované v: WOS
- ADCA187 SLÁDEK, Ján - SLÁDEK, Vladimír - SOLEK, Peter - TAN, C. L. - ZHANG, Chuanzeng. Two-and three-dimensional transient thermoelastic analysis by the MLPG method. In CMES: Computer Modeling in Engineering & Sciences, 2009, vol. 47, no. 1, p. 61-95. (2008: 4.785 - IF, Q1 - JCR, 1.116 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 1526-1492.
- Citácie:
1. [1.1] MOARREFZADEH, A. - SHAHROOI, S. - AZIZPOUR, M. J. The application of the meshless local Petrov-Galerkin method for the analysis of heat conduction and residual stress due to welding. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2019, vol. 104, no. 1-4, p. 723-742., Registrované v: WOS
2. [1.2] ZHANG, Qiaoyun - GUO, Y. - ZHAO, M. Iterative boundary element method for cracks in a thermal medium with exact crack face boundary conditions. In WIT Transactions on Engineering Sciences. ISSN 17433533, 2019, 122, p. 51-62., Registrované v: SCOPUS
- ADCA188 SLÁDEK, Ján - SLÁDEK, Vladimír - WEN, P. H. - HON, Y.C. The inverse problem of determining heat transfer coefficients by the meshless local Petrov-Galerkin method. In CMES: Computer Modeling in Engineering & Sciences, 2009, vol. 48, p. 191-218. (2008: 4.785 - IF, Q1 - JCR, 1.116 - SJR, Q1 - SJR, karentované - CCC). (2009 - Current Contents). ISSN 1526-1492.
- Citácie:
1. [1.1] MOARREFZADEH, A. - SHAHROOI, S. - AZIZPOUR, M. J. The application of the meshless local Petrov-Galerkin method for the analysis of heat conduction and residual stress due to welding. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2019, vol. 104, no. 1-4, p. 723-742., Registrované v: WOS
- ADCA189 SLÁDEK, Ján - SLÁDEK, Vladimír - SCHANZ, M. A meshless method for axisymmetric problems in continuously nonhomogeneous saturated porous media. In Computers and Geotechnics, 2014, vol. 62, p. 100-109. (2013: 1.647 - IF, Q1 - JCR, 2.158 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0266-352X. Dostupné na: <https://doi.org/10.1016/j.compgeo.2014.07.006>
- Citácie:
1. [1.1] SWATI, R. F. - WEN, L. H. - ELAHI, H. - KHAN, A. A. - SHAD, S. Extended finite element method (XFEM) analysis of fiber reinforced composites for prediction of micro-crack propagation and delaminations in progressive damage: a review. In MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS. ISSN 0946-7076, 2019, vol. 25, no. 3, p. 747-763., Registrované v: WOS
- ADCA190 SLÁDEK, Ján - SLÁDEK, Vladimír - SCHANZ, M. The MLPG applied to porous materials with variable stiffness and permeability. In Meccanica, 2014, vol. 49, p. 2359-2373. (2013: 1.815 - IF, Q1 - JCR, 0.922 - SJR, karentované - CCC). (2014 -

Current Contents). ISSN 0025-6455. Dostupné na: <https://doi.org/10.1007/s11012-014-0004-0>

Citácie:

1. [1.1] SOARES JR, D. *A simple non-iterative uncoupled algorithm for nonlinear pore-dynamic analyses. In COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING. ISSN 0045-7825, 2019, vol. 357, art. no. UNSP 112593., Registrované v: WOS*

ADCA191

SLÁDEK, Ján - SLÁDEK, Vladimír - PAN, E. - WÜNSCHE, Michael. Fracture analysis in piezoelectric semiconductors under a thermal load. In Engineering Fracture Mechanics, 2014, vol. 126, p. 27-39. (2013: 1.662 - IF, Q2 - JCR, 1.483 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0013-7944. Dostupné na: <https://doi.org/10.1016/j.engfracmech.2014.05.011>

Citácie:

1. [1.1] CHENG, R. R. - ZHANG, C. L. - CHEN, W. Q. - YANG, J. S. *Electrical behaviors of a piezoelectric semiconductor fiber under a local temperature change. In NANO ENERGY. ISSN 2211-2855, 2019, vol. 66, art. no. 104081., Registrované v: WOS*
2. [1.1] CHENG, R. R. - ZHANG, C. L. - CHEN, W. Q. - YANG, J. S. *Temperature Effects on Mobile Charges in Extension of Composite Fibers of Piezoelectric Dielectrics and Non-Piezoelectric Semiconductors. In INTERNATIONAL JOURNAL OF APPLIED MECHANICS. ISSN 1758-8251, 2019, vol. 11, no. 9, art. no. 1950088., Registrované v: WOS*
3. [1.1] CHENG, R. R. - ZHANG, C. L. - YANG, J. S. *Thermally Induced Carrier Distribution in a Piezoelectric Semiconductor Fiber. In JOURNAL OF ELECTRONIC MATERIALS. ISSN 0361-5235, 2019, vol. 48, no. 8, p. 4939-4946., Registrované v: WOS*
4. [1.1] FANG, K. - QIAN, Z. H. - YANG, J. S. *Piezopotential in a composite cantilever of piezoelectric dielectrics and nonpiezoelectric semiconductors produced by shear force through e(15). In MATERIALS RESEARCH EXPRESS, 2019, vol. 6, no. 11, art. no. 115917., Registrované v: WOS*
5. [1.1] JIAO, F. Y. - WEI, P. J. - ZHOU, X. L. - ZHOU, Y. H. *The dispersion and attenuation of the multi-physical fields coupled waves in a piezoelectric semiconductor. In ULTRASONICS. ISSN 0041-624X, 2019, vol. 92, p. 68-78., Registrované v: WOS*
6. [1.1] JIAO, F. Y. - WEI, P. J. - ZHOU, Y. H. - ZHOU, X. L. *Wave propagation through a piezoelectric semiconductor slab sandwiched by two piezoelectric half-spaces. In EUROPEAN JOURNAL OF MECHANICS A-SOLIDS. ISSN 0997-7538, 2019, vol. 75, p. 70-81., Registrované v: WOS*
7. [1.1] JIN, Z. H. - YANG, J. S. *Analysis of a sandwiched piezoelectric semiconducting thermoelectric structure. In MECHANICS RESEARCH COMMUNICATIONS. ISSN 0093-6413, 2019, vol. 98, p. 31-36., Registrované v: WOS*
8. [1.1] LIANG, C. - ZHANG, C. L. - CHEN, W. Q. - YANG, J. S. *Static buckling of piezoelectric semiconductor fibers. In MATERIALS RESEARCH EXPRESS. ISSN 2053-1591, 2019, vol. 6, no. 12, art. no. 125919., Registrované v: WOS*
9. [1.1] LIANG, Y. X. - YANG, W. L. - YANG, J. S. *Transient Bending Vibration of a Piezoelectric Semiconductor Nanofiber Under a Suddenly Applied Shear Force. In ACTA MECHANICA SOLIDA SINICA. ISSN 0894-9166, 2019, vol. 32, no. 6, p. 688-697., Registrované v: WOS*
10. [1.1] LUO, Y. X. - ZHANG, C. L. - CHEN, W. Q. - YANG, J. S. *Piezotronic Effect of a Thin Film With Elastic and Piezoelectric Semiconductor Layers Under a Static Flexural Loading. In JOURNAL OF APPLIED MECHANICS-*

*TRANSACTIONS OF THE ASME. ISSN 0021-8936, 2019, vol. 86, no. 5, art. no. 051003., Registrované v: WOS*

11. [1.1] QIN, G. S. - ZHANG, X. - ZHAO, M. H. - WANG, G. *Effect of electric current on fracture behavior of GaN piezoelectric semiconductive ceramics. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2019, vol. 39, no. 2-3, p. 316-322., Registrované v: WOS*

12. [1.1] YANG, W. L. - HU, Y. T. - YANG, J. S. *Transient extensional vibration in a ZnO piezoelectric semiconductor nanofiber under a suddenly applied end force. In MATERIALS RESEARCH EXPRESS. ISSN 2053-1591, 2019, vol. 6, no. 2, article number: 025902., Registrované v: WOS*

13. [1.1] ZHAO, M. H. - ZHANG, Q. Y. - FAN, C. Y. *An efficient iteration approach for nonlinear boundary value problems in 2D piezoelectric semiconductors. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-904X, 2019, vol. 74, p. 170-183., Registrované v: WOS*

14. [1.2] LIU, W. - LU, S. - ZHU, C. - REN, C. - ZHENG, H. *Displacement Control of Piezoelectric Actuator Based on Fuzzy Fractional Order PID. In 2019 5th International Conference on Control, Automation and Robotics, ICCAR 2019, 2019, p. 495-500., Registrované v: SCOPUS*

ADCA192 SLÁDEK, Ján - SLÁDEK, Vladimír - PAN, E. - YOUNG, D. L. *Dynamic Anti-plane Crack Analysis in Functional Graded Piezoelectric Semiconductor Crystals. In CMES: Computer Modeling in Engineering & Sciences, 2014, vol. 99, no. 4, p. 273-296. (2013: 1.183 - IF, Q2 - JCR, 0.828 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 1526-1492. Dostupné na: <https://doi.org/10.3970/cmes.2014.099.273>*

Citácie:

1. [1.1] CHENG, R. R. - ZHANG, C. L. - CHEN, W. Q. - YANG, J. S. *Temperature Effects on Mobile Charges in Extension of Composite Fibers of Piezoelectric Dielectrics and Non-Piezoelectric Semiconductors. In INTERNATIONAL JOURNAL OF APPLIED MECHANICS. ISSN 1758-8251, 2019, vol. 11, no. 9, art. no. 1950088., Registrované v: WOS*

2. [1.1] LIANG, C. - ZHANG, C. L. - CHEN, W. Q. - YANG, J. S. *Static buckling of piezoelectric semiconductor fibers. In MATERIALS RESEARCH EXPRESS. ISSN 2053-1591, 2019, vol. 6, no. 12, art. no. 125919., Registrované v: WOS*

3. [1.1] LIANG, Y. X. - YANG, W. L. - YANG, J. S. *Transient Bending Vibration of a Piezoelectric Semiconductor Nanofiber Under a Suddenly Applied Shear Force. In ACTA MECHANICA SOLIDA SINICA. ISSN 0894-9166, 2019, vol. 32, no. 6, p. 688-697., Registrované v: WOS*

4. [1.1] LUO, Y. X. - ZHANG, C. L. - CHEN, W. Q. - YANG, J. S. *Piezotronic Effect of a Thin Film With Elastic and Piezoelectric Semiconductor Layers Under a Static Flexural Loading. In JOURNAL OF APPLIED MECHANICS-TRANSACTIONS OF THE ASME. ISSN 0021-8936, 2019, vol. 86, no. 5, art. no. 051003., Registrované v: WOS*

5. [1.1] QIN, G. S. - ZHANG, X. - ZHAO, M. H. - WANG, G. *Effect of electric current on fracture behavior of GaN piezoelectric semiconductive ceramics. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2019, vol. 39, no. 2-3, p. 316-322., Registrované v: WOS*

6. [1.1] YANG, W. L. - HU, Y. T. - YANG, J. S. *Transient extensional vibration in a ZnO piezoelectric semiconductor nanofiber under a suddenly applied end force. In MATERIALS RESEARCH EXPRESS. ISSN 2053-1591, 2019, vol. 6, no. 2, article number: 025902., Registrované v: WOS*

7. [1.1] ZHAO, M. H. - ZHANG, Q. Y. - FAN, C. Y. *An efficient iteration approach for nonlinear boundary value problems in 2D piezoelectric*

- semiconductors. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-904X, 2019, vol. 74, no., p. 170-183., Registrované v: WOS*
- ADCA193 SLÁDEK, Ján - SLÁDEK, Vladimír - SOLEK, Peter - ZHANG, C. Fracture analysis in continuously nonhomogeneous magneto-electro-elastic solids under a thermal load by the MLPG. In International Journal of Solids and Structures, 2010, vol. 47, no. 10, p. 1381-1391. (2009: 1.809 - IF, Q1 - JCR, 1.820 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0020-7683. Dostupné na: <https://doi.org/10.1016/j.ijsolstr.2010.01.025>
- Citácie:
1. [1.1] HWU, C. B. - HSU, C. L. - HSU, C. W. - SHIAH, Y. C. Fundamental solutions for two-dimensional anisotropic thermo-magneto-electro-elasticity. In MATHEMATICS AND MECHANICS OF SOLIDS. ISSN 1081-2865, 2019, vol. 24, no. 11, p. 3575-3596., Registrované v: WOS
  2. [1.1] MEMARI, A. Computational Analysis of Linear Elastic Crack Growth in Functionally Graded Bodies Using Non-Uniform Steps Integrated in the MLPG. In INTERNATIONAL JOURNAL OF APPLIED MECHANICS. ISSN 1758-8251, 2019, vol. 11, no. 8, art. no. 1950080., Registrované v: WOS
  3. [1.1] STOYNOV, Y. - DINEVA, P. - RANGELOV, T. Wave scattering and stress concentration in a magneto-electro-elastic plane with a nano-crack by boundary integral equations. In JOURNAL OF THEORETICAL AND APPLIED MECHANICS-BULGARIA. ISSN 0861-6663, 2019, vol. 49, no. 3, p. 203-223., Registrované v: WOS
  4. [1.2] STOYNOV, Y. 2D crack problems in functionally graded magneto-electro-elastic materials. In Advanced Structured Materials. ISSN 18698433, 2019, 92, p. 255-265., Registrované v: SCOPUS
- ADCA194 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, Chuanzeng. Local integral equation method for viscoelastic Reissner-Mindlin plates. In Computational Mechanics, 2008, vol. 41, no. 6, p.759-768. (2007: 1.060 - IF, Q2 - JCR, 0.992 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0178-7675.
- Citácie:
1. [1.1] JAFARI, N. - AZHARI, M. - BOROOMAND, B. Large deformation analysis of moderately thick viscoelastic plates. In MATHEMATICS AND COMPUTERS IN SIMULATION. ISSN 0378-4754, 2019, vol. 163, p. 146-167., Registrované v: WOS
  2. [1.1] JAFARI, N. - AZHARI, M. Time-dependent static analysis of viscoelastic Mindlin plates by defining a time function. In MECHANICS OF TIME-DEPENDENT MATERIALS. ISSN 1385-2000, 2019., Registrované v: WOS
  3. [1.1] KONDA, D. H. - SANTIAGO, J. A. F. - TELLES, J. C. F. - MELLO, J. P. F. - COSTA, E. G. A. A meshless Reissner plate bending procedure using local radial point interpolation with an efficient integration scheme. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 46-59., Registrované v: WOS
- ADCA195 SLÁDEK, Ján - SLÁDEK, Vladimír - SOLEK, Peter - SAEZ, A. Dynamic 3D axisymmetric problems in continuously non-homogeneous piezoelectric solids. In International Journal of Solids and Structures, 2008, vol. 45, no. 16, p. 4523-4542. (2007: 1.569 - IF, Q1 - JCR, 1.669 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0020-7683.
- Citácie:
1. [1.1] ABJADI, A. - JABBARI, M. - KHORSHIDVAND, A. R. Axisymmetric elasticity solution for an undrained saturated poro-piezoelectric thick disk. In THEORETICAL AND APPLIED MECHANICS. ISSN 1450-5584, 2019, vol. 46, no. 2, p. 191-219., Registrované v: WOS



- ADCA196 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, C. - TAN, C. L. Meshless local Petrov-Galerkin method for linear coupled thermoelastic analysis. In CMES-Computer Modeling in Engineering & Sciences, 2006, vol. 16, no. 1, p. 57-68. (2005: 2.178 - IF, Q1 - JCR, 1.348 - SJR, Q1 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 1526-1492.  
Citácie:  
1. [1.2] LI, Q. - CHEN, S. Meshless natural neighbour Petrov-Galerkin method for two-dimensional dynamic coupled thermoelasticity problem. In Tumu yu Huanjing Gongcheng Xuebao/Journal of Civil and Environmental Engineering. ISSN 20966717, 2019, 41, 5, p. 109-114., Registrované v: SCOPUS  
2. [1.2] WANG, F. - ZHENG, B. J. - LIN, G. - ZHOU, Y. H. - FAN, Y. Meshless method based on interpolating moving least square shape functions for dynamic coupled thermoelasticity analysis. In Gongcheng Lixue/Engineering Mechanics. ISSN 10004750, 2019, 36, 4, p. 37-43., Registrované v: SCOPUS  
3. [1.2] ZHANG, Jianping - WANG, S. - GONG, S. - SHEN, X. - HU, H. Meshless model and application for thermal deformation and thermal stress analysis of orthotropic material. In Fuhe Cailiao Xuebao/Acta Materiae Compositae Sinica. ISSN 10003851, 2019, 36, 6, p. 1558-1567., Registrované v: SCOPUS
- ADCA197 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, Chuanzeng - SOLEK, Peter. Application of the MLPG to thermo-piezoelectricity. In CMES: Computer Modeling in Engineering & Sciences, 2007, vol. 22, no. 3, p. 217-233. (2006: 2.038 - IF, Q1 - JCR, 1.358 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 1526-1492.  
Citácie:  
1. [1.1] WINGEN, M. - RICOEUR, A. Caloric aspects of nonlinear ferroelectric constitutive behavior: modeling and simulation. In CONTINUUM MECHANICS AND THERMODYNAMICS. ISSN 0935-1175, 2019, vol. 31, no. 2, p. 549-568., Registrované v: WOS
- ADCA198 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, Chuanzeng - SOLEK, Peter - STAREK, L. Fracture analyses in continuously nonhomogeneous piezoelectric solids by the MLPG. In CMES: Computer Modeling in Engineering & Sciences, 2007, vol. 19, no. 3, p. 247-262. (2006: 2.038 - IF, Q1 - JCR, 1.358 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 1526-1492.  
Citácie:  
1. [1.1] ZHOU, L. M. - LI, M. - ZHAO, H. W. - TIAN, W. J. Cell-Based Smoothed Finite Element Method for the Intensity Factors of Piezoelectric Bimaterials with Interfacial Crack. In INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS. ISSN 0219-8762, 2019, vol. 16, no. 7, art. no. 1850107., Registrované v: WOS
- ADCA199 SLÁDEK, Ján - SLÁDEK, Vladimír - KRIVÁČEK, Jozef - ALIABADI, M.H. Local boundary integral equations for orthotropic shallow shells. In International Journal of Solids and Structures, 2007, vol. 44, no. 7-8, p. 2285-2303. (2006: 1.529 - IF, Q1 - JCR, 1.632 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0020-7683.  
Citácie:  
1. [1.1] MELLOULI, H. - JRAD, H. - WALI, M. - DAMMAK, F. Meshless implementation of arbitrary 3D-shell structures based on a modified first order shear deformation theory. In COMPUTERS & MATHEMATICS WITH APPLICATIONS. ISSN 0898-1221, 2019, vol. 77, no. 1, p. 34-49., Registrované v: WOS
- ADCA200 SLÁDEK, Ján - SLÁDEK, Vladimír - HELLMICH, Ch. - EBERHARDSTEINER, J. Heat conduction analysis of 3-D axisymmetric and anisotropic FGM bodies by

meshless local Petrov-Galerkin method. In Computational Mechanics, 2007, vol. 39, no. 3, p. 323-333. (2006: 1.087 - IF, Q2 - JCR, 1.247 - SJR, Q1 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0178-7675.

Citácie:

1. [1.1] MOARREFZADEH, A. - SHAHROOI, S. - AZIZPOUR, M. J. *The application of the meshless local Petrov-Galerkin method for the analysis of heat conduction and residual stress due to welding. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2019, vol. 104, no. 1-4, p. 723-742., Registrované v: WOS*

2. [1.1] QU, W. Z. - FAN, C. M. - ZHANG, Y. M. *Analysis of three-dimensional heat conduction in functionally graded materials by using a hybrid numerical method. In INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, 2019, vol. 145, art. no. 118771., Registrované v: WOS*

ADCA201 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, Chuanzeng - SOLEK, Peter - PAN, E. Evaluation of fracture parameters in continuously nonhomogeneous piezoelectric solids. In International Journal of Fracture, 2007, vol. 145, no. 4, p. 313-326. (2006: 0.685 - IF, Q3 - JCR, 0.725 - SJR, Q2 - SJR, karentované - CCC). (2007 - Current Contents). ISSN 0376-9429.

Citácie:

1. [1.1] ZHOU, L. M. - LI, M. - ZHAO, H. W. - TIAN, W. J. *Cell-Based Smoothed Finite Element Method for the Intensity Factors of Piezoelectric Bimaterials with Interfacial Crack. In INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS. ISSN 0219-8762, 2019, vol. 16, no. 7, art. no. 1850107., Registrované v: WOS*

ADCA202 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, Chuanzeng - WÜNSCHE, Michael. Modelling of orthorhombic quasicrystal shallow shells. In European Journal of Mechanics A: Solids, 2015, vol. 49, p. 518-530. (2014: 1.678 - IF, Q2 - JCR, 1.322 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0997-7538. Dostupné na: <https://doi.org/10.1016/j.euromechsol.2014.09.004>

Citácie:

1. [1.1] LI, Y. - YANG, L. Z. - GAO, Y. *Bending Analysis of Laminated Two-Dimensional Piezoelectric Quasicrystal Plates with Functionally Graded Material Properties. In ACTA PHYSICA POLONICA A. ISSN 0587-4246, 2019, vol. 135, no. 3, p. 426-433., Registrované v: WOS*

2. [1.1] LI, Y. - YANG, L. Z. - ZHANG, L. L. - GAO, Y. *Static response of functionally graded multilayered one-dimensional quasicrystal cylindrical shells. In MATHEMATICS AND MECHANICS OF SOLIDS. ISSN 1081-2865, 2019, vol. 24, no. 6, p. 1908-1921., Registrované v: WOS*

ADCA203 SLÁDEK, Ján - SLÁDEK, Vladimír - BISHAY, P.L. - GARCIA SANCHEZ, F. Influence of electric conductivity on intensity factors for cracks in functionally graded piezoelectric semiconductors. In International Journal of Solids and Structures, 2015, vol. 59, p. 79-89. (2014: 2.214 - IF, Q1 - JCR, 1.603 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0020-7683. Dostupné na: <https://doi.org/10.1016/j.ijsolstr.2015.01.012>

Citácie:

1. [1.1] FATEHI, P. - FARID, M. *Piezoelectric Energy Harvesting from Nonlinear Vibrations of Functionally Graded Beams: Finite-Element Approach. In JOURNAL OF ENGINEERING MECHANICS. ISSN 0733-9399, 2019, vol. 145, no. 1, art. no. 04018116., Registrované v: WOS*

2. [1.1] JIAO, F. Y. - WEI, P. J. - ZHOU, Y. H. - ZHOU, X. L. *Wave propagation through a piezoelectric semiconductor slab sandwiched by two piezoelectric half-spaces. In EUROPEAN JOURNAL OF MECHANICS A-SOLIDS. ISSN 0997-*

- 7538, 2019, vol. 75, p. 70-81., Registrované v: WOS
3. [1.1] QIN, G. S. - ZHANG, X. - LU, C. S. - FAN, C. Y. - ZHAO, M. H. *Electric field-induced toughening in GaN piezoelectric semiconductor ceramics. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2019, vol. 45, no. 5, p. 6589-6593., Registrované v: WOS*
4. [1.1] QIN, G. S. - ZHANG, X. - ZHAO, M. H. - WANG, G. *Effect of electric current on fracture behavior of GaN piezoelectric semiconductive ceramics. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2019, vol. 39, no. 2-3, p. 316-322., Registrované v: WOS*
- ADCA204 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, C. - GARCIA SANCHEZ, F. - WÜNSCHE, Michael. Meshless local Petrov-Galerkin method for plane piezoelectricity. In CMC - Computers Materials & Continua, 2006, vol. 4, no. 2, p. 109-117. (2005: 0.750 - IF, Q2 - JCR, 0.372 - SJR, Q2 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 1546-2218.
- Citácie:
1. [1.1] ZHOU, L. M. - LI, M. - ZHAO, H. W. - TIAN, W. J. *Cell-Based Smoothed Finite Element Method for the Intensity Factors of Piezoelectric Bimaterials with Interfacial Crack. In INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS. ISSN 0219-8762, 2019, vol. 16, no. 7, art. no. 1850107., Registrované v: WOS*
- ADCA205 SLÁDEK, Ján - SLÁDEK, Vladimír - LU, H. H. H. - YOUNG, D. L. The FEM analysis of FGM piezoelectric semiconductor problems. In Composite Structures, 2017, vol. 163, p. 13-20. (2016: 3.858 - IF, Q1 - JCR, 2.162 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0263-8223. Dostupné na: <https://doi.org/10.1016/j.compstruct.2016.12.019> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch)
- Citácie:
1. [1.1] HOU, P. F. - CHEN, J. Y. - TANG, J. P. - ZHANG, W. H. *Two-dimensional Green's function solution for a tangential line force buried in the three-phase orthotropic piezoelectric structure. In ZAMM-ZEITSCHRIFT FÜR ANGEWANDTE MATHEMATIK UND MECHANIK. ISSN 0044-2267, 2019, vol. 99, no. 8, art. no. UNSP e201800304., Registrované v: WOS*
2. [1.1] KWAK, Y. - PARK, S. M. - LEE, S. - KIM, H. S. - LEE, J. - PARK, J. *Direct evaluation method to measure permittivity and conductivity of thin layers via wave approach in the THz region. In AIP ADVANCES, 2019, vol. 9, no. 11, art. no. 115113., Registrované v: WOS*
3. [1.1] LV, J. - SHAO, M. J. - CUI, M. - GAO, X. W. *An efficient collocation approach for piezoelectric problems based on the element differential method. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 230, art. no. 111483., Registrované v: WOS*
4. [1.2] WEI, X. - CHEN, S. - ZHANG, H. - LI, S. - JIANG, T. *Frequency optimization of power-law functionally graded plates via surrogate model. In Fuhe Cailiao Xuebao/Acta Materiae Compositae Sinica. ISSN 10003851, 2019, 36, 8, p. 1886-1892., Registrované v: SCOPUS*
- ADCA206 SLÁDEK, Ján - SLÁDEK, Vladimír - STANÁK, Peter - ZHANG, Chuanzeng - TAN, C. L. Fracture mechanics analysis of size-dependent piezoelectric solids. In International Journal of Solids and Structures, 2017, vol. 113, p. 1-9. (2016: 2.760 - IF, Q1 - JCR, 1.548 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0020-7683. Dostupné na: <https://doi.org/10.1016/j.ijsolstr.2016.08.011> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch)
- Citácie:

1. [1.1] LI, J. N. - WANG, B. L. - ZHANG, C. W. *Anti-plane fracture mechanics analysis of a piezoelectric material layer with strain and electric field gradient effects.* In *MECHANICS RESEARCH COMMUNICATIONS*. ISSN 0093-6413, 2019, vol. 102, art. no. UNSP 103439., Registrované v: WOS
2. [1.1] LIU, H. T. - WU, J. G. - LI, T. J. *Dynamic analytical solution of a limited-permeable mode-I crack in piezoelectric materials based on the non-local theory.* In *WAVE MOTION*. ISSN 0165-2125, 2019, vol. 90, p. 82-98., Registrované v: WOS

ADCA207 SLÁDEK, Ján - SLÁDEK, Vladimír - HRCEK, S. - PAN, E. The nonlocal and gradient theories for a large deformation of piezoelectric nanoplates. In *Composite Structures*, 2017, vol. 172, p. 119-129. (2016: 3.858 - IF, Q1 - JCR, 2.162 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0263-8223. Dostupné na: <https://doi.org/10.1016/j.compstruct.2017.03.080> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch)

Citácie:

1. [1.1] CHWAL, M. - MUC, A. *Buckling and Free Vibrations of Nanoplates Comparison of Nonlocal Strain and Stress Approaches.* In *APPLIED SCIENCES-BASEL*, 2019, vol. 9, no. 7, art. no. 1409., Registrované v: WOS
2. [1.1] RAD, M. H. G. - SHAHABIAN, F. - HOSSEINI, S. M. *Nonlocal geometrically nonlinear dynamic analysis of nanobeam using a meshless method.* In *STEEL AND COMPOSITE STRUCTURES*. ISSN 1229-9367, 2019, vol. 32, no. 3, p. 293-304., Registrované v: WOS
3. [1.1] TANZADEH, H. - AMOUSHAH, H. *Buckling and free vibration analysis of piezoelectric laminated composite plates using various plate deformation theories.* In *EUROPEAN JOURNAL OF MECHANICS A-SOLIDS*. ISSN 0997-7538, 2019, vol. 74, p. 242-256., Registrované v: WOS

ADCA208 SLÁDEK, Ján - SLÁDEK, Vladimír - REPKA, Miroslav - KASALA, J. - BISHAY, P.L. Evaluation of effective material properties in magneto-electro-elastic composite materials. In *Composite Structures*, 2017, vol. 174, p. 176-186. (2016: 3.858 - IF, Q1 - JCR, 2.162 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0263-8223. Dostupné na: <https://doi.org/10.1016/j.compstruct.2017.03.104> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch. VEGA 1/0145/16)

Citácie:

1. [1.1] HAGHGOO, M. - ANSARI, R. - HASSANZADEH-AGHDAM, M. K. - DARVIZEH, A. *Fully coupled thermo-magneto-electro-elastic properties of unidirectional smart composites with a piezoelectric interphase.* In *PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE*. ISSN 0954-4062, 2019, vol. 233, no. 8, p. 2813-2829., Registrované v: WOS
2. [1.1] HAGHGOO, M. - HASSANZADEH-AGHDAM, M. K. - ANSARI, R. *Effect of piezoelectric interphase on the effective magneto-electro-elastic properties of three-phase smart composites: A micromechanical study.* In *MECHANICS OF ADVANCED MATERIALS AND STRUCTURES*. ISSN 1537-6494, 2019, vol. 26, no. 23, p. 1935-1950., Registrované v: WOS
3. [1.1] PENG, X. H. - YU, M. - YANG, Y. X. *Interaction between a generalized screw dislocation in the matrix and an inhomogeneity containing an elliptic hole in piezoelectric-piezomagnetic composite materials.* In *MATHEMATICS AND MECHANICS OF SOLIDS*. ISSN 1081-2865, 2019, vol. 24, no. 10, p. 3080-3091., Registrované v: WOS
4. [1.1] SUFYAN, M. - ATIQ, S. - ABBAS, S. K. - YOUNIS, M. - RIAZ, S. - NASEEM, S. *Magnetically driven robust polarization in (1-x)BiFeO<sub>3</sub>-xPbTiO<sub>3</sub>*



*multiferroic composites. In MATERIALS LETTERS. ISSN 0167-577X, 2019, vol. 238, p. 10-12., Registrované v: WOS*

5. [1.1] VILLALOBOS-PORTILLO, E. E. - FUENTES-MONTERO, L. - MONTERO-CABRERA, M. E. - BURCIAGA-VALENCIA, D. C. - FUENTES-COBAS, L. E. Polycrystal piezoelectricity: revisiting the Voigt-Reuss-Hill approximation. In MATERIALS RESEARCH EXPRESS. ISSN 2053-1591, 2019, vol. 6, no. 11, art. no. 115705., Registrované v: WOS

6. [1.1] VINYAS, M. - SUNNY, K. K. - HARURSAMPATH, D. - NGUYEN-THOI, T. - LOJA, M. A. R. Influence of interphase on the multi-physics coupled frequency of three-phase smart magneto-electro-elastic composite plates. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 226, art. no. 111254., Registrované v: WOS

7. [1.1] VINYAS, M. Interphase effect on the controlled frequency response of three-phase smart magneto-electro-elastic plates embedded with active constrained layer damping: FE study. In MATERIALS RESEARCH EXPRESS. ISSN 2053-1591, 2019, vol. 6, no. 12, art. no. 125707., Registrované v: WOS

8. [1.1] XIAO, J. H. - XU, B. X. - XU, Y. L. - ZHANG, F. C. The generalized self-consistent micromechanics prediction of the magnetoelectroelastic properties of multi-coated nanocomposites with surface effect. In SMART MATERIALS AND STRUCTURES. ISSN 0964-1726, 2019, vol. 28, no. 5, art. no. 055004., Registrované v: WOS

ADCA209 SLÁDEK, Ján - SLÁDEK, Vladimír - WÜNSCHE, Michael - TAN, C. L. Crack analysis of size-dependent piezoelectric solids under a thermal load. In Engineering Fracture Mechanics, 2017, vol. 182, p. 187-201. (2016: 2.151 - IF, Q2 - JCR, 1.262 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0013-7944. Dostupné na: <https://doi.org/10.1016/j.engfracmech.2017.07.018> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch. VEGA 1/0145/17. SASPRO 0106/01/01 : Multiškálové modelovanie vrstevnatých, vláknami vystužených a poréznych magnetoelektrických materiálov)

Citácie:

1. [1.1] LIU, H. T. - WU, W. J. - TIAN, H. Y. Fracture analysis of a 3D rectangular permeable crack and two 3D rectangular permeable cracks in the orthotropic piezoelectric media. In ZAMM-ZEITSCHRIFT FÜR ANGEWANDTE MATHEMATIK UND MECHANIK. ISSN 0044-2267, 2019, vol. 99, no. 9, art. no. UNSP e201900040., Registrované v: WOS

ADCA210 SLÁDEK, Ján\*\* - SLÁDEK, Vladimír - WÜNSCHE, Michael - ZHANG, C. Effects of electric field and strain gradients on cracks in piezoelectric solids. In European Journal of Mechanics A: Solids, 2018, vol. 71, p. 187-198. (2017: 2.881 - IF, Q1 - JCR, 1.676 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0997-7538. Dostupné na: <https://doi.org/10.1016/j.euromechsol.2018.03.018> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch. VEGA 2/0046/16 : Viazané úlohy tepelných a elektromechanických polí v piezoelektrických materiáloch s poréznuou mikroštruktúrou. SASPRO 0106/01/01 : Multiškálové modelovanie vrstevnatých, vláknami vystužených a poréznych magnetoelektrických materiálov)

Citácie:

1. [1.1] KHATIR, S. - WAHAB, M. A. A computational approach for crack identification in plate structures using XFEM, XIGA, PSO and Jaya algorithm. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 103, art. no. 102240., Registrované v: WOS

2. [1.1] LI, J. N. - WANG, B. L. - ZHANG, C. W. Anti-plane fracture mechanics analysis of a piezoelectric material layer with strain and electric field gradient

*effects. In MECHANICS RESEARCH COMMUNICATIONS. ISSN 0093-6413, 2019, vol. 102, art. no. UNSP 103439., Registrované v: WOS*

3. [1.1] LURIE, S. - SOLYAEV, Y. *Anti-plane inclusion problem in the second gradient electroelasticity theory. In INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE. ISSN 0020-7225, 2019, vol. 144, art. no. UNSP 103129., Registrované v: WOS*

4. [1.1] SOLYAEV, Y. - LURIE, S. *Pure bending of a piezoelectric layer in second gradient electroelasticity theory. In ACTA MECHANICA. ISSN 0001-5970, 2019, vol. 230, no. 12, p. 4197-4211., Registrované v: WOS*

5. [1.1] ZHU, S. - LIU, H. T. *Fracture Analysis of Multiple Cracks in Functionally Graded Piezoelectric Materials Based on Layering Method. In PROCEEDINGS OF THE 2019 14TH SYMPOSIUM ON PIEZOELECTRICITY, ACOUSTIC WAVES AND DEVICE APPLICATIONS (SPAWDA19), 2019, p. 286-291., Registrované v: WOS*

6. [1.2] KIRILYUK, V. S. - LEVCHUK, O. I. - ALTENBACH, H. *Calculation of Stress Intensity Factors for an Arbitrary Oriented Penny-shaped Crack Under Inner Pressure in an Orthotropic Electroelastic Material. In Advanced Structured Materials. ISSN 18698433, 2019, 108, p. 211-222., Registrované v: SCOPUS*

ADCA211 SLÁDEK, Ján\*\* - SLÁDEK, Vladimír - JUS, M. *The MLPG for crack analyses in composites with flexoelectricity effects. In Composite Structures, 2018, vol. 204, p. 105–113. (2017: 4.101 - IF, Q1 - JCR, 1.905 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0263-8223. Dostupné na: <https://doi.org/10.1016/j.compstruct.2018.07.043> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch. VEGA 2/0046/16 : Viazané úlohy tepelných a elektromechanických polí v piezoelektrických materiáloch s poréznuou mikroštruktúrou)*

*Citácie:*

1. [1.1] MEMARI, A. - AZAR, M. R. K. *Thermo-mechanical shock fracture analysis by meshless method. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 102, p. 171-192., Registrované v: WOS*

2. [1.1] MEMARI, A. *Computational Analysis of Linear Elastic Crack Growth in Functionally Graded Bodies Using Non-Uniform Steps Integrated in the MLPG. In INTERNATIONAL JOURNAL OF APPLIED MECHANICS. ISSN 1758-8251, 2019, vol. 11, no. 8, art. no. 1950080., Registrované v: WOS*

ADCA212 SLÁDEK, Ján - SLÁDEK, Vladimír - REPKA, Miroslav - TAN, C. L. *Evaluation of the T-stress for cracks in functionally graded materials by the FEM. In Theoretical and Applied Fracture Mechanics, 2016, vol. 86, p. 332–341. (2015: 2.025 - IF, Q1 - JCR, 0.816 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0167-8442. Dostupné na: <https://doi.org/10.1016/j.tafmec.2016.09.004> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch)*

*Citácie:*

1. [1.1] ROMANOWICZ, M. *A non-local stress fracture criterion accounting for the anisotropy of the fracture toughness. In ENGINEERING FRACTURE MECHANICS. ISSN 0013-7944, 2019, vol. 214, p. 544-557., Registrované v: WOS*

2. [1.1] SINGH, A. - DAS, S. - CRACIUN, E. M. *Effect of Thermomechanical Loading on an Edge Crack of Finite Length in an Infinite Orthotropic Strip. In MECHANICS OF COMPOSITE MATERIALS. ISSN 0191-5665, 2019, vol. 55, no. 3, p. 285-296., Registrované v: WOS*

ADCA213 SLÁDEK, Ján - SLÁDEK, Vladimír - GFRERER, M. - SCHANZ, M. *Mindlin theory for the bending of porous plates. In Acta Mechanica, 2015, vol. 226, iss. 6, p.*

1909-1928. (2014: 1.465 - IF, Q2 - JCR, 0.940 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0001-5970. Dostupné na: <https://doi.org/10.1007/s00707-014-1287-x>

Citácie:

1. [1.1] ALIPOUR, M. M. - SHARIYAT, M. *Nonlocal zigzag analytical solution for Laplacian hygrothermal stress analysis of annular sandwich macro/nanoplates with poor adhesions and 2D-FGM porous cores. In ARCHIVES OF CIVIL AND MECHANICAL ENGINEERING. ISSN 1644-9665, 2019, vol. 19, no. 4, p. 1211-1234., Registrované v: WOS*

ADCA214 SLÁDEK, Ján - SLÁDEK, Vladimír - ATLURI, S. N. Path-independent integral in fracture mechanics of quasicrystals. In Engineering Fracture Mechanics, 2015, vol. 140, p. 61-71. (2014: 1.767 - IF, Q2 - JCR, 1.561 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0013-7944. Dostupné na: <https://doi.org/10.1016/j.engfracmech.2015.03.039>

Citácie:

1. [1.1] HU, K. Q. - JIN, H. - YANG, Z. J. - CHEN, X. *Interface crack between dissimilar one-dimensional hexagonal quasicrystals with piezoelectric effect. In ACTA MECHANICA. ISSN 0001-5970, 2019, vol. 230, no. 7, p. 2455-2474., Registrované v: WOS*

2. [1.1] LI, Y. - ZHAO, M. H. - QIN, Q. H. - FAN, C. Y. *Analysis solution method for 3D planar crack problems of two-dimensional hexagonal quasicrystals with thermal effects. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-904X, 2019, vol. 69, p. 648-664., Registrované v: WOS*

3. [1.1] UFLYAND, I. E. - DROGAN, E. G. - BURLAKOVA, V. E. - KYDRALIEVA, K. A. - SHERSHNEVA, I. N. - DZHARDIMALIEVA, G. I. *Testing the mechanical and tribological properties of new metal-polymer nanocomposite materials based on linear low-density polyethylene and Al<sub>65</sub>Cu<sub>22</sub>Fe<sub>13</sub> quasicrystals. In POLYMER TESTING. ISSN 0142-9418, 2019, vol. 74, p. 178-186., Registrované v: WOS*

4. [1.1] ZHOU, Z. H. - YANG, Z. T. - XU, W. - YU, X. - XU, C. H. - XU, X. S. *Evaluation of electroelastic singularity of finite-size V-notched one-dimensional hexagonal quasicrystalline bimetals with piezoelectric effect. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 100, p. 139-153., Registrované v: WOS*

5. [1.2] TCHERDINTSEV, V. V. - STEPASHKIN, A. A. - CHUKOV, D. I. - OLIFIROV, L. K. - SENATOV, F. S. *Formation of ethylene-vinyl acetate composites filled with Al-Cu-Fe and Al-Cu-Cr quasicrystalline particles. In Journal of Materials Research and Technology. ISSN 22387854, 2019, 8, 1, p. 572-589., Registrované v: SCOPUS*

ADCA215 SLÁDEK, Ján - SLÁDEK, Vladimír - KRAHULEC, Slavomír - CHEN, C. S. - YOUNG, D. L. Analyses of Circular Magneto-electroelastic Plates with Functionally Graded Material Properties. In Mechanics of Advanced Materials and Structures, 2015, vol. 22, iss. 6, p. 479-489. (2014: 0.773 - IF, Q3 - JCR, 0.486 - SJR, Q2 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1537-6494. Dostupné na: <https://doi.org/10.1080/15376494.2013.807448>

Citácie:

1. [1.1] CHEN, Chieh-Li - HSU, C. H. *An element free Galerkin method for static behavior of a magneto-electro-elastic beam in thermal environments. In SMART MATERIALS AND STRUCTURES. ISSN 0964-1726, 2019, vol. 28, no. 11, art. no. 115034., Registrované v: WOS*

2. [1.1] EBRAHIM, F. - JAFARIL, A. - MAHESH, V. *Assessment of porosity influence on dynamic characteristics of smart heterogeneous magneto-electro-*



- elastic plates. In STRUCTURAL ENGINEERING AND MECHANICS. ISSN 1225-4568, 2019, vol. 72, no. 1, p. 875-891., Registrované v: WOS*
3. [1.1] EBRAHIMI, F. - FARAZMANDNIA, N. - KOKABA, M. R. - MAHESH, V. *Vibration analysis of porous magneto-electro-elastically actuated carbon nanotube-reinforced composite sandwich plate based on a refined plate theory. In ENGINEERING WITH COMPUTERS. ISSN 0177-0667, 2019., Registrované v: WOS*
4. [1.1] EBRAHIMI, F. - FARDSHAD, R. E. - MAHESH, V. *Frequency response analysis of curved embedded magneto-electro-viscoelastic functionally graded nanobeams. In ADVANCES IN NANO RESEARCH. ISSN 2287-237X, 2019, vol. 7, no. 6, p. 391-403., Registrované v: WOS*
5. [1.1] LI, Y. - YANG, L. Z. - GAO, Y. *Bending Analysis of Laminated Two-Dimensional Piezoelectric Quasicrystal Plates with Functionally Graded Material Properties. In ACTA PHYSICA POLONICA A. ISSN 0587-4246, 2019, vol. 135, no. 3, p. 426-433., Registrované v: WOS*
6. [1.1] VINYAS, M. - SANDEEP, A. S. - NGUYEN-THOI, T. - EBRAHIMI, F. - DUC, D. N. *A finite element-based assessment of free vibration behaviour of circular and annular magneto-electro-elastic plates using higher order shear deformation theory. In JOURNAL OF INTELLIGENT MATERIAL SYSTEMS AND STRUCTURES. ISSN 1045-389X, 2019, vol. 30, no. 16, p. 2478-2501., Registrované v: WOS*
- ADCA216 SLÁDEK, Ján - SLÁDEK, Vladimír - STAŇÁK, Peter. Scaled boundary finite element method for thermoelasticity in voided materials. In CMES: Computer Modeling in Engineering & Sciences, 2015, vol. 106, no. 4, p. 229-262. (2014: 1.030 - IF, Q2 - JCR, 0.799 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1526-1492.
- Citácie:
1. [1.1] TALEBI, H. - SILANI, O. - KLUSEMANN, B. *The scaled boundary finite element method for computational homogenization of heterogeneous media. In INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING. ISSN 0029-5981, 2019, vol. 118, no. 1, p. 1-17., Registrované v: WOS*
- ADCA217 SLÁDEK, Ján - SLÁDEK, Vladimír - KRAHULEC, Slavomír - SONG, Chunqing. Micromechanics determination of effective properties of voided magneto-electroelastic materials. In Computational Materials Science, 2016, vol. 116, p. 103-112. (2015: 2.086 - IF, Q2 - JCR, 0.953 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0927-0256. Dostupné na: <https://doi.org/10.1016/j.commatsci.2015.05.015>
- Citácie:
1. [1.1] KRISHNASWAMY, J. A. - BURONI, F. C. - GARCIA-SANCHEZ, F. - MELNIK, R. - RODRIGUEZ-TEMBLEQUE, L. - SAEZ, A. *Improving the performance of lead-free piezoelectric composites by using polycrystalline inclusions and tuning the dielectric matrix environment. In SMART MATERIALS AND STRUCTURES. ISSN 0964-1726, 2019, vol. 28, no. 7, art. no. 075032., Registrované v: WOS*
2. [1.1] TALEBI, H. - SILANI, O. - KLUSEMANN, B. *The scaled boundary finite element method for computational homogenization of heterogeneous media. In INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING. ISSN 0029-5981, 2019, vol. 118, no. 1, p. 1-17., Registrované v: WOS*
- ADCA218 SLÁDEK, Ján - SLÁDEK, Vladimír - REPKA, Miroslav - BISHAY, P.L. Static and dynamic behaviour of porous elastic materials based on micro-dilatation theory: A

numerical study using the MLPG method. In International Journal of Solids and Structures, 2016, vol. 96, p. 126-135. (2015: 2.081 - IF, Q1 - JCR, 1.456 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0020-7683. Dostupné na: <https://doi.org/10.1016/j.ijsolstr.2016.06.016>

Citácie:

1. [1.1] JEONG, J. - RAMEZANI, H. - CHUTA, E. *Reactive transport numerical modeling of mortar carbonation: Atmospheric and accelerated carbonation. In JOURNAL OF BUILDING ENGINEERING. ISSN 2352-7102, 2019, vol. 23, p. 351-368., Registrované v: WOS*
2. [1.1] MOARREFZADEH, A. - SHAHROOI, S. - AZIZPOUR, M. J. *Predicting fatigue crack propagation in residual stress field due to welding by meshless local Petrov-Galerkin method. In JOURNAL OF MANUFACTURING PROCESSES. ISSN 1526-6125, 2019, vol. 45, p. 379-391., Registrované v: WOS*

ADCA219 SLÁDEK, Vladimír - SLÁDEK, Ján - TANAKA, M. Nonsingular BEM formulations for thin-walled structures and elastostatic crack problems. In Acta Mechanica, 1993, vol. 99, no. 1-4, p. 173-190. ISSN 0001-5970.

Citácie:

1. [1.1] XIE, G. Z. - ZHOU, F. L. - LI, H. - WEN, X. Y. - MENG, F. N. *A family of non-conforming crack front elements of quadrilateral and triangular types for 3D crack problems using the boundary element method. In FRONTIERS OF MECHANICAL ENGINEERING. ISSN 2095-0233, 2019, vol. 14, no. 3, p. 332-341., Registrované v: WOS*
2. [1.1] XIE, G. Z. - ZHOU, F. L. - ZHANG, D. H. - WEN, X. Y. - LI, H. *A novel triangular boundary crack front element for 3D crack problems based on 8-node serendipity element. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 105, p. 296-302., Registrované v: WOS*

ADCA220 SLÁDEK, Vladimír - SLÁDEK, Ján - MARKECHOVÁ, I. An advanced boundary element method for elasticity problems in nonhomogeneous media. In Acta Mechanica, 1993, vol. 97, no. 1-2, p. 71-90. ISSN 0001-5970.

Citácie:

1. [1.1] XIE, G. Z. - ZHOU, F. L. - ZHANG, D. H. - WEN, X. Y. - LI, H. *A novel triangular boundary crack front element for 3D crack problems based on 8-node serendipity element. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 105, p. 296-302., Registrované v: WOS*

ADCA221 SLÁDEK, Vladimír - SLÁDEK, Ján - TANAKA, M. Numerical integration of logarithmic and nearly logarithmic singularity in BEMs. In Applied Mathematical Modeling, 2001, vol. 25, no. 11, p. 901-922. (2001 - Current Contents). ISSN 0307-904X.

Citácie:

1. [1.1] GHEHSAREH, H. R. - ESFAHANI, M. H. - ETESAMI, S. K. *Numerical simulation of electromagnetic wave scattering from perfectly conducting cylinders using the local radial point interpolation technique. In JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS. ISSN 0920-5071, 2019, vol. 33, no. 3, p. 335-349., Registrované v: WOS*
2. [1.1] GONG, Y. P. - TREVELYAN, J. - HATTORI, G. - DONG, C. Y. *Hybrid nearly singular integration for isogeometric boundary element analysis of coatings and other thin 2D structures. In COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING. ISSN 0045-7825, 2019, vol. 346, p. 642-673., Registrované v: WOS*

ADCA222 SLÁDEK, Vladimír - SLÁDEK, Ján. Transient elastodynamic 3-dimensional problems in cracked bodies. In Applied Mathematical Modeling, 1984, vol. 8, p. 2-10. ISSN 0307-904X.

Citácie:

1. [1.1] AGRANOVICH, G. - LITSYN, E. - SLAVOVA, A. Dynamical behavior of integro-differential boundary value problem arising in nano-structures via Cellular Nanoscale Network approach. In *JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS*. ISSN 0377-0427, 2019, vol. 352, p. 62-71., Registrované v: WOS
2. [1.1] SIMIONATO, F. - DAROS, C. H. Boundary element method analysis for mode III linear fracture mechanics in anisotropic and nonhomogeneous media. In *ZAMM-ZEITSCHRIFT FÜR ANGEWANDTE MATHEMATIK UND MECHANIK*. ISSN 0044-2267, 2019, vol. 99, no. 10, art. no. UNSP e201800211., Registrované v: WOS

ADCA223 SLÁDEK, Vladimír - SLÁDEK, Ján. Boundary integral-equation method in thermoelasticity part I: General analysis. In *Applied Mathematical Modeling*. - Elsevier, 1983, vol. 7, p. 241- 253. ISSN 0307-904X.

Citácie:

1. [1.1] BAO, G. - XU, L. W. - YIN, T. Boundary integral equation methods for the elastic and thermoelastic waves in three dimensions. In *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING*. ISSN 0045-7825, 2019, vol. 354, p. 464-486., Registrované v: WOS
2. [1.1] ELHAGARY, M. A. Boundary integral equation formulation for the generalized thermoviscoelasticity with one relaxation time. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 104, p. 209-214., Registrované v: WOS
3. [1.1] VORONA, Y. V. - KARA, I. D. EVALUATION OF THE SINGULAR INTEGRALS OF THE THREE-DIMENSIONAL THERMOELASTICITY. In *OPIR MATERIALIV I TEORIA SPORUD-STRENGTH OF MATERIALS AND THEORY OF STRUCTURES*, 2019, vol., no. 102, p. 220-231., Registrované v: WOS

ADCA224 SLÁDEK, Vladimír - SLÁDEK, Ján. Boundary integral equation method in thermoelasticity part III: uncoupled thermoelasticity. In *Applied Mathematical Modeling*, 1984, vol. 8, no. 6, p. 413-418. ISSN 0307-904X.

Citácie:

1. [1.1] ELHAGARY, M. A. Boundary integral equation formulation for the generalized thermoviscoelasticity with one relaxation time. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 104, p. 209-214., Registrované v: WOS
2. [1.1] HWU, C. - HSU, C. L. - HSU, C. W. - SHIAH, Y. C. Fundamental solutions for two-dimensional anisotropic thermo-magneto-electro-elasticity. In *MATHEMATICS AND MECHANICS OF SOLIDS*. ISSN 1081-2865, 2019, vol. 24, no. 11, p. 3575-3596., Registrované v: WOS
3. [1.1] SHIAH, Y. C. - TUAN, N. A. - HEMATIYAN, M. R. Thermal Stress Analysis of 3D Anisotropic Materials Involving Domain Heat Source by the Boundary Element Method. In *JOURNAL OF MECHANICS*. ISSN 1727-7191, 2019, vol. 35, no. 6, p. 839-850., Registrované v: WOS

ADCA225 SLÁDEK, Vladimír - SLÁDEK, Ján. Singular integrals and boundary elements. In *Computer Methods in Applied Mechanics and Engineering*, 1998, vol. 157, no. 3-4, p. 251-266. ISSN 0045-7825.

Citácie:

1. [1.1] GONG, Y. P. - TREVELYAN, J. - HATTORI, G. - DONG, C. Y. Hybrid nearly singular integration for isogeometric boundary element analysis of coatings and other thin 2D structures. In *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING*. ISSN 0045-7825, 2019, vol. 346, p. 642-673., Registrované v: WOS

- ADCA226 SLÁDEK, Vladimír - SLÁDEK, Ján - TANAKA, M. - ZHANG, C. Local integral equation method for potential problems in functionally graded anisotropic materials. In *Engineering Analysis with Boudary Elements*, 2005, vol. 29, no. 9, p. 829-843. (2004: 1.000 - IF, karentované - CCC). (2005 - Current Contents). ISSN 0955-7997.  
Citácie:  
1. [1.1] HUANG, T. - PAN, Q. X. - JIN, J. - ZHENG, J. L. - WEN, P. H. *Continuous constitutive model for bimodulus materials with meshless approach. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-904X, 2019, vol. 66, p. 41-58., Registrované v: WOS*  
2. [1.1] ZHENG, H. - XIONG, J. G. - YUAN, Y. - WEN, P. H. *Mixed-mode dynamic stress intensity factors by variation technique with finite block method. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 106, p. 27-33., Registrované v: WOS*
- ADCA227 SLÁDEK, Vladimír - SLÁDEK, Ján - TANAKA, M. Optimal transformations of the integration variables in computation of singular integrals in BEM. In *International Journal for Numerical Methods in Engineering*, 2000, vol. 47, no. 7, p. 1263-1283. ISSN 0029-5981.  
Citácie:  
1. [1.1] MA, H. - HE, D. H. - TIAN, Y. *High order isoparametric elements in boundary element method Smooth spheroidal element. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 104, p. 34-45., Registrované v: WOS*  
2. [1.1] MA, H. - TIAN, Y. - HE, D. H. *High order isoparametric elements in boundary element method-Smooth elliptical element. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 101, p. 37-47., Registrované v: WOS*
- ADCA228 SLÁDEK, Vladimír - SLÁDEK, Ján - TANAKA, M. Local integral equations and two meshless polynomial interpolations with application to potential problems i non-homogeneous media. In *CMES: Computer Modeling in Engineering & Sciences*, 2005, vol. 7, no. 1, p. 69-83. (2004: 2.210 - IF, karentované - CCC). (2005 - Current Contents). ISSN 1526-1492.  
Citácie:  
1. [1.1] LEE, Y. T. - CHEN, J. T. - KUO, S. R. *Semi-analytical approach for torsion problems of a circular bar containing multiple holes and/or cracks. In ENGINEERING FRACTURE MECHANICS. ISSN 0013-7944, 2019, vol. 219, art. no. 106547., Registrované v: WOS*
- ADCA229 SLÁDEK, Vladimír - SLÁDEK, Ján. Nonsingular formulation of bie for plate bending problems. In *European Journal of Mechanics A: Solids*, 1992, vol. 11, iss. 3, p. 335-348. ISSN 0997-7538.  
Citácie:  
1. [1.1] ZHANG, J. M. - LIN, W. C. - DONG, Y. Q. *A dual interpolation boundary face method for elasticity problems. In EUROPEAN JOURNAL OF MECHANICS A-SOLIDS. ISSN 0997-7538, 2019, vol. 73, p. 500-511., Registrované v: WOS*
- ADCA230 SLÁDEK, Vladimír - SLÁDEK, Ján - TANAKA, M. Eigenvalue analysis of 3-dimensional helmholtz-equation. In *Engineering Analysis with Boudary Elements*, 1993, vol. 11, no. 2, p. 165-170. ISSN 0955-7997.  
Citácie:  
1. [1.1] BARBOSA, J. P. - LOEFFLER, C. F. - LARA, L. O. C. *The direct interpolation boundary element technique applied to three-dimensional scalar free vibration problems. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 108, p. 295-300., Registrované v: WOS*
- ADCA231 SLÁDEK, Vladimír - SLÁDEK, Ján - TANAKA, M. Regularization of



Hypersingular and Nearly Singular-Integrals in the Potential-Theory and Elasticity. In International Journal for Numerical Methods in Engineering, 1993, vol. 36, no. 10, p. 1609-1628. ISSN 0029-5981.

Citácie:

1. [1.1] LIU, Y. J. *On the BEM for acoustic wave problems. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 107, p. 53-62., Registrované v: WOS*

ADCA232 SLÁDEK, Vladimír - SLÁDEK, Ján. Three-dimensional curved crack in an elastic body. In International Journal of Solids and Structures, 1983, vol. 19, no. 5, p. 425-436. ISSN 0020-7683.

Citácie:

1. [1.2] BRISOLA, G. M. S. - PALERMO, L. - ALMEIDA, L. C. *Analysis of the crack propagation in fiber-reinforced concrete specimens using the bem. In WIT Transactions on Engineering Sciences. ISSN 17433533, 2019, 122, p. 39-49., Registrované v: SCOPUS*

ADCA233 SLÁDEK, Vladimír - SLÁDEK, Ján - ZHANG, C. Local integro-differential equations with domain elements for the numerical solution of partial differential equations with variable coefficients. In Journal of Engineering Mathematics, 2005, vol. 51, no. 3, p. 261-282. ISSN 0022-0833.

Citácie:

1. [1.1] FRESNEDA-PORTILLO, C. - MIKHAILOV, S. E. *Analysis of boundary-domain integral equations to the mixed BVP for a compressible Stokes system with variable viscosity. In COMMUNICATIONS ON PURE AND APPLIED ANALYSIS. ISSN 1534-0392, 2019, vol. 18, no. 6, p. 3059-3088., Registrované v: WOS*

2. [1.1] FRESNEDA-PORTILLO, C. - WOLDEMICHEAL, Z. W. *On the existence of solution of the boundary-domain integral equation system derived from the 2D Dirichlet problem for the diffusion equation with variable coefficient using a novel parametrix. In COMPLEX VARIABLES AND ELLIPTIC EQUATIONS. ISSN 1747-6933, 2019., Registrované v: WOS*

3. [1.1] GAO, X. W. - GAO, L. F. - ZHANG, Y. - CUI, M. - LV, J. *Free element collocation method: A new method combining advantages of finite element and mesh free methods. In COMPUTERS & STRUCTURES. ISSN 0045-7949, 2019, vol. 215, p. 10-26., Registrované v: WOS*

4. [1.1] WANG, Z. X. - LI, Y. - YU, T. B. - ZHAO, J. - WEN, P. H. *Prediction of 3D grinding temperature field based on meshless method considering infinite element. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2019, vol. 100, no. 9-12, p. 3067-3084., Registrované v: WOS*

5. [1.1] YANG, J. J. - WANG, Z. X. - ADETORO, O. B. - WEN, P. H. - BAILEY, C. G. *The thermal analysis of cutting/grinding processes by meshless finite block method. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 100, p. 68-79., Registrované v: WOS*

ADCA234 SLÁDEK, Vladimír - SLÁDEK, Ján - TANAKA, M. - ZHANG, C. Transient heat conduction in anisotropic and functionally graded media by local integral equations. In Engineering Analysis with Boundary Elements, 2005, vol. 29, no. 11, p. 1047-1065. (2004: 1.000 - IF, karentované - CCC). (2005 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2005.05.011>

Citácie:

1. [1.1] ASTAKHOVA, E. - GLUSHKO, A. - LOGINOVA, E. A. *Effect of Heat on Deformations in Material with a Defect. In COMPUTATIONAL MATHEMATICS AND MATHEMATICAL PHYSICS. ISSN 0965-5425, 2019, vol. 59, no. 9, p. 1470-*

1474., Registrované v: WOS

2. [1.1] CORFDIR, A. - BONNET, G. The degenerate scales of BIEs for conduction in piecewise homogeneous domains. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 98, p. 281-295., Registrované v: WOS

3. [1.1] GAO, X. W. - DING, J. X. - CUI, M. - YANG, K. Global-element-based free element method for solving non-linear and inhomogeneous heat conduction problems. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 109, p. 117-128., Registrované v: WOS

4. [1.1] GAO, X. W. - GAO, L. F. - ZHANG, Y. - CUI, M. - LV, J. Free element collocation method: A new method combining advantages of finite element and mesh free methods. In *COMPUTERS & STRUCTURES*. ISSN 0045-7949, 2019, vol. 215, p. 10-26., Registrované v: WOS

5. [1.2] GAO, X. - XU, B. - LÜ, J. - PENG, H. Free Element Method and Its Application in Structural Analysis. In *Lixue Xuebao/Chinese Journal of Theoretical and Applied Mechanics*. ISSN 04591879, 2019, 51, 3, p. 703-713., Registrované v: SCOPUS

6. [1.2] ZHENG, Y. T. - GAO, X. W. - PENG, H. F. Bem-edm coupled analysis of multi-scale problems. In *WIT Transactions on Engineering Sciences*. ISSN 17433533, 2019, 126, p. 101-110., Registrované v: SCOPUS

ADCA235 SLÁDEK, Vladimír - SLÁDEK, Ján - ATLURI, S. N. - VAN KEER, R. Numerical integration of singularities in meshless implementation of local boundary integral equations. In *Computational Mechanics*, 2000, vol. 25, no. 4, p. 394-403. ISSN 0178-7675.

Citácie:

1. [1.1] HASSLINGER, P. - KURFUEST, A. - HAMMER, T. - FISCHMEISTER, E. - HELLMICH, C. - SCHEINER, S. Shear stress concentrations in tramway rails: Results from beam theory-based cross-sectional 2D Finite Element analyses. In *ENGINEERING STRUCTURES*. ISSN 0141-0296, 2019, vol. 195, p. 579-590., Registrované v: WOS

2. [1.2] MUŽÍK, J. - BULKO, R. Global singular boundary method for solving 2d navier-stokes equations. In *WIT Transactions on Engineering Sciences*. ISSN 17433533, 2019, 126, p. 201-210., Registrované v: SCOPUS

ADCA236 SLÁDEK, Vladimír - SLÁDEK, Ján - SÁTOR, Ladislav. Physical decomposition of thin plate bending problems and their solution by mesh-free methods. In *Engineering Analysis with Boundary Elements*, 2013, vol. 37, p. 348-365. (2012: 1.596 - IF, Q1 - JCR, 1.244 - SJR, Q1 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2012.11.005>

Citácie:

1. [1.1] KONDA, D. H. - SANTIAGO, J. A. F. - TELLES, J. C. F. - MELLO, J. P. F. - COSTA, E. G. A. A meshless Reissner plate bending procedure using local radial point interpolation with an efficient integration scheme. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 99, p. 46-59., Registrované v: WOS

ADCA237 SLÁDEK, Vladimír - SLÁDEK, Ján - ZHANG, C. Computation of stresses in non-homogeneous elastic solids by local integral equation method: a comparative study. In *Computational Mechanics*, 2008, vol. 41, no. 6, p. 827-845. (2007: 1.060 - IF, Q2 - JCR, 0.992 - SJR, Q1 - SJR, karentované - CCC). (2008 - Current Contents). ISSN 0178-7675.

Citácie:

1. [1.1] GAO, X. W. - GAO, L. F. - ZHANG, Y. - CUI, M. - LV, J. Free element collocation method: A new method combining advantages of finite element and



- mesh free methods. In COMPUTERS & STRUCTURES. ISSN 0045-7949, 2019, vol. 215, p. 10-26., Registrované v: WOS*
- ADCA238 SLÁDEK, Vladimír - SLÁDEK, Ján - ZHANG, C. A comparative study of meshless approximations in local integral equation method. In CMC - Computers Materials & Continua, 2006, vol. 4, no. 3, p. 177-188. (2005: 0.750 - IF, Q2 - JCR, 0.372 - SJR, Q2 - SJR, karentované - CCC). (2006 - Current Contents). ISSN 1546-2218.  
Citácie:  
1. [1.1] DINEVA, P. S. - MANOLIS, G. D. - WUTTKE, F. *Fundamental solutions in 3D elastodynamics for the BEM: A review. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 105, p. 47-69., Registrované v: WOS*
- ADCA239 SLÁDEK, Vladimír - SLÁDEK, Ján - SHIRZADI, A. The local integral equation method for pattern formation simulations in reaction-diffusion systems. In Engineering Analysis with Boudary Elements, 2015, vol. 50, p. 329-340. (2014: 1.392 - IF, Q2 - JCR, 1.032 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2014.08.017>  
Citácie:  
1. [1.1] ALAM KHAN, N. - HAMEED, T. - AYAZ, M. - ABDUL RAZZA, O. *THE REACTION DIMERIZATION A Resourceful Slant Applied on the Fractional Partial Differential Equation. In THERMAL SCIENCE. ISSN 0354-9836, 2019, vol. 23, p. S2095-S2105., Registrované v: WOS*  
2. [1.1] DEHGHAN, M. - ABBASZADEH, M. *The simulation of some chemotactic bacteria patterns in liquid medium which arises in tumor growth with blow-up phenomena via a generalized smoothed particle hydrodynamics (GSPH) method. In ENGINEERING WITH COMPUTERS. ISSN 0177-0667, 2019, vol. 35, no. 3, p. 875-892., Registrované v: WOS*
- ADCA240 SOARES, D., Jr. - SLÁDEK, Vladimír - SLÁDEK, Ján. Modified meshless local Petrov-Galerkin formulations for elastodynamics. In International Journal for Numerical Methods in Engineering, 2012, vol. 90, iss. 12, p. 1508–1528. (2011: 2.009 - IF, Q1 - JCR, 2.132 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0029-5981. Dostupné na: <https://doi.org/10.1002/nme.3373>  
Citácie:  
1. [1.1] SINGH, R. - SINGH, K. M. *Stabilised MLS in MLPG method for heat conduction problem. In ENGINEERING COMPUTATIONS. ISSN 0264-4401, 2019, vol. 36, no. 4, p. 1323-1345., Registrované v: WOS*
- ADCA241 SOARES, D., Jr. - SLÁDEK, Ján - SLÁDEK, Vladimír. Non-linear dynamic analyses by meshless local Petrov-Galerkin formulations. In International Journal for Numerical Methods in Engineering, 2010, vol. 81, no. 13, p. 1687-1699. (2009: 2.025 - IF, Q1 - JCR, 1.932 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 0029-5981. Dostupné na: <https://doi.org/10.1002/nme.2756>  
Citácie:  
1. [1.1] SELLOUNTOS, E. J. - TIAGO, J. - SEQUEIRA, A. *Meshless velocity vorticity local boundary integral equation (LBIE) method for two dimensional incompressible Navier-Stokes equations. In INTERNATIONAL JOURNAL OF NUMERICAL METHODS FOR HEAT & FLUID FLOW. ISSN 0961-5539, 2019, vol. 29, no. 11, p. 4034-4073., Registrované v: WOS*  
2. [1.1] YANG, Z. J. - YAO, F. - OOI, E. T. - CHEN, X. W. *A scaled boundary finite element formulation for dynamic elastoplastic analysis. In INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING. ISSN 0029-5981, 2019, vol. 120, no. 4, p. 517-536., Registrované v: WOS*

- ADCA242 SOLANO LAMPHAR, H. A. - KOCIFAJ, Miroslav. Urban artificial light emission function determined experimentally using night sky images. In Journal of Quantitative Spectroscopy & Radiative Transfer, 2016, vol. 181, p. 87-95. (2015: 2.859 - IF, Q1 - JCR, 1.156 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0022-4073. Dostupné na: <https://doi.org/10.1016/j.jqsrt.2016.04.027> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest. VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)  
Citácie:  
1. [1.1] JECHOW, Andreas - HOELKER, Franz - KYBA, Christopher C. M. Using all-sky differential photometry to investigate how nocturnal clouds darken the night sky in rural areas. In SCIENTIFIC REPORTS. ISSN 2045-2322, 2019, vol. 9, art. no. 1391., Registrované v: WOS
- ADCA243 TADEU, A. - STAŇÁK, Peter - SLÁDEK, Ján - SLÁDEK, Vladimír - PRATA, J. - SIMÕES, N. A Coupled BEM-MLPG Technique for the Thermal Analysis of Non-Homogeneous Media. In CMES: Computer Modeling in Engineering & Sciences, 2013, vol. 93, no. 6, p. 489-516. (2012: 0.849 - IF, Q2 - JCR, 0.727 - SJR, karentované - CCC). (2013 - Current Contents). ISSN 1526-1492.  
Citácie:  
1. [1.1] LI, Z. Y. - CHEN, Z. J. - WU, X. H. - TAO, W. Q. Coupled MLPG-FVM simulation of steady state heat conduction in irregular geometry. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 100, p. 265-275., Registrované v: WOS
- ADCA244 TADEU, A. - STAŇÁK, Peter - SLÁDEK, Ján - SLÁDEK, Vladimír. Coupled BEM-MLPG acoustic analysis for non-homogeneous media. In Engineering Analysis with Boundary Elements, 2014, vol. 44, p. 161-169. (2013: 1.437 - IF, Q1 - JCR, 1.167 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2014.01.023>  
Citácie:  
1. [1.1] CHEN, L. C. - LI, X. L. An improved boundary point interpolation method for exterior acoustic radiation problem. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 103, p. 11-21., Registrované v: WOS  
2. [1.1] DOGAN, H. - OCHMANN, M. A New Test Function for Acoustic Computations with Meshless Methods. In JOURNAL OF THEORETICAL AND COMPUTATIONAL ACOUSTICS. ISSN 2591-7285, 2019, vol. 27, no. 1, art. no. 1940001., Registrované v: WOS  
3. [1.1] LI, Z. Y. - CHEN, Z. J. - WU, X. H. - TAO, W. Q. Coupled MLPG-FVM simulation of steady state heat conduction in irregular geometry. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 100, p. 265-275., Registrované v: WOS  
4. [1.2] ZHANG, X. - YANG, J. - ZHANG, W. Analysis of spatial resolution in the wave propagation simulation with smoothed particle hydrodynamic method. In INTER-NOISE 2019 MADRID 48th International Congress and Exhibition on Noise Control Engineering, 2019., Registrované v: SCOPUS
- ADCA245 TANAKA, M. - SLÁDEK, Vladimír - SLÁDEK, Ján. Regularization techniques applied to boundary element methods. In Applied Mechanics Reviews, 1994, vol. 47, p. 457-499. ISSN 0003-6900.  
Citácie:  
1. [1.1] BORDON, J. D. R. - AZNAREZ, J. J. - MAESO, O. Numerical integration scheme for singular integrals based on polar coordinates free from angular

- quasi-singularities. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 103, p. 126-136., Registrované v: WOS*
2. [1.1] GONG, Y. P. - TREVELYAN, J. - HATTORI, G. - DONG, C. Y. Hybrid nearly singular integration for isogeometric boundary element analysis of coatings and other thin 2D structures. In COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING. ISSN 0045-7825, 2019, vol. 346, p. 642-673., Registrované v: WOS
3. [1.1] LI, B. - XIANG, S. H. Efficient methods for highly oscillatory integrals with weakly singular and hypersingular kernels. In APPLIED MATHEMATICS AND COMPUTATION. ISSN 0096-3003, 2019, vol. 362, art. no. UNSP 124499., Registrované v: WOS
- ADCA246 TESÁR, Alexander. The effect of diaphragms on distortion vibration on thin-walled box beams. In Computers & Structures, 1998, vol. 66, no. 4, p. 499-507. ISSN 0045-7949.
- Citácie:
1. [1.1] JIANG, L. Z. - YU, J. - ZHOU, W. B. - FENG, Y. L. - CHAI, X. L. Analysis of flexural natural vibrations of thin-walled box beams using higher order beam theory. In STRUCTURAL DESIGN OF TALL AND SPECIAL BUILDINGS. ISSN 1541-7794, 2019, vol. 28, no. 14, art. no. e1659., Registrované v: WOS
- ADCA247 TSANG, Ernest K. W. - KOCIFAJ, Miroslav\*\* - LI, Danny H. W. - KUNDRACIK, F. - MOHELNÍKOVÁ, Jitka. Straight light pipes' daylighting: A case study for different climatic zones. In Solar Energy, 2018, vol. 179, p. 56-63. (2017: 4.374 - IF, Q1 - JCR, 1.615 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0038-092X. Dostupné na: <https://doi.org/10.1016/j.solener.2018.05.042> (VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy)
- Citácie:
1. [1.1] MALET-DAMOUR, B. - BIGOT, D. - GUICHARD, S. - BOYER, H. Photometrical analysis of mirrored light pipe: From state-of-the-art on experimental results (1990-2019) to the proposition of new experimental observations in high solar potential climates. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 193, p. 637-653., Registrované v: WOS
2. [1.2] OBRADOVIC, Biljana - MATUSIAK, Barbara Szybinska. Daylight transport systems for buildings at high latitudes. In Journal of Daylighting. ISSN 23838701, 2019, 6, 2, p. 60-79., Registrované v: SCOPUS
3. [1.2] ULLAH, I. Heliostats daylighting system for multi-floor buildings. In Journal of Daylighting. ISSN 23838701, 2019-12-01, 6, 2, p. 202-209., Registrované v: SCOPUS
- ADCA248 VALÍČEK, J. - DRŽÍK, Milan - HLOCH, S. - OHLÍDAL, M. - MILOSLAV, L. - GOMBÁR, M. - RADVANSKÁ, A. - HLAVÁČEK, P. - PÁLENÍKOVÁ, K. Experimental analysis of irregularities of metallic surfaces generated by abrasive waterjet. In International Journal of Machine Tools and Manufacture, 2007, vol. 47, p. 1786-1790. (2006: 1.184 - IF, Q1 - JCR, 1.390 - SJR, Q1 - SJR). ISSN 0890-6955.
- Citácie:
1. [1.1] LV, Zhe - HOU, Rongguo - WANG, Tao - HUANG, Chuanzhen - ZHU, Hongtao. Research on cavitation involved in ultrasonic-assisted abrasive waterjet machining. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2019, vol. 101, no. 5-8, p. 1879-1886., Registrované v: WOS
2. [1.1] PEREC, Andrzej - PUDE, Frank - GRIGORYEV, Anton - KAUFELD, Michael - WEGENER, Konrad. A study of wear on focusing tubes exposed to

- corundum-based abrasives in the waterjet cutting process. In INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY. ISSN 0268-3768, 2019, vol. 104, no. 5-8, p. 2415-2427., Registrované v: WOS*
3. [1.2] KARAKURT, I. - AYDIN, G. - YILDIRIM, F. - KAYA, S. *Methods for improvement of abrasive waterjet cutting performance. In IMCET 2019 Proceedings of the 26th International Mining Congress and Exhibition of Turkey, 2019, p. 1340-1345., Registrované v: SCOPUS*
- ADCA249 WANG, Shiu-an-Man - MATIAŠOVSKÝ, Peter - MIHÁLKA, Peter - LAI, Chi-Ming\*\*. Experimental investigation of the daily thermal performance of a mPCM honeycomb wallboard. In *Energy and Buildings*, 2018, vol. 159, p. 419-425. (2017: 4.457 - IF, Q1 - JCR, 2.061 - SJR, Q1 - SJR, karentované - CCC). (2018 - Current Contents). ISSN 0378-7788. Dostupné na: <https://doi.org/10.1016/j.enbuild.2017.10.080>
- Citácie:
1. [1.1] ALAM, M. - ZOU, P. X. W. - SANJAYAN, J. - RAMAKRISHNAN, S. *Energy saving performance assessment and lessons learned from the operation of an active phase change materials system in a multi-storey building in Melbourne. In APPLIED ENERGY. ISSN 0306-2619, 2019, vol. 238, p. 1582-1595., Registrované v: WOS*
2. [1.1] SHIH, H. M. - LIN, Y. P. - LIN, L. P. - LAI, C. M. *Thermal Characterization of a Heat Management Module Containing Microencapsulated Phase Change Material. In ENERGIES. ISSN 1996-1073, 2019, vol. 12, no. 11, art. no. 2164., Registrované v: WOS*
3. [1.1] XIE, N. - LUO, J. M. - LI, Z. P. - HUANG, Z. W. - GAO, X. N. - FANG, Y. T. - ZHANG, Z. G. *Salt hydrate/expanded vermiculite composite as a form-stable phase change material for building energy storage. In SOLAR ENERGY MATERIALS AND SOLAR CELLS. ISSN 0927-0248, 2019, vol. 189, p. 33-42., Registrované v: WOS*
- ADCA250 WÜNSCHE, Michael - ZHANG, C. - KUNA, M. - HIROSE, S. - SLÁDEK, Ján - SLÁDEK, Vladimír. A hypersingular time-domain BEM for 2D dynamic crack analysis in anisotropic solids. In *International Journal for Numerical Methods in Engineering*, 2009, vol. 78, no. 2, p. 127-150. (2008: 2.229 - IF, Q1 - JCR, 2.065 - SJR, Q1 - SJR). ISSN 0029-5981.
- Citácie:
1. [1.1] AGHAHOSSEINI, A. - KHOSRAVIFARD, A. - BUI, T. Q. *Efficient analysis of dynamic fracture mechanics in various media by a novel meshfree approach. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 99, p. 161-176., Registrované v: WOS*
- ADCA251 WÜNSCHE, Michael - SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, Chuanzeng - GARCIA SANCHEZ, F. - SAEZ, A. Dynamic crack analysis in piezoelectric solids under time-harmonic loadings with a symmetric Galerkin boundary element method. In *Engineering Analysis with Boundary Elements*, 2017, vol. 84, p. 141-153. (2016: 1.721 - IF, Q2 - JCR, 1.025 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2017.08.013> (SASPRO 0106/01/01 : Multiškálové modelovanie vrstevnatých, vláknami vystužených a poréznych magnetoelektrických materiálov)
- Citácie:
1. [1.1] AYATOLLAHI, M. - FARTASH, A. H. *Multiple interfacial cracks in dissimilar piezoelectric layers under time harmonic loadings. In FATIGUE & FRACTURE OF ENGINEERING MATERIALS & STRUCTURES. ISSN 8756-758X, 2019, vol. 42, no. 2, p. 466-479., Registrované v: WOS*



2. [1.1] LIU, H. T. - WU, J. G. - LI, T. J. *Dynamic analytical solution of a limited-permeable mode-I crack in piezoelectric materials based on the non-local theory.* In *WAVE MOTION*. ISSN 0165-2125, 2019, vol. 90, p. 82-98., Registrované v: WOS
  3. [1.1] MISHRA, R. - BURELA, R. G. *Thermo-electro-mechanical fatigue crack growth simulation in piezoelectric solids using XFEM approach.* In *THEORETICAL AND APPLIED FRACTURE MECHANICS*. ISSN 0167-8442, 2019, vol. 104, art. no. 102388., Registrované v: WOS
  4. [1.1] XIE, G. Z. - ZHOU, F. L. - ZHANG, D. H. - WEN, X. Y. - LI, H. *A novel triangular boundary crack front element for 3D crack problems based on 8-node serendipity element.* In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 105, p. 296-302., Registrované v: WOS
  5. [1.2] ZHOU, Q. - CHEN, Y. *Free vibration analysis of thin-walled axisymmetric structures with boundary element method.* In *Lixue Xuebao/Chinese Journal of Theoretical and Applied Mechanics*. ISSN 04591879, 2019, 51, 1, p. 146-158., Registrované v: SCOPUS
- ADCA252 XIE, L. - ZHANG, C. - SLÁDEK, Ján - SLÁDEK, Vladimír. Unified analytical expressions of the three-dimensional fundamental solutions and their derivatives for linear elastic anisotropic materials. In *Proceedings of the Royal Society : A-Mathematical Physical and Engineering Sciences*, 2016, vol. 472, no. 2186, art. no. 20150272. (2015: 1.935 - IF, Q2 - JCR, 0.936 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 1364-5021. Dostupné na: <https://doi.org/10.1098/rspa.2015.0272>
- Citácie:
1. [1.1] TOKOVYY, Y. *Direct integration of three-dimensional thermoelasticity equations for a transversely isotropic layer.* In *JOURNAL OF THERMAL STRESSES*. ISSN 0149-5739, 2019, vol. 42, no. 1, p. 49-64., Registrované v: WOS
  2. [1.1] ZHAN, Q. W. - ZHUANG, M. W. - FANG, Y. - LIU, J. G. - LIU, Q. H. *Green's function for anisotropic dispersive poroelastic media based on the Radon transform and eigenvector diagonalization.* In *PROCEEDINGS OF THE ROYAL SOCIETY A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES*. ISSN 1364-5021, 2019, vol. 475, no. 2221, art. no. 20180610., Registrované v: WOS
- ADCA253 XIE, L. - ZHANG, Chuanzeng - HWU, C. B. - SLÁDEK, Ján - SLÁDEK, Vladimír. On two accurate methods for computing 3D Green's function and its first and second derivatives in piezoelectricity. In *Engineering Analysis with Boundary Elements*, 2015, vol. 61, p. 183-193. (2014: 1.392 - IF, Q2 - JCR, 1.032 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2015.07.014>
- Citácie:
1. [1.1] BURONI, F. C. - UBESSI, C. - HATTORI, G. - MARCZAK, R. J. - SAEZ, A. *A fast and non-degenerate scheme for the evaluation of the 3D fundamental solution and its derivatives for fully anisotropic magneto-electro-elastic materials.* In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 105, p. 94-103., Registrované v: WOS
  2. [1.1] IGUMNOV, L. A. - MARKOV, I. P. - BOEV, A. *BOUNDARY ELEMENT TIME-HARMONIC ANALYSIS OF 3D LINEAR PIEZOELECTRIC SOLIDS.* In *MATERIALS PHYSICS AND MECHANICS*. ISSN 1605-2730, 2019, vol. 42, no. 2, p. 256-264., Registrované v: WOS
- ADCA254 YOUNG, D. L. - HUANG, Y. J. - WU, C. S. - SLÁDEK, Vladimír - SLÁDEK, Ján. Angular basis functions formulation for 2D potential flows with non-smooth boundaries. In *Engineering Analysis with Boundary Elements*, 2015, vol. 61, p. 1-15.

(2014: 1.392 - IF, Q2 - JCR, 1.032 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0955-7997. Dostupné na:  
<https://doi.org/10.1016/j.enganabound.2015.06.011>

Citácie:

1. [1.1] KUO, C. L. - YEIH, W. C. - KU, C. Y. - FAN, C. M. *The method of two-point angular basis function for solving Laplace equation. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 106, p. 264-274., Registrované v: WOS*

ADCA255 ZHANG, C. - SLÁDEK, Ján - SLÁDEK, Vladimír. Effects of material gradients on transient dynamic mode-III stress intensity factors in a FGM. In International Journal of Solids and Structures, 2003, vol. 40, no. 20, p. 5251-5270. (2003 - Current Contents). ISSN 0020-7683.

Citácie:

1. [1.1] BAGHERI, R. *Analytical Solution of Cracked Functionally Graded Magneto-Electro-Elastic Half-Plane Under Impact Loading. In IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF MECHANICAL ENGINEERING. ISSN 2228-6187, 2019., Registrované v: WOS*

ADCA256 ZHANG, C. - SLÁDEK, Ján - SLÁDEK, Vladimír. Crack analysis in unidirectionally and bidirectionally functionally graded materials. In International Journal of Fracture, 2004, vol. 129, no. 4, p. 385-406. (2004 - Current Contents). ISSN 0376-9429.

Citácie:

1. [1.1] CHO, J. R. *A Numerical Evaluation of SIFs of 2-D Functionally Graded Materials by Enriched Natural Element Method. In APPLIED SCIENCES-BASEL, 2019, vol. 9, no. 17, art. no. 3581., Registrované v: WOS*

2. [1.1] CHO, J. R. *Computation of mixed-mode stress intensity factors in functionally graded materials by natural element method. In STEEL AND COMPOSITE STRUCTURES. ISSN 1229-9367, 2019, vol. 31, no. 1, p. 43-51., Registrované v: WOS*

3. [1.1] KUMAR, M. - SINGH, I. - MISHRA, B. K. *Fatigue crack growth simulations of plastically graded materials using XFEM and J-integral decomposition approach. In ENGINEERING FRACTURE MECHANICS. ISSN 0013-7944, 2019, vol. 216, art. no. 106470., Registrované v: WOS*

ADCA257 ZHANG, Chuanzeng - SLÁDEK, Ján - SLÁDEK, Vladimír. Numerical analysis of cracked functionally graded materials. In Advances in Fracture and Damage Mechanics : Book Series: Key Engineering Materials, 2003, vol. 251-2, p. 463-471. (2002: 0.497 - IF). ISSN 1013-9826.

Citácie:

1. [1.1] GHANNADPOUR, S. A. M. - KARIMI, M. - TORNABENE, F. *Application of plate decomposition technique in nonlinear and post-buckling analysis of functionally graded plates containing crack. In COMPOSITE STRUCTURES. ISSN 0263-8223, 2019, vol. 220, p. 158-167., Registrované v: WOS*

ADCA258 ZHANG, Chuanzeng - CUI, M. - WANG, J. - GAO, X.W. - SLÁDEK, Ján - SLÁDEK, Vladimír. 3D crack analysis in functionally graded materials. In Engineering Fracture Mechanics, 2011, vol. 78, p. 585-604. (2010: 1.576 - IF, Q1 - JCR, 1.447 - SJR, Q1 - SJR, karentované - CCC). (2011 - Current Contents). ISSN 0013-7944. Dostupné na: <https://doi.org/10.1016/j.engfracmech.2010.05.017>

Citácie:

1. [1.1] AL-BAYATI, S. A. - WROBEL, L. C. *Radial integration boundary element method for two-dimensional non-homogeneous convection-diffusion-reaction problems with variable source term. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 101, p. 89-101.,*



*Registrované v: WOS*

2. [1.1] GAYEN, D. - TIWARI, R. - CHAKRABORTY, D. *Static and dynamic analyses of cracked functionally graded structural components: A review. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, 2019, vol. 173, art. no. UNSP 106982., Registrované v: WOS*

3. [1.1] MEMARI, A. - AZAR, M. R. K. - VAKILI-TAHAMI, F. *Meshless fracture analysis of 3D planar cracks with generalized thermo-mechanical stress intensity factors. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 169-194., Registrované v: WOS*

4. [1.1] MEMARI, A. - AZAR, M. R. K. *Thermo-mechanical shock fracture analysis by meshless method. In THEORETICAL AND APPLIED FRACTURE MECHANICS. ISSN 0167-8442, 2019, vol. 102, p. 171-192., Registrované v: WOS*

5. [1.1] SIMIONATO, F. - DAROS, C. H. *Boundary element method analysis for mode III linear fracture mechanics in anisotropic and nonhomogeneous media. In ZAMM-ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND MECHANIK. ISSN 0044-2267, 2019, vol. 99, no. 10, art. no. UNSP e201800211., Registrované v: WOS*

6. [1.1] YAO, W. A. - WANG, Z. H. - ZUO, C. - HU, X. F. *Precise time-domain expanding boundary element method for solving phase change problems. In NUMERICAL HEAT TRANSFER PART B-FUNDAMENTALS. ISSN 1040-7790, 2019, vol. 76, no. 4, p. 203-223., Registrované v: WOS*

7. [1.2] GNITKO, V. V. - DEGTYARIOV, K. G. - KARAIEV, A. A. - STRELNIKOVA, E. A. *Multi-domain boundary element method for axisymmetric problems in potential theory and linear isotropic elasticity. In WIT Transactions on Engineering Sciences. ISSN 17433533, 2019, 122, p. 13-25., Registrované v: SCOPUS*

ADCA259 ZHANG, Y. M. - SLÁDEK, Vladimír - SLÁDEK, Ján - LIU, Z. Y. *A new boundary integral equation formulation for plane orthotropic elastic media. In Applied Mathematical Modeling, 2012, vol. 36, iss. 10, p. 4862-4875. (2011: 1.579 - IF, Q1 - JCR, 0.844 - SJR, Q1 - SJR, karentované - CCC). (2012 - Current Contents). ISSN 0307-904X. Dostupné na: <https://doi.org/10.1016/j.apm.2011.12.023>*

*Citácie:*

1. [1.1] GONG, Y. P. - YANG, H. S. - DONG, C. Y. *A novel interface integral formulation for 3D steady state thermal conduction problem for a medium with non-homogenous inclusions. In COMPUTATIONAL MECHANICS. ISSN 0178-7675, 2019, vol. 63, no. 2, p. 181-199., Registrované v: WOS*

ADCA260 ZHANG, Y. M. - LI, X. - SLÁDEK, Vladimír - SLÁDEK, Ján - GAO, X.W. *Computation of nearly singular integrals in 3D BEM. In Engineering Analysis with Boundary Elements, 2014, vol. 48, p. 32-42. (2013: 1.437 - IF, Q1 - JCR, 1.167 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2014.07.004>*

*Citácie:*

1. [1.1] MA, H. - HE, D. H. - TIAN, Y. *High order isoparametric elements in boundary element method Smooth spheroidal element. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 104, p. 34-45., Registrované v: WOS*

2. [1.1] MA, H. - TIAN, Y. - HE, D. H. *High order isoparametric elements in boundary element method-Smooth elliptical element. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 101, p. 37-47., Registrované v: WOS*

3. [1.1] ZHOU, F. L. - WANG, W. J. - XIE, G. Z. - LIAO, H. Y. - CAO, Y. *The*

*Distance-Sinh combined transformation for near-singularity cancelation based on the generalized Duffy normalization. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 108, p. 108-114.,*

*Registrované v: WOS*

- ADCA261 ZHANG, Y. M. - LIU, Z. Y. - GAO, X.W. - SLÁDEK, Vladimír - SLÁDEK, Ján. A novel boundary element approach for solving the 2D elasticity problems. In Applied Mathematics and Computation, 2014, vol. 232, p. 568-580. (2013: 1.600 - IF, Q1 - JCR, 1.143 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 0096-3003. Dostupné na: <https://doi.org/10.1016/j.amc.2014.01.071>

*Citácie:*

*1. [1.1] GONG, Y. P. - YANG, H. S. - DONG, C. Y. A novel interface integral formulation for 3D steady state thermal conduction problem for a medium with non-homogenous inclusions. In COMPUTATIONAL MECHANICS. ISSN 0178-7675, 2019, vol. 63, no. 2, p. 181-199., Registrované v: WOS*

- ADCA262 ZHANG, Y. M. - LI, X. - SLÁDEK, Vladimír - SLÁDEK, Ján - GAO, X. A new method for numerical evaluation of nearly singular integrals over high-order geometry elements in 3D BEM. In Journal of Computational and Applied Mathematics, 2015, vol. 277, p. 57-72. (2014: 1.266 - IF, Q1 - JCR, 1.066 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0377-0427. Dostupné na: <https://doi.org/10.1016/j.cam.2014.08.027>

*Citácie:*

*1. [1.1] ZHANG, Jianming - JU, Chuanming - DIVO, Eduardo - ZHONG, Yudong - CHI, Baotao. A binary-tree subdivision method for evaluation of singular integrals in 3D BEM. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 103, p. 80-93., Registrované v: WOS*

- ADCA263 ZHENG, H. - ZHANG, Chuanzeng - WANG, Y. - CHEN, W. - SLÁDEK, Ján - SLÁDEK, Vladimír. A local RBF collocation method for band structure computations of 2D solid/fluid and fluid/solid phononic crystals. In International Journal for Numerical Methods in Engineering, 2017, vol.110, iss. 5, p. 467-500. (2016: 2.162 - IF, Q1 - JCR, 1.751 - SJR, Q1 - SJR, karentované - CCC). (2017 - Current Contents). ISSN 0029-5981. Dostupné na: <https://doi.org/10.1002/nme.5366>

*Citácie:*

*1. [1.1] FU, Z. J. - TANG, Z. C. - ZHAO, H. T. - LI, P. W. - RABCZUK, T. Numerical solutions of the coupled unsteady nonlinear convection-diffusion equations based on generalized finite difference method. In EUROPEAN PHYSICAL JOURNAL PLUS. ISSN 2190-5444, 2019, vol. 134, no. 6, art. no. 272., Registrované v: WOS*

*2. [1.1] WU, L. J. - WANG, Yuan-zhan - LI, Y. - JI, C. N. A meshless method by using radial basis function for numerical solutions of wave shoaling equation. In JOURNAL OF HYDRODYNAMICS. ISSN 1001-6058, 2019, vol. 31, no. 1, p. 83-92., Registrované v: WOS*

*3. [1.2] SAEEDPANAH, I. - AZAR, R. Golmohamadi - SARKARDEH, H. An efficient radial basis function meshfree local petrov-galerkin method for modeling the unidirectional fully developed fluid flow. In Journal of Applied Fluid Mechanics. ISSN 17353572, 2019, 13, 2, p. 491-497., Registrované v: SCOPUS*

- ADCA264 ZHENG, H. - ZHANG, Chuanzeng - WANG, Yong - SLÁDEK, Ján - SLÁDEK, Vladimír. A meshfree local RBF collocation method for anti-plane transverse elastic wave propagation analysis in 2D phononic crystals. In Journal of Computational Physics, 2016, vol. 305, p. 997-1014. (2015: 2.556 - IF, Q1 - JCR, 2.054 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0021-9991. Dostupné na: <https://doi.org/10.1016/j.jcp.2015.10.020>

*Citácie:*

1. [1.1] GODINHO, L. - REDONDO, J. - AMADO-MENDES, P. The method of fundamental solutions for the analysis of infinite 3D sonic crystals. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 98, p. 172-183., Registrované v: WOS
2. [1.1] GOLUB, M. - DOROSHENKO, O. Boundary integral equation method for simulation scattering of elastic waves obliquely incident to a doubly periodic array of interface delaminations. In *JOURNAL OF COMPUTATIONAL PHYSICS*. ISSN 0021-9991, 2019, vol. 376, p. 675-693., Registrované v: WOS
3. [1.1] KHOSROWPOUR, E. - HEMATIYAN, M. R. - HAJHASHEMKHANI, M. A strong-form meshfree method for stress analysis of hyperelastic materials. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 109, p. 32-42., Registrované v: WOS
4. [1.1] LI, W. W. - CHEN, W. Simulation of the band structure for scalar waves in 2D phononic crystals by the singular boundary method. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 101, p. 17-26., Registrované v: WOS
5. [1.1] SHEIKHI, N. - NAJAFI, M. - ENJILELA, V. Extending the Meshless Local Petrov-Galerkin Method to Solve Stabilized Turbulent Fluid Flow Problems. In *INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS*. ISSN 0219-8762, 2019, vol. 16, no. 1, art. no. 1850086., Registrované v: WOS
6. [1.1] YAO, L. Y. - HUANG, G. L. - CHEN, H. - BARNHART, M. A modified smoothed finite element method (M-SFEM) for analyzing the band gap in phononic crystals. In *ACTA MECHANICA*. ISSN 0001-5970, 2019, vol. 230, no. 6, p. 2279-2293., Registrované v: WOS
7. [1.1] YAO, L. Y. - JIANG, G. Q. - WU, F. - LUO, J. Y. Band structure computation of two-dimensional and three-dimensional phononic crystals using a finite element-least square point interpolation method. In *APPLIED MATHEMATICAL MODELLING*. ISSN 0307-904X, 2019, vol. 76, p. 591-606., Registrované v: WOS
8. [1.2] WANG, Lihua - LI, Y. - CHU, F. Finite Subdomain Radial Basis Collocation Method for The Large Deformation Analysis. In *Lixue Xuebao/Chinese Journal of Theoretical and Applied Mechanics*. ISSN 04591879, 2019, 51, 3, p. 743-753., Registrované v: SCOPUS

ADCA265 ZHENG, H. - ZHANG, Chuanzeng - WANG, Yong - SLÁDEK, Ján - SLÁDEK, Vladimír. Band structure computation of in-plane elastic waves in 2D phononic crystals by a meshfree local RBF collocation method. In *Engineering Analysis with Boundary Elements*, 2016, vol. 66, p. 77-90. (2015: 1.862 - IF, Q1 - JCR, 1.180 - SJR, Q1 - SJR, karentované - CCC). (2016 - Current Contents). ISSN 0955-7997. Dostupné na: <https://doi.org/10.1016/j.enganabound.2016.01.012>

Citácie:

1. [1.1] GODINHO, L. - REDONDO, J. - AMADO-MENDES, P. The method of fundamental solutions for the analysis of infinite 3D sonic crystals. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 98, p. 172-183., Registrované v: WOS
2. [1.1] LI, W. W. - CHEN, W. Simulation of the band structure for scalar waves in 2D phononic crystals by the singular boundary method. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 101, p. 17-26., Registrované v: WOS
3. [1.1] YAO, L. Y. - HUANG, G. L. - CHEN, H. - BARNHART, M. A modified smoothed finite element method (M-SFEM) for analyzing the band gap in phononic crystals. In *ACTA MECHANICA*. ISSN 0001-5970, 2019, vol. 230, no. 6, p. 2279-2293., Registrované v: WOS

4. [1.1] YAO, L. Y. - JIANG, G. Q. - WU, F. - LUO, J. Y. *Band structure computation of two-dimensional and three-dimensional phononic crystals using a finite element-least square point interpolation method. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-904X, 2019, vol. 76, p. 591-606., Registrované v: WOS*
  5. [1.2] GODINHO, L. - REDONDO, J. - AMADO-MENDES, P. *3D analysis of sonic crystal structures with absorbing scatterers. In INTER-NOISE 2019 MADRID 48th International Congress and Exhibition on Noise Control Engineering, 2019., Registrované v: SCOPUS*
- ADCA266 ŽEMLIČKA, Matúš - KUZIELOVÁ, Eva - KULIFFAYOVÁ, Marta - TKACZ, Jakub - PÁLOU, Martin T.. Study of hydration products in the model systems metakaolin-lime and metakaolin-lime-gypsum. In *Ceramics-Silikáty*, 2015, vol. 59, no. 4, p. 283-291. (2014: 0.435 - IF, Q3 - JCR, 0.405 - SJR, Q2 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 0862-5468.
- Citácie:
1. [1.1] WANG, Y. Y. - SHUI, Z. H. - GAO, X. - HUANG, Y. - YU, R. - LING, G. *Chloride binding behaviors of metakaolin-lime hydrated blends: Influence of gypsum and atmospheric carbonation. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 201, p. 380-390., Registrované v: WOS*
- ADCA267 ŽIVICA, Vladimír. High effective silica fume alkali activator. In *Bulletin of Materials Science*, 2004, vol. 27, no. 2, p. 179-182. (2004 - Current Contents). ISSN 0250-4707.
- Citácie:
1. [1.1] BATISTA, R. P. - TRINDADE, A. C. C. - BORGES, P. H. R. - SILVA, F. D. *Silica Fume as Precursor in the Development of Sustainable and High-Performance MK-Based Alkali-Activated Materials Reinforced With Short PVA Fibers. In FRONTIERS IN MATERIALS. ISSN 2296-8016, 2019, vol. 6, art. no. 77., Registrované v: WOS*
  2. [1.1] VILLAQUIRAN-CAICEDO, M. A. *Studying different silica sources for preparation of alternative waterglass used in preparation of binary geopolymer binders from metakaolin/boiler slag. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 227, art. no. 116621., Registrované v: WOS*
- ADCA268 ŽIVICA, Vladimír. Corrosion of reinforcement induced by environment containing chloride and carbon dioxide. In *Bulletin of Materials Science*, 2003, vol. 26, no. 6, p. 605-608. ISSN 0250-4707.
- Citácie:
1. [1.1] RAHMANI, H. - GHEIB, M. M. *CO2 curing of hydrated lime modified pervious concretes. In MAGAZINE OF CIVIL ENGINEERING. ISSN 2071-4726, 2019, vol. 92, no. 8, p. 106-114., Registrované v: WOS*
- ADCA269 ŽIVICA, Vladimír. Significance and influence of the ambient temperature as a rate factor of steel reinforcement corrosion. In *Bulletin of Materials Science*, 2002, vol. 25, no. 5, p. 375-379. ISSN 0250-4707.
- Citácie:
1. [1.2] SENIN, S. F. - HAMID, R. - AHMAD, J. - ROSLI, M. I. F. - YUSUFF, A. - ROHIM, R. - ABDUL GHANI, K. D. - MOHAMED NOOR, S. *Damage detection of artificial corroded rebars and quantification using non-destructive methods on reinforced concrete structure. In Journal of Physics: Conference Series. ISSN 17426588, 2019, 1349, 1, art. no. 012044., Registrované v: SCOPUS*
- ADCA270 ŽIVICA, Vladimír - SZABO, V. The behaviour of cement composite under compression loads at sulphate attack. In *Cement and concrete research*, 1994, vol. 24, no. 8, p. 1475-1484. ISSN 0008-8846.



Citácie:

1. [1.1] GONG, J. - CAO, J. - WANG, Y. F. *Effect of creep on the stress-strain relation of fly-ash slag concrete in marine environments. In STRUCTURAL CONCRETE. ISSN 1464-4177, 2019, vol. 20, no. 3, p. 1076-1085., Registrované v: WOS*

2. [1.1] IKUMI, T. - SEGURA, I. - CAVALARO, S. H. P. *Effects of biaxial confinement in mortars exposed to external sulfate attack. In CEMENT & CONCRETE COMPOSITES. ISSN 0958-9465, 2019, vol. 95, p. 111-127., Registrované v: WOS*

3. [1.1] YAN, X. - YANG, G. - JIANG, L. - SONG, Z. - GUO, M. - CHEN, Y. *Influence of compressive fatigue on the sulfate resistance of slag contained concrete under steam curing. In STRUCTURAL CONCRETE. ISSN 1464-4177, 2019, vol. 20, no. 5, p. 1572-1582., Registrované v: WOS*

4. [1.2] LUO, D. M. - NIU, D. T. - SU, L. *Research progress on durability of stressed concrete under environmental actions. In Gongcheng Lixue/Engineering Mechanics. ISSN 10004750, 2019, 36, 1, p. 1-14., Registrované v: SCOPUS*

ADCA271 ŽIVICA, Vladimír - PALOU, Martin T. - IFKA, Tomáš - BÁGEL, Ľubomír. High strength metahalloysite based geopolymer. In *Composites Part B: Engineering*, 2014, vol. 57, p. 155-165. (2013: 2.602 - IF, Q1 - JCR, 1.380 - SJR, karentované - CCC). (2014 - Current Contents). ISSN 1359-8368. Dostupné na: <https://doi.org/10.1016/j.compositesb.2013.09.034>

Citácie:

1. [1.1] LI, L. B. - ZHANG, H. M. - GUO, X. Y. - ZHOU, X. M. - LU, L. C. - CHEN, M. X. - CHENG, X. *Pore structure evolution and strength development of hardened cement paste with super low water-to-cement ratios. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 227, art. no. UNSP 117108., Registrované v: WOS*

2. [1.1] SITARZ-PALCZAK, E. - KALEMBKIEWICZ, J. - GALAS, D. *Comparative study on the characteristics of coal fly ash and biomass ash geopolymers. In ARCHIVES OF ENVIRONMENTAL PROTECTION. ISSN 2083-4772, 2019, vol. 45, no. 1, p. 126-135., Registrované v: WOS*

ADCA272 ŽIVICA, Vladimír. Effectiveness of new silicafume alkali activator. In *Cement and Concrete Composites*, 2006, vol. 28, p. 21-25. (2005: 0.457 - IF, Q2 - JCR, 0.890 - SJR, Q1 - SJR). ISSN 0958-9465.

Citácie:

1. [1.1] BATISTA, R. P. - TRINDADE, A. C. C. - BORGES, P. H. R. - SILVA, F. D. A. *Silica Fume as Precursor in the Development of Sustainable and High-Performance MK-Based Alkali-Activated Materials Reinforced With Short PVA Fibers. In FRONTIERS IN MATERIALS. ISSN 2296-8016, 2019, vol. 6, art. no. 77., Registrované v: WOS*

2. [1.1] CHEN, C. - LI, X. - CHEN, X. - CHAI, J. - TIAN, H. *Development of cemented paste backfill based on the addition of three mineral additions using the mixture design modeling approach. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 229, art. no. 116919., Registrované v: WOS*

3. [1.1] KANG, S. H. - KWON, Y. H. - HONG, S. G. - CHUN, S. - MOON, J. *Hydrated lime activation on byproducts for eco-friendly production of structural mortars. In JOURNAL OF CLEANER PRODUCTION. ISSN 0959-6526, 2019, vol. 231, p. 1389-1398., Registrované v: WOS*

4. [1.1] VILLAQUIRAN-CAICEDO, M. A. *Studying different silica sources for preparation of alternative waterglass used in preparation of binary geopolymer binders from metakaolin/boiler slag. In CONSTRUCTION AND BUILDING*

*MATERIALS. ISSN 0950-0618, 2019, vol. 227, art. no. 116621., Registrované v: WOS*

5. [1.1] VINAI, R. - SOUTSOS, M. *Production of sodium silicate powder from waste glass cullet for alkali activation of alternative binders. In CEMENT AND CONCRETE RESEARCH. ISSN 0008-8846, 2019, vol. 116, p. 45-56., Registrované v: WOS*

6. [1.1] YOU, N. - LI, B. - CAO, R. - SHI, J. - CHEN, C. - ZHANG, Y. *The influence of steel slag and ferronickel slag on the properties of alkali-activated slag mortar. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 227, art. no. 116614., Registrované v: WOS*

7. [1.2] AWOYERA, P. - ADESINA, A. *A critical review on application of alkali activated slag as a sustainable composite binder. In Case Studies in Construction Materials. ISSN 22145095, 2019, 11, art. no. e00268., Registrované v: SCOPUS*

ADCA273 ŽIVICA, Vladimír - PALOU, Martin T.. *Physico-chemical characterization of thermally treated bentonite. In Composites Part B: Engineering, 2015, vol. 68, p. 436-445. (2014: 2.983 - IF, Q1 - JCR, 1.951 - SJR, Q1 - SJR, karentované - CCC). (2015 - Current Contents). ISSN 1359-8368. Dostupné na: <https://doi.org/10.1016/j.compositesb.2014.07.019>*

Citácie:

1. [1.1] DE OLIVEIRA, A. D. - BARBOSA DE LIMA, M. A. - DE OLIVEIRA PIRES, L. H. - DA SILVA, M. R. - SOUZA DA LUZ, P. T. - ANGELICA, R. S. - DA ROCHA FILHO, G. N. - DA COSTA, C. E. F. - LUQUE, R. - SANTOS DO NASCIMENTO, L. A. *Bentonites Modified with Phosphomolybdic Heteropolyacid (HPMo) for Biowaste to Biofuel Production. In MATERIALS, 2019, vol. 12, no. 9, art. no. 1431., Registrované v: WOS*

2. [1.1] MEKATEL, E. - AMORKRANE, S. - TRARI, M. - NIBOU, D. - DAHDOUH, N. - LADJALI, S. *Combined Adsorption/Photocatalysis Process for the Decolorization of Acid Orange 61. In ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING. ISSN 2193-567X, 2019, vol. 44, no. 6, p. 5311-5322., Registrované v: WOS*

3. [1.1] MUHAMMAD, B. Z. - DARMAWAN, M. A. - GOZAN, M. *Reduction of Beta-carotene with Thermal Activated Bentonite in Illipe Butter from Nanga Yen, Kalimantan Barat. In PROCEEDINGS OF THE 5TH INTERNATIONAL SYMPOSIUM ON APPLIED CHEMISTRY 2019. ISSN 0094-243X, 2019, vol. 2175, art. no. 020046., Registrované v: WOS*

#### ADCB Vedecké práce v zahraničných karentovaných časopisoch – neimpaktovaných

ADCB01 FRANKOVSKÁ, J. - ANDREJKOVIČOVÁ, Slávka - JANOTKA, Ivan. *Effect of NaCl on hydraulic properties of bentonite and bentonite-palygorskite mixture. In Geosynthetics International, 2010, vol. 17, no. 4, p. 250-259. (2009: 1.833 - SJR, Q1 - SJR, karentované - CCC). (2010 - Current Contents). ISSN 1072-6349. Dostupné na: <https://doi.org/10.1680/gein.2010.17.4.250>*

Citácie:

1. [1.1] NARTOWSKA, E. - KOZLOWSKI, T. - GAWDZIK, J. *Assessment of the influence of copper and zinc on the microstructural parameters and hydraulic conductivity of bentonites on the basis of SEM tests. In HELIYON. ISSN 2405-8440, 2019, vol. 5, no. 7, art. no. e02142., Registrované v: WOS*

2. [1.1] NARTOWSKA, E. *The effects of potentially toxic metals (copper and zinc) on selected physical and physico-chemical properties of bentonites. In HELIYON. ISSN 2405-8440, 2019, vol. 5, no. 10, art. no. e02563., Registrované v: WOS*



## ADDB Vedecké práce v domácich karentovaných časopisoch – neimpaktovaných

- ADDB01 ANDRÁŠIOVÁ, Katarína - DULLA, Matúš - HABERLANDOVÁ, Katarína - MORAVČÍKOVÁ, Henrieta - KRIŠTEKOVÁ, Laura - SZALAY, Peter. Planning the unplanned city: Modern urban conceptions in a traditional urban structure = Plánované neplánované mestá: Moderné urbanistické koncepcie v tradičnej mestskej štruktúre. In *Architektúra & urbanizmus : journal of architectural and town-planning theory*, 2015, roč. 49, č. 3-4, s. 83-103. (2014: 0.130 - SJR, Q2 - SJR, karentované - CCC). (2015 - Current Contents, Web of Science, Scopus). ISSN 0044-8680.  
Citácie:  
1. [2.1] BARTOSOVA, N. *Planning through a Prism of Individual Interests: Historical Events Defining the Area of Bratislava's Former Key Industrial Zone. In MESTO A DEJINY. ISSN 1339-0163, 2019, vol. 8, no. 2, p. 39-62., Registrované v: WOS*  
2. [2.1] SCEPANOVA, S. *The Greater Bratislava of Architects Alois Balan and Jiri Grossmann. In ARCHITEKTURA & URBANIZMUS. ISSN 0044-8680, 2019, vol. 53, no. 1-2, p. 89-102., Registrované v: WOS*
- ADDB02 HABERLANDOVÁ, Katarína. The New Bratislava of Josef Marek = Nová Bratislava Josefa Mareka. In *Architektúra & urbanizmus : journal of architectural and town-planning theory*, 2017, roč. 51, č. 3-4, s. 162-175. (2016: 0.114 - SJR, Q3 - SJR, karentované - CCC). (2017 - Current Contents, Web of Science, Scopus). ISSN 0044-8680.(VEGA 2/0074/17 : Neplánované mesto: architektonické a urbanistické koncepcie 20. storočia a ich priemet do mestskej štruktúry Bratislavy. APVV-16-0584 : Nezamýšľané mesto: Architektonické a urbanistické koncepcie 19. a 20. storočia v mestskej štruktúre Bratislavy)  
Citácie:  
1. [2.1] SCEPANOVA, S. *The Greater Bratislava of Architects Alois Balan and Jiri Grossmann. In ARCHITEKTURA & URBANIZMUS. ISSN 0044-8680, 2019, vol. 53, no. 1-2, p. 89-102., Registrované v: WOS*
- ADDB03 MORAVČÍKOVÁ, Henrieta - LOVRA, Éva - KRIŠTEKOVÁ, Laura. Red or Blue? The Start of Modern Planning in Bratislava = Červený alebo modrý? Začiatky moderného plánovania Bratislavy. In *Architektúra & urbanizmus : journal of architectural and town-planning theory*, 2017, roč. 51, č. 1-2, s. 31-44. (2016: 0.114 - SJR, Q3 - SJR, karentované - CCC). (2017 - Current Contents, Web of Science, Scopus). ISSN 0044-8680.(VEGA 2/0074/17 : Neplánované mesto: architektonické a urbanistické koncepcie 20. storočia a ich priemet do mestskej štruktúry Bratislavy)  
Citácie:  
1. [2.1] BARTOSOVA, N. *Planning through a Prism of Individual Interests: Historical Events Defining the Area of Bratislava's Former Key Industrial Zone. In MESTO A DEJINY. ISSN 1339-0163, 2019, vol. 8, no. 2, p. 39-62., Registrované v: WOS*  
2. [2.1] SCEPANOVA, S. *The Greater Bratislava of Architects Alois Balan and Jiri Grossmann. In ARCHITEKTURA & URBANIZMUS. ISSN 0044-8680, 2019, vol. 53, no. 1-2, p. 89-102., Registrované v: WOS*

## ADEA Vedecké práce v ostatných zahraničných časopisoch – impaktovaných

- ADEA01 JANOTKA, Ivan - PUERTAS, F. - PALACIOS, M. - KULIFFAYOVÁ, Marta - VARGA, C. Metakaolin sand-blended-cement pastes: Rheology, hydration process and mechanical properties. In *Construction and Building Materials*, 2010, vol. 24, no. 5, p. 791-802. (2009: 1.456 - IF, Q1 - JCR, 1.055 - SJR, Q1 - SJR). (2010 - Thomson Reuters Master Journal List). ISSN 0950-0618. Dostupné na:

<https://doi.org/10.1016/j.conbuildmat.2009.10.028>

Citácie:

1. [1.1] MENDOZA REALES, O. A. - DUDA, P. - SILVA, E. C. C. M. - PAIVA, M. D. M. - TOLEDO FILHO, R. D. Nanosilica particles as structural buildup agents for 3D printing with Portland cement pastes. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 219, p. 91-100.,

Registrované v: WOS

2. [1.2] MCCARTHY, M. J. - DYER, T. D. Pozzolanas and pozzolanic materials. In Lea's Chemistry of Cement and Concrete, 2019, p. 363-467., Registrované v: SCOPUS

ADEA02 JERGA, Ján. Physico-mechanical properties of carbonated concrete. In Construction and Building Materials, 2004, vol. 18, no. 9, p. 645-652. (2004 - Thomson Reuters Master Journal List). ISSN 0950-0618.

Citácie:

1. [1.1] HERNANDEZ, H. H. - DIAZ, F. G. - SAN MIGUEL, G. D. - ALTAMIRANO, J. C. V. - MORAN, C. O. G. - HERNANDEZ, J. M.

Electrochemical Impedance Spectroscopy as a Practical Tool for Monitoring the Carbonation Process on Reinforced Concrete Structures. In ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING. ISSN 2193-567X, 2019, vol. 44, no. 12, p. 10087-10103., Registrované v: WOS

2. [1.1] LI, Y. - ZHANG, S. - WANG, R. J. - ZHAO, Y. - MEN, C. S. Effects of carbonation treatment on the crushing characteristics of recycled coarse aggregates. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 201, p. 408-420., Registrované v: WOS

3. [1.1] MENG, Y. Z. - LING, T. C. - MO, K. H. - TIAN, W. H. Enhancement of high temperature performance of cement blocks via CO<sub>2</sub> curing. In SCIENCE OF THE TOTAL ENVIRONMENT. ISSN 0048-9697, 2019, vol. 671, p. 827-837., Registrované v: WOS

4. [1.1] XIE, Qifang - ZHANG, Lipeng - YIN, Shenghua - ZHANG, Baozhuang - WU, Yaopeng. Effects of High Temperatures on the Physical and Mechanical Properties of Carbonated Ordinary Concrete. In ADVANCES IN MATERIALS SCIENCE AND ENGINEERING. ISSN 1687-8434, 2019, vol. 2019, art. no. 5753232., Registrované v: WOS

5. [1.1] ZHANG, Z. G. - DING, Y. Z. - QIAN, S. Z. Influence of bacterial incorporation on mechanical properties of engineered cementitious composites (ECC). In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 196, p. 195-203., Registrované v: WOS

6. [1.2] MCCARTHY, M. J. - DYER, T. D. Pozzolanas and pozzolanic materials. In Lea's Chemistry of Cement and Concrete, 2019, p. 363-467., Registrované v: SCOPUS

ADEA03 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, Chuanzeng - TAN, C. L. Evaluation of fracture parameters for crack problems in FGM a meshless method. In Journal of Theoretical and Applied Mechanics, 2006, vol. 44, p. 603-636. ISSN 1429-2955.

Citácie:

1. [1.1] LI, Y. - LI, J. - WEN, P. H. Finite and infinite block Petrov-Galerkin method for cracks in functionally graded materials. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-904X, 2019, vol. 68, p. 306-326., Registrované v: WOS

ADEA04 ŽIVICA, Vladimír. Sulfate resistance of the cement materials based on the modified silica fume. In Construction and Building Materials, 2000, vol. 14, no. 1, p. 17-26. ISSN 0950-0618.

Citácie:

1. [1.1] LIU, H. - LUO, G. - WANG, L. - WANG, W. - LI, W. - GONG, Y. *Laboratory Evaluation of Eco-Friendly Pervious Concrete Pavement Material Containing Silica Fume. In APPLIED SCIENCES-BASEL. ISSN 2076-3417, 2019, vol. 9, no. 1, article number: 73., Registrované v: WOS*
- ADEA05 ŽIVICA, Vladimír. Utilisation of electrical resistance method for the evaluation of the state of steel reinforcement in concrete and the rate its corrosion. In *Construction and Building Materials*, 2000, vol. 14, no. 6-7, p. 351-358. ISSN 0950-0618.
- Citácie:
1. [1.1] DONG, W. K. - LI, W. G. - SHEN, L. M. - SHENG, D. C. *Piezoresistive behaviours of carbon black cement-based sensors with layer-distributed conductive rubber fibres. In MATERIALS & DESIGN. ISSN 0264-1275, 2019, vol. 182, art. no. 108012., Registrované v: WOS*
2. [1.1] LUO, D. - LI, Y. Y. - LI, J. N. - LIM, K. S. - NAZAL, N. A. M. - AHMAD, H. *A Recent Progress of Steel Bar Corrosion Diagnostic Techniques in RC Structures. In SENSORS, 2019, vol. 19, no. 1, art. no. 34., Registrované v: WOS*
- ADEA06 ŽIVICA, Vladimír - BAJZA, A. Acidic attack of cement based materials - a review. Part 1. Principle of acidic attack. In *Construction and Building Materials*, 2001, vol. 15, no. 8, p. 331-340. ISSN 0950-0618.
- Citácie:
1. [1.1] BISHT, K. - RAMANA, P. V. *Waste to resource conversion of crumb rubber for production of sulphuric acid resistant concrete. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 194, p. 276-286., Registrované v: WOS*
2. [1.1] COLLIER, N. C. - HEYES, D. W. - BUTCHER, E. J. - BORWICK, J. - MILODOWSKI, A. E. - FIELD, L. P. - KEMP, S. J. - MOUNTENEY, I. - BERNAL, S. A. - CORKHILL, C. L. - HYATT, N. C. - PROVIS, J. L. - BLACK, L. *Gaseous carbonation of cementitious backfill for geological disposal of radioactive waste: Nirex Reference Vault Backfill. In APPLIED GEOCHEMISTRY. ISSN 0883-2927, 2019, vol. 106, p. 120-133., Registrované v: WOS*
3. [1.1] DU, S. - WU, J. - ALSHAREEDAH, O. - SHI, X. *Nanotechnology in Cement-Based Materials: A Review of Durability, Modeling, and Advanced Characterization. In NANOMATERIALS, 2019, vol. 9, no. 9, art. no. 1213., Registrované v: WOS*
4. [1.1] DURAMAN, S. B. - OMAR, M. F. H. H. *Durability of pulverised fuel ash (PFA) concrete exposed to acidic and alkali conditions. In INTERNATIONAL CONFERENCE ON SUSTAINABLE CIVIL ENGINEERING STRUCTURES AND CONSTRUCTION MATERIALS (SCESCM 2018). ISSN 2261-236X, 2019, vol. 258, art. no. UNSP 05015., Registrované v: WOS*
5. [1.1] ELNAGGAR, E. M. - ELSOKKARY, T. M. - SHOHIDE, M. A. - EL-SABBAGH, B. A. - ABDEL-GAWWAD, H. A. *Surface protection of concrete by new protective coating. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 220, p. 245-252., Registrované v: WOS*
6. [1.1] GHORBANI, S. - TAJI, I. - DE BRITO, J. - NEGAHBAN, M. - GHORBANI, S. - TAVAKKOLIZADEH, M. - DAVOODI, A. *Mechanical and durability behaviour of concrete with granite waste dust as partial cement replacement under adverse exposure conditions. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 194, p. 143-152., Registrované v: WOS*
7. [1.1] HOOTON, R. D. *Future directions for design, specification, testing, and construction of durable concrete structures. In CEMENT AND CONCRETE RESEARCH. ISSN 0008-8846, 2019, vol. 124, art. no. 105827., Registrované v:*

WOS

8. [1.1] JUAN-VALDES, A. - GARCIA-GONZALEZ, J. - RODRIGUEZ-ROBLES, D. - MORAN-DEL POZO, J. M. - IGNACIO GUERRA-ROMERO, M. - DE BELIE, N. *The use of recycled concrete in the livestock farming sector. In V CONGRESO IBEROAMERICANO DE HORMIGON AUTOCOMPACTANTE Y HORMIGONES ESPECIALES*, 2018, p. 701-710., Registrované v: WOS
9. [1.1] SENHADJI, Y. - SIAD, H. - ESCADEILLAS, G. - BENOSMAN, A. S. - CHIHAOUI, R. - MOULI, M. - LACHEMI, M. *Physical, mechanical and thermal properties of lightweight composite mortars containing recycled polyvinyl chloride. In CONSTRUCTION AND BUILDING MATERIALS*. ISSN 0950-0618, 2019, vol. 195, p. 198-207., Registrované v: WOS
10. [1.1] TAMBUNAN, T. - JUKI, M. I. - OTHMAN, N. *Mechanical properties of sulphate reduction bacteria on the durability of concrete in chloride condition. In INTERNATIONAL CONFERENCE ON SUSTAINABLE CIVIL ENGINEERING STRUCTURES AND CONSTRUCTION MATERIALS (SCESCM 2018)*. ISSN 2261-236X, 2019, vol. 258, art. no. UNSP 01024., Registrované v: WOS
11. [1.1] VAF AEI, M. - ALLAHVERDI, A. - DONG, P. - BASSIM, N. *Durability performance of geopolymer cement based on fly ash and calcium aluminate cement in mild concentration acid solutions. In JOURNAL OF SUSTAINABLE CEMENT-BASED MATERIALS*. ISSN 2165-0373, 2019, vol. 8, no. 5, p. 290-308., Registrované v: WOS
12. [1.1] VEIGA, M. D. - SILVA, A. S. *Mortars. In LONG-TERM PERFORMANCE AND DURABILITY OF MASONRY STRUCTURES: DEGRADATION MECHANISMS, HEALTH MONITORING AND SERVICE LIFE DESIGN*. ISSN 2052-4714, 2019, p. 169-208., Registrované v: WOS
13. [1.1] WEI, H. - BAI, X. - QIAN, G. - WANG, F. - LI, Z. - JIN, J. - ZHANG, Y. *Aging Mechanism and Properties of SBS Modified Bitumen under Complex Environmental Conditions. In MATERIALS*, 2019, vol. 12, no. 7, art. no. 1189., Registrované v: WOS
14. [1.1] WU, L. - HU, C. - LIU, W. V. *Effects of pozzolans on acid resistance of shotcrete for sewer tunnel rehabilitation. In JOURNAL OF SUSTAINABLE CEMENT-BASED MATERIALS*. ISSN 2165-0373, 2019, vol. 8, no. 1, p. 55-77., Registrované v: WOS
15. [1.2] AL-ASADI, A. K. - RAMADAN, S. H. *Effect of silica fume on the compressive strength and acid resistance of concrete. In Journal of Engineering and Applied Science*. ISSN 11101903, 2019, 66, 5, p. 659-678., Registrované v: SCOPUS
16. [1.2] CAO, C. - ZHENG, S. - HU, W. *A Survey on Concrete Structure Properties Under Acid Rain Erosion. In Cailiao Daobao/Materials Reports*, 2019, 33, 6, p. 1869-1874., Registrované v: SCOPUS
17. [1.2] ONDREJKA HARBULAKOVA, V. - ESTOKOVA, A. - LUPTAKOVA, A. *Investigation of calcium and sulfur content changes in liquid medium due to bacterial attack on concrete. In Advances and Trends in Engineering Sciences and Technologies III- Proceedings of the 3rd International Conference on Engineering Sciences and Technologies, ESaT 2018*, 2019, p. 503-508., Registrované v: SCOPUS
18. [1.2] PAVLÍK, V. *Acid attack on hardened cement paste by acids forming low soluble calcium salts. In IOP Conference Series: Materials Science and Engineering*. ISSN 17578981, 2019, 549, 1, art. no. 012020., Registrované v: SCOPUS
19. [1.2] RAMASWAMY, K. P. - SANTHANAM, M. *Degradation kinetics of cement-based materials in citric acid. In Lecture Notes in Civil Engineering*. ISSN



- 23662557, 2019, 11, p. 891-905., *Registrované v: SCOPUS*
- ADEA07 ŽIVICA, Vladimír. Acidic attack of cement based materials - a review Part 3: research and test methods. Zivica V. In *Construction and Building Materials*, 2004, vol. 18, no. 9, p. 683-688. (2004 - Thomson Reuters Master Journal List). ISSN 0950-0618.
- Citácie:*
1. [1.2] CAO, C. - ZHENG, S. - HU, W. *A Survey on Concrete Structure Properties Under Acid Rain Erosion. In Cailiao Daobao/Materials Reports*, 2019, 33, 6, p. 1869-1874., *Registrované v: SCOPUS*
- ADEA08 ŽIVICA, Vladimír - BAJZA, A. Acidic attack of cement-based materials - a review Part 2. Factors of rate of acidic attack and protective measures. In *Construction and Building Materials*, 2002, vol. 16, no.4, p. 215-222. ISSN 0950-0618.
- Citácie:*
1. [1.1] ABDELOUAHED, A. - HEBHOUB, H. - KHERRAF, L. - BELACHIA, M. *EFFECT OF COCKLE SHELLS ON MORTARS PERFORMANCE IN EXTREME CONDITIONS. In CIVIL AND ENVIRONMENTAL ENGINEERING REPORTS. ISSN 2080-5187*, 2019, vol. 29, no. 2, p. 60-73., *Registrované v: WOS*
2. [1.1] BISHT, K. - RAMANA, P. V. *Waste to resource conversion of crumb rubber for production of sulphuric acid resistant concrete. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618*, 2019, vol. 194, p. 276-286., *Registrované v: WOS*
3. [1.1] BOUBEKEUR, T. - BOULEKBACHE, B. - AOUDJANE, K. - EZZIANE, K. - KADRI, E. H. *Prediction of the durability performance of ternary cement containing limestone powder and ground granulated blast furnace slag. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618*, 2019, vol. 209, p. 215-221., *Registrované v: WOS*
4. [1.1] BOUKHELKHAL, A. - AZZOUZ, L. - KENAI, S. - KADRI, E. H. - BENABED, B. *Combined effects of mineral additions and curing conditions on strength and durability of self-compacting mortars exposed to aggressive solutions in the natural hot-dry climate in North African desert region. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618*, 2019, vol. 197, p. 307-318., *Registrované v: WOS*
5. [1.1] BREITENBUECHER, R. - BAECKER, J. - KUNZ, S. - EHRENBERG, A. - GERTEN, C. *Optimizing the Acid Resistance of Concrete with Granulated Blast-Furnace Slag. In INTERNATIONAL CONFERENCE ON CONCRETE REPAIR, REHABILITATION AND RETROFITTING (ICCRRR 2018). ISSN 2261-236X*, 2018, vol. 199, art. no. 02001., *Registrované v: WOS*
6. [1.1] VAFAEI, M. - ALLAHVERDI, A. - DONG, P. - BASSIM, N. *Durability performance of geopolymer cement based on fly ash and calcium aluminate cement in mild concentration acid solutions. In JOURNAL OF SUSTAINABLE CEMENT-BASED MATERIALS. ISSN 2165-0373*, 2019, vol. 8, no. 5, p. 290-308., *Registrované v: WOS*
7. [1.2] CAO, C. - ZHENG, S. - HU, W. *A Survey on Concrete Structure Properties Under Acid Rain Erosion. In Cailiao Daobao/Materials Reports*, 2019, 33, 6, p. 1869-1874., *Registrované v: SCOPUS*
8. [1.2] OLIVIA, M. - SITOMPUL, I. R. - SAPUTRA, E. - SUTIKNO, S. - YAMAMOTO, K. *Effectiveness of using pozzolanic material for concrete canal blocks in tropical peatland. In IOP Conference Series: Materials Science and Engineering. ISSN 17578981*, 2019, 615, 1, art. no. 012111., *Registrované v: SCOPUS*
- ADEA09 ŽIVICA, Vladimír. Acidic resistance of materials based on the novel use of silica fume in concrete. In *Construction and Building Materials*, 1999, vol. 13, no. 5, p.

263-269. ISSN 0950-0618.

Citácie:

1. [1.2] OLIVIA, M. - SITOMPUL, I. R. - SAPUTRA, E. - SUTIKNO, S. - YAMAMOTO, K. Effectiveness of using pozzolanic material for concrete canal blocks in tropical peatland. In *IOP Conference Series: Materials Science and Engineering*. ISSN 17578981, 2019, 615, 1, art. no. 012111., Registrované v: SCOPUS

ADEA10

ŽIVICA, Vladimír. Effects of the very low water/cement ratio. In *Construction and Building Materials*, 2009, vol. 23, no.12, p. 3579-3582. (2008: 0.947 - IF, Q1 - JCR, 0.869 - SJR, Q1 - SJR). (2009 - Thomson Reuters Master Journal List). ISSN 0950-0618.

Citácie:

1. [1.1] ABDULMATIN, A. - TANGCHIRAPAT, W. - JATURAPITAKKUL, C. Environmentally friendly interlocking concrete paving block containing new cementing material and recycled concrete aggregate. In *EUROPEAN JOURNAL OF ENVIRONMENTAL AND CIVIL ENGINEERING*. ISSN 1964-8189, 2019, vol. 23, no. 12, p. 1467-1484., Registrované v: WOS
2. [1.1] DASTGERDI, A. S. - PETERMAN, R. J. - RIDING, K. - BECK, B. T. Effect of concrete mixture components, proportioning, and compressive strength on fracture parameters. In *CONSTRUCTION AND BUILDING MATERIALS*. ISSN 0950-0618, 2019, vol. 206, p. 179-192., Registrované v: WOS
3. [1.1] HUANG, H. F. - AN, M. Z. - WANG, Y. - YU, Z. R. - JI, W. Y. Effect of environmental thermal fatigue on concrete performance based on mesostructural and microstructural analyses. In *CONSTRUCTION AND BUILDING MATERIALS*. ISSN 0950-0618, 2019, vol. 207, p. 450-462., Registrované v: WOS
4. [1.1] KARGARI, A. - ESKANDARI-NADDAF, H. - KAZEMI, R. Effect of cement strength class on the generalization of Abrams' law. In *STRUCTURAL CONCRETE*. ISSN 1464-4177, 2019, vol. 20, no. 1, p. 493-505., Registrované v: WOS
5. [1.1] KHONGPERMGOSON, P. - ABDULMATIN, A. - TANGCHIRAPAT, W. - JATURAPITAKKUL, C. Evaluation of compressive strength and resistance of chloride ingress of concrete using a novel binder from ground coal bottom ash and ground calcium carbide residue. In *CONSTRUCTION AND BUILDING MATERIALS*. ISSN 0950-0618, 2019, vol. 214, p. 631-640., Registrované v: WOS
6. [1.1] LI, L. B. - ZHANG, H. M. - GUO, X. Y. - ZHOU, X. M. - LU, L. C. - CHEN, M. X. - CHENG, X. Pore structure evolution and strength development of hardened cement paste with super low water-to-cement ratios. In *CONSTRUCTION AND BUILDING MATERIALS*. ISSN 0950-0618, 2019, vol. 227, art. no. 117108., Registrované v: WOS
7. [1.1] NAZERIGIVI, A. - NAJIGIVI, A. Study on mechanical properties of ternary blended concrete containing two different sizes of nano-SiO<sub>2</sub>. In *COMPOSITES PART B-ENGINEERING*. ISSN 1359-8368, 2019, vol. 167, p. 20-24., Registrované v: WOS

ADEA11

ŽIVICA, Vladimír - BALKOVIC, Svetozár - DRÁBIK, Milan. Properties of metakaolin geopolymer hardened paste prepared by high-pressure compaction. In *Construction and Building Materials*, 2011, vol. 25, p. 2206-2213. (2010: 1.366 - IF, Q1 - JCR, 1.345 - SJR, Q1 - SJR). (2011 - Thomson Reuters Master Journal List). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2010.11.004>

Citácie:

1. [1.1] ABDELMAWLA, M. - ABDELAAL, A. - BEHEARY, M. S. - ABDULLAH, N. A. - RAZEK, T. M. A. Compressive Strength of Geopolymeric Cubes Produced from Solid Wastes of Alum Industry and Drinking Water Treatment Plants. In



- EGYPTIAN JOURNAL OF CHEMISTRY. ISSN 0449-2285, 2019, vol. 62, no. 12, p. 2331-2340., Registrované v: WOS*
2. [1.1] CHEN, X. - ZHOU, M. K. - GE, X. X. - NIU, Z. D. - GUO, Y. G. Study on the microstructure of metakaolin-based geopolymer enhanced by polyacrylate. In *JOURNAL OF THE CERAMIC SOCIETY OF JAPAN. ISSN 1882-0743, 2019, vol. 127, no. 3, p. 165-172., Registrované v: WOS*
3. [1.1] RASAKI, S. A. - ZHANG, B. X. - GUARECUCO, R. - THOMAS, T. - YANG, M. H. Geopolymer for use in heavy metals adsorption, and advanced oxidative processes: A critical review. In *JOURNAL OF CLEANER PRODUCTION. ISSN 0959-6526, 2019, vol. 213, p. 42-58., Registrované v: WOS*
4. [1.1] SVILOVIC, S. - MUZEK, M. N. - NUIC, I. - VUCENOVIC, P. Taguchi design of optimum process parameters for sorption of copper ions using different sorbents. In *WATER SCIENCE AND TECHNOLOGY. ISSN 0273-1223, 2019, vol. 80, no. 1, p. 98-108., Registrované v: WOS*
5. [1.1] SZABO, R. Control of mechanical properties of lignite fly ash based geopolymers by vibrating compaction. In *EPITOANYAG-JOURNAL OF SILICATE BASED AND COMPOSITE MATERIALS. ISSN 0013-970X, 2019, vol. 71, no. 2, p. 66-71., Registrované v: WOS*

#### ADEB Vedecké práce v ostatných zahraničných časopisoch – neimpaktovaných

- ADEB01 DARULA, Stanislav - KITTLER, Richard - WITTKOPF, S.K. Outdoor illuminance levels in the tropics and their representation in virtual sky domes. In *Architectural Science Review, 2006, vol. 49, p. 301-313. (2005: 0.331 - SJR, Q1 - SJR). ISSN 0003-8628.*  
Citácie:  
1. [1.2] PHUONG NGUYEN, T. K. - TAMRAZYAN, A. G. - LE, M. T. Correction of the Uneven Brightness Coefficient for the Tropical Sky Conditions. In *IOP Conference Series: Materials Science and Engineering. ISSN 17578981, 2019, 661, 1, art. no. 012117., Registrované v: SCOPUS*
- ADEB02 JANOTKA, Ivan - KRAJČI, Ľudovít - UHLÍK, Peter - BAČUVČÍK, Michal. Natural and calcined clayey diatomite as cement replacement materials: Microstructure and pore structure study. In *International Journal of Research in Engineering and Technology, 2014, vol. 3, special iss. 13, p. 20-26. ISSN 2321-7308. Dostupné na internete: <<http://ijret.org/Archive?VI=20140325>>*  
Citácie:  
1. [1.1] GHOBARA, M. M. - MOHAMED, A. Diatomite in Use: Nature, Modifications, Commercial Applications and Prospective Trends. In *DIATOMS: FUNDAMENTALS AND APPLICATIONS, 2019, p. 471-509., Registrované v: WOS*  
2. [1.1] INCE, C. - DEROGAR, S. - BALL, R. J. - EKINCI, A. - YUZER, N. Long-term mechanical properties of cellulose fibre-reinforced cement mortar with diatomite. In *ADVANCES IN CEMENT RESEARCH. ISSN 0951-7197, 2019, vol. 31, no. 8, p. 343-352., Registrované v: WOS*
- ADEB03 JANOTKA, Ivan - KRAJČI, Ľudovít - KOMLOŠ, Karol - FRŤALOVÁ, D.M. Chloride corrosion of steel fibre reinforcement in cement mortar. In *The International Journal of Cement Composites and Lightweight Concrete, 1989, vol. 11, no. 4, p. 221-228.*  
Citácie:  
1. [1.1] FRAZAO, C. M. - BARROS, J. A. O. - BOGAS, J. A. Durability of Recycled Steel Fiber Reinforced Concrete in Chloride Environment. In *FIBERS, 2019, vol. 7, no. 12, art. no. 111., Registrované v: WOS*

- ADEB04 KITTLER, Richard - DARULA, Stanislav. Analemma, the ancient sketch of fictitious sunpath geometry—sun, time and history of mathematics. In *Architectural Science Review*, 2004, vol. 47, iss. 2, p. 141-144. ISSN 0003-8628.  
Citácie:  
1. [1.1] *DEVETAKOVIC, M. S. - DORDEVIC, D. D. - DUKANOVIC, G. D. - FURUNDZIC, A. D. K. - SUDIMAC, B. S. - SCOGNAMIGLIO, A. Design of Solar Systems for Buildings and Use of BIM Tools: Overview of Relevant Geometric Aspects. In FME TRANSACTIONS. ISSN 1451-2092, 2019, vol. 47, no. 2, p. 387-397., Registrované v: WOS*
- ADEB05 KITTLER, Richard - DARULA, Stanislav. Applying solar geometry to understand the foundation ritual of 'Old Kingdom' Egyptian pyramids. In *Architectural Science Review*, 2008, vol. 51, no. 4, p. 407-412. (2007: 0.449 - SJR, Q1 - SJR). (2008 - Scopus). ISSN 0003-8628.  
Citácie:  
1. [1.1] *DEVETAKOVIC, M. S. - DORDEVIC, D. D. - DUKANOVIC, G. D. - FURUNDZIC, A. D. K. - SUDIMAC, B. S. - SCOGNAMIGLIO, A. Design of Solar Systems for Buildings and Use of BIM Tools: Overview of Relevant Geometric Aspects. In FME TRANSACTIONS. ISSN 1451-2092, 2019, vol. 47, no. 2, p. 387-397., Registrované v: WOS*  
2. [1.1] *GUERRA, C. - DAISY, J. - ANTONIO, B. Factorial Research Design for description of value understanding conceptual geometry. In SITUARTE. ISSN 1856-7134, 2019, vol. 14, no. 24, p. 64-71., Registrované v: WOS*
- ADEB06 KOMLOŠ, Karol - POPOVICS, S. - NÜRNBERGEROVÁ, Terézia - BABAL, B. - POPOVICS, J. S. Comparison of five standards on ultrasonic pulse velocity testing of concrete. In *Cement Concrete and Aggregates*, 1996, vol. 18, no. 1, p. 42-48. ISSN 0149-6123.  
Citácie:  
1. [1.1] *AYDIN, E. - AREL, H. S. High-volume marble substitution in cement-paste: Towards a better sustainability. In JOURNAL OF CLEANER PRODUCTION. ISSN 0959-6526, 2019, vol. 237, art. no. UNSP 117801., Registrované v: WOS*
- ADEB07 KORONTHÁLYOVÁ, Oľga - MATIAŠOVSKÝ, Peter. Thermal conductivity of fibre reinforced porous calcium silicate hydrate-based. In *Journal of Building Physics*, 2003, vol. 26, no. 4, p. 71-89. ISSN 1744-2591.  
Citácie:  
1. [1.1] *GRUBESA, I. N. - TENI, M. - KRSTIC, H. - VRACEVIC, M. Influence of Freeze/Thaw Cycles on Mechanical and Thermal Properties of Masonry Wall and Masonry Wall Materials. In ENERGIES. ISSN 1996-1073, 2019, vol. 12, no. 8, art. no. 1464., Registrované v: WOS*
- ADEB08 SADOVSKÝ, Zoltán. A theoretical approach to the problem of the most dangerous initial deflection shape in stability type structural problems. In *Aplikace matematiky*, 1978, vol. 23, no. 4, p. 248-266. ISSN 0373-6725.  
Citácie:  
1. [1.1] *ASADNIA, M. - RODDIS, W. M. K. Out-of-Flatness Effect on Flexural Strength of Steel Bridge Girders. In TRANSPORTATION RESEARCH RECORD. ISSN 0361-1981, 2019, vol. 2673, no. 3, p. 561-573., Registrované v: WOS*
- ADEB09 SLÁDEK, Ján - SLÁDEK, Vladimír. The BIE analysis of the berger equation. In *Ingenieur Archiv*, 1983, vol. 53, iss. 6, p. 385-397. ISSN 0020-1154.  
Citácie:  
1. [1.1] *ORUC, O. Numerical solution to the deflection of thin plates using the two-dimensional Berger equation with a meshless method based on multiple-scale Pascal polynomials. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-*

- 904X, 2019, vol. 74, p. 441-456., Registrované v: WOS
- ADEB10 STAŇÁK, Peter - SLÁDEK, Vladimír - SLÁDEK, Ján - KRAHULEC, Slavomír - SÁTOR, Ladislav. Application of patch test in meshless analysis of continuously non-homogeneous piezoelectric circular plate. In Applied and Computational Mechanics, 2013, vol. 7, no. 1, p. 65-76. ISSN 1802-680X.
- Citácie:
1. [1.1] NOURMOHAMMADI, H. - BEHJAT, B. Geometrically nonlinear analysis of functionally graded piezoelectric plate using mesh-free RPIM. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 131-141., Registrované v: WOS
- ADEB11 TESÁR, Alexander. NONLINEAR-INTERACTIONS IN RESONANCE RESPONSE OF THIN SHELLS. In Computers & Structures, 1984, vol. 18, no. 6, p. 1047-1055. ISSN 0045-7949.
- Citácie:
1. [1.1] AHMADI, H. - FOROUTAN, K. Nonlinear primary resonance of spiral stiffened functionally graded cylindrical shells with damping force using the method of multiple scales. In THIN-WALLED STRUCTURES. ISSN 0263-8231, 2019, vol. 135, p. 33-44., Registrované v: WOS
2. [1.1] AHMADI, H. - FOROUTAN, K. Nonlinear vibration of stiffened multilayer FG cylindrical shells with spiral stiffeners rested on damping and elastic foundation in thermal environment. In THIN-WALLED STRUCTURES. ISSN 0263-8231, 2019, vol. 145, art. no. 106388., Registrované v: WOS
3. [1.1] AHMADI, H. - FOROUTAN, K. Superharmonic and Subharmonic Resonances of Spiral Stiffened Functionally Graded Cylindrical Shells under Harmonic Excitation. In INTERNATIONAL JOURNAL OF STRUCTURAL STABILITY AND DYNAMICS. ISSN 0219-4554, 2019, vol. 19, no. 10, art. no. 1950114., Registrované v: WOS
4. [1.1] AHMADI, H. Nonlinear primary resonance of imperfect spiral stiffened functionally graded cylindrical shells surrounded by damping and nonlinear elastic foundation. In ENGINEERING WITH COMPUTERS. ISSN 0177-0667, 2019, vol. 35, no. 4, p. 1491-1505., Registrované v: WOS
- ADEB12 TESÁR, Alexander. NONLINEAR 3-DIMENSIONAL RESONANCE ANALYSIS OF SHELLS. In Computers & Structures, 1985, vol. 21, no. 4, p. 797-805. ISSN 0045-7949.
- Citácie:
1. [1.1] AHMADI, H. - FOROUTAN, K. Combination resonance analysis of FG porous cylindrical shell under two-term excitation. In STEEL AND COMPOSITE STRUCTURES. ISSN 1229-9367, 2019, vol. 32, no. 2, p. 253-264., Registrované v: WOS
2. [1.1] AHMADI, H. - FOROUTAN, K. Nonlinear primary resonance of spiral stiffened functionally graded cylindrical shells with damping force using the method of multiple scales. In THIN-WALLED STRUCTURES. ISSN 0263-8231, 2019, vol. 135, p. 33-44., Registrované v: WOS
3. [1.1] AHMADI, H. Nonlinear primary resonance of imperfect spiral stiffened functionally graded cylindrical shells surrounded by damping and nonlinear elastic foundation. In ENGINEERING WITH COMPUTERS. ISSN 0177-0667, 2019, vol. 35, no. 4, p. 1491-1505., Registrované v: WOS
4. [1.1] AHMADI, Habib - FOROUTAN, Kamran. Nonlinear vibration of stiffened multilayer FG cylindrical shells with spiral stiffeners rested on damping and elastic foundation in thermal environment. In THIN-WALLED STRUCTURES. ISSN 0263-8231, 2019, vol. 145, art. no. 106388., Registrované v: WOS

5. [1.1] AHMADI, Habib - FOROUTAN, Kamran. *Superharmonic and Subharmonic Resonances of Spiral Stiffened Functionally Graded Cylindrical Shells under Harmonic Excitation. In INTERNATIONAL JOURNAL OF STRUCTURAL STABILITY AND DYNAMICS. ISSN 0219-4554, 2019, vol. 19, no. 10, art. no. 1950114., Registrované v: WOS*

#### ADFB Vedecké práce v ostatných domácich časopisoch – neimpaktovaných

- ADFB01 ANDRÁŠIOVÁ, Katarína. Šesťdesiate roky 20. storočia v architektúre Slovenska. Výskum prostredníctvom autobiografických výpovedí = The 1960s in Architecture of Slovakia. Autobiographical Stories as a Research method. In *Architektúra & urbanizmus : journal of architectural and town-planning theory*, 2008, roč. 42, č. 1-2, s. 119-140. ISSN 0044-8680.  
Citácie:  
1. [2.1] VITKOVA, L. - BOGAR, M. *Slovak Architects and Algerian Cities in the 1970s and 1980s-Historic Heritage, French Urban Planning and Czecho-Slovak Urban Interventions. In ARCHITEKTURA & URBANIZMUS. ISSN 0044-8680, 2019, vol. 53, no. 3-4, p. 130-145., Registrované v: WOS*
- ADFB02 HABERLANDOVÁ, Katarína. Princípy moderného bývania a urbanizmu v diele architekta Josefa Mareka. In *Forum historiae : odborný internetový časopis pre históriu a príbuzné spoločenské vedy*, 2016, roč. 10, č. 2, s. 35-47. ISSN 1337-6861. Názov z obrazovky. Dostupné na internete: <[http://forumhistoriae.sk/-/principy-moderneho-byvania-a-urbanizmu-v-diele-architekta-josefa-mareka?redirect=http%3A%2F%2Fforumhistoriae.sk%2F02%2F2016-kvalita-zivota-byvania-a-urbanizmu-v-meste-v-19.-a-20.-storoci%3Bjsessionid%3D4CBCEAC12A53B9F64B3C32C2A0FF6BA6%3Fp\\_p\\_id%3D101\\_INSTANCE\\_DdGl3ThmxDLK%26p\\_p\\_lifecycle%3D0%26p\\_p\\_state%3Dnormal%26p\\_p\\_mode%3Dview%26p\\_p\\_col\\_id%3Dcolumn-2%26p\\_p\\_col\\_pos%3D2%26p\\_p\\_col\\_count%3D3](http://forumhistoriae.sk/-/principy-moderneho-byvania-a-urbanizmu-v-diele-architekta-josefa-mareka?redirect=http%3A%2F%2Fforumhistoriae.sk%2F02%2F2016-kvalita-zivota-byvania-a-urbanizmu-v-meste-v-19.-a-20.-storoci%3Bjsessionid%3D4CBCEAC12A53B9F64B3C32C2A0FF6BA6%3Fp_p_id%3D101_INSTANCE_DdGl3ThmxDLK%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-2%26p_p_col_pos%3D2%26p_p_col_count%3D3)>  
Citácie:  
1. [2.1] SCEPANOVA, S. *The Greater Bratislava of Architects Alois Balan and Jiri Grossmann. In ARCHITEKTURA & URBANIZMUS. ISSN 0044-8680, 2019, vol. 53, no. 1-2, p. 89-102., Registrované v: WOS*
- ADFB03 HABERLANDOVÁ, Katarína - KALOVÁ, Petra. Prístav v Bratislave [Harbour in Bratislava]. In *Pamiatky a múzeá : revue pre kultúrne dedičstvo*, 2015, roč. 64, č. 1, s. 59-63. ISSN 1335-4353.  
Citácie:  
1. [2.1] BARTOSOVA, N. *Planning through a Prism of Individual Interests: Historical Events Defining the Area of Bratislava's Former Key Industrial Zone. In MESTO A DEJINY. ISSN 1339-0163, 2019, vol. 8, no. 2, p. 39-62., Registrované v: WOS*
- ADFB04 KITTLER, Richard - DARULA, Stanislav. Historická dôležitosť solárnej geometrie pre orientáciu v čase, priestore a v architektúre. In *Architektúra & urbanizmus : journal of architectural and town-planning theory*, 2008, roč. 42, č. 3-4, s. 159-165. ISSN 0044-8680.  
Citácie:  
1. [1.1] DEVETAKOVIC, M. S. - DORDEVIC, D. D. - DUKANOVIC, G. D. - FURUNDZIC, A. D. K. - SUDIMAC, B. S. - SCOGNAMIGLIO, A. *Design of Solar Systems for Buildings and Use of BIM Tools: Overview of Relevant Geometric Aspects. In FME TRANSACTIONS. ISSN 1451-2092, 2019, vol. 47, no. 2, p. 387-397., Registrované v: WOS*
- ADFB05 KONDÁŠ, Kristián - DARULA, Stanislav. Daylighting on the working plane in



oriented attic rooms under overcast and clear sky. In SSP - Journl of Civil Engineering : selected scientific papers, 2014, vol. 9, iss. 1, p. 33-40. ISSN 1336 – 9024.

Citácie:

1. [1.1] NOVAKOVA, P. - VAJKAY, F. *The Issue of the Daylighting Intensity by Light Guides. In 3RD WORLD MULTIDISCIPLINARY CIVIL ENGINEERING, ARCHITECTURE, URBAN PLANNING SYMPOSIUM (WMCAUS 2018). ISSN 1757-8981, 2019, vol. 471, art. no. 062025., Registrované v: WOS*

ADFB06 MORAVČÍKOVÁ, Henrieta. Baťovany – Partizánske: vzorné priemyselné mesto. In Architektúra & urbanizmus : journal of architectural and town-planning theory, 2003, roč. 37, č. 3-4, s. 113-146. ISSN 0044-8680.

Citácie:

1. [2.1] JANTO, J. *Modern City and Its Cultural Heritage the example of Partizanske and Nova Dubnica. In MUZEOLOGIA A KULTURNE DEDICSTVO-MUSEOLOGY AND CULTURAL HERITAGE. ISSN 1339-2204, 2019, vol. 7, no. 2, p. 109-121., Registrované v: WOS*

ADFB07 MORAVČÍKOVÁ, Henrieta. Moderná architektúra v čase a predpoklady jej udržateľnosti: Hotel Kyjev a bývalý obchodný dom Prior, 1960--2008. In Architektúra & urbanizmus : journal of architectural and town-planning theory, 2008, roč. XLII, č. 3-4, s. 183-198. ISSN 0044-8680.

Citácie:

1. [1.1] KVITKOVA, N. *Heritage Obscured: Undesirable Legacies of the Prior Department Stores in Slovakia. In STUDIES IN HISTORY AND THEORY OF ARCHITECTURE-STUDII DE ISTORIA SI TEORIA ARHITECTURII. ISSN 2344-6544, 2019, vol. 7, p. 171-188., Registrované v: WOS*

ADFB08 MORAVČÍKOVÁ, Henrieta. Zrod moderného mesta: zmeny obrazu slovenských miest v druhej polovici 19. a prvej polovici 20. Storočia. In Forum historiae : odborný internetový časopis pre históriu a príbuzné spoločenské vedy, 2016, roč. 10, č. 2, s. 1-11. ISSN 1337-6861. Názov z obrazovky. Dostupné na internete: <[http://forumhistoriae.sk/-/zrod-moderneho-mesta-zmeny-obrazu-slovenskych-miest-v-druhej-polovici-19-a-prvej-polovici-20-storocia?redirect=http%3A%2F%2Fforumhistoriae.sk%2F02%2F2016-kvalita-zivota-byvania-a-urbanizmu-v-meste-v-19.-a-20.-storoci%3Bjsessionid%3D4CBCEAC12A53B9F64B3C32C2A0FF6BA6%3Fp\\_p\\_id%3D101\\_INSTANCE\\_waELc4N9ncmc%26p\\_p\\_lifecycle%3D0%26p\\_p\\_state%3Dnormal%26p\\_p\\_mode%3Dview%26p\\_p\\_col\\_id%3Dcolumn-2%26p\\_p\\_col\\_pos%3D1%26p\\_p\\_col\\_count%3D3](http://forumhistoriae.sk/-/zrod-moderneho-mesta-zmeny-obrazu-slovenskych-miest-v-druhej-polovici-19-a-prvej-polovici-20-storocia?redirect=http%3A%2F%2Fforumhistoriae.sk%2F02%2F2016-kvalita-zivota-byvania-a-urbanizmu-v-meste-v-19.-a-20.-storoci%3Bjsessionid%3D4CBCEAC12A53B9F64B3C32C2A0FF6BA6%3Fp_p_id%3D101_INSTANCE_waELc4N9ncmc%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-2%26p_p_col_pos%3D1%26p_p_col_count%3D3)>

Citácie:

1. [2.1] JANTO, Juraj. *Modern City and Its Cultural Heritage the example of Partizanske and Nova Dubnica. In MUZEOLOGIA A KULTURNE DEDICSTVO-MUSEOLOGY AND CULTURAL HERITAGE. ISSN 1339-2204, 2019, vol. 7, no. 2, pp. 109-121., Registrované v: WOS*

2. [2.1] LASLAVIKOVA, Jana. *The city theatre in Pressburg in the context of the development of city theatres in Central Europe in the second half of the 19th century. In HISTORICKY CASOPIS. ISSN 0018-2575, 2019, vol. 67, no. 2, pp. 241-263., Registrované v: WOS*

ADFB09 MORAVČÍKOVÁ, Henrieta. Vývoj názorov na obnovu architektúry moderného hnutia: prípad Slovensko = The evolution of perspectives in restoration of modern movement architecture: case Slovakia. In Architektúra & urbanizmus : journal of architectural and town-planning theory, 2010, roč. XLIV, č. 3-4, s. 180-190. (2009: 0.101 - SJR, Q3 - SJR). (2010 - SCOPUS, CEOL, RIBA). ISSN 0044-8680.

Citácie:

1. [2.1] JANTO, J. *Modern City and Its Cultural Heritage the example of Partizanske and Nova Dubnica. In MUZEOLOGIA A KULTURNE DEDICSTVO-MUSEOLOGY AND CULTURAL HERITAGE. ISSN 1339-2204, 2019, vol. 7, no. 2, p. 109-121., Registrované v: WOS*
- ADFB10 STAŇÁK, Peter - SLÁDEK, Ján - SLÁDEK, Vladimír - KRAHULEC, Slavomír. Numerical MLPG analysis of piezoelectric sensor in structures. In *Slovak Journal of Civil Engineering*, 2014, vol. 22, no. 2, p. 15-20. ISSN 1210-3896.
- Citácie:
1. [1.1] NOURMOHAMMADI, H. - BEHJAT, B. *Geometrically nonlinear analysis of functionally graded piezoelectric plate using mesh-free RPIM. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 99, p. 131-141., Registrované v: WOS*
- ADFB11 SZALAY, Peter. Zahraničné styky Slovenskej architektonickej obce obdobia socializmu v grafoch a štatistikách = Graphics and statistics of the foreign relations of the slovak architectural community during socialism. In *Architektúra & urbanizmus : journal of architectural and town-planning theory*, 2006, roč. 40, č. 3-4, s. 171-187. ISSN 0044-8680.
- Citácie:
1. [2.1] VITKOVA, L. - BOGAR, M. *Slovak Architects and Algerian Cities in the 1970s and 1980s-Historic Heritage, French Urban Planning and Czecho-Slovak Urban Interventions. In ARCHITEKTURA & URBANIZMUS. ISSN 0044-8680, 2019, vol. 53, no. 3-4, p. 130-145., Registrované v: WOS*
- ADFB12 ŽIVICA, Vladimír - PALOU, Martin T. - KRIŽMA, Martin. Geopolymer cements and their properties: A Review. In *Building Research Journal*, 2014, vol. 61, no. 2, p. 85-100. ISSN 1335-8863.
- Citácie:
1. [1.1] BAYIHA, B. N. - BILLONG, N. - YAMB, E. - KAZE, R. C. - NZENGWA, R. *Effect of limestone dosages on some properties of geopolymer from thermally activated halloysite. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 217, p. 28-35., Registrované v: WOS*
2. [1.1] LUHAR, S. - CHENG, T. W. - NICOLAIDES, D. - LUHAR, I. - PANIAS, D. - SAKKAS, K. *Valorisation of glass waste for development of Geopolymer composites Mechanical properties and rheological characteristics: A review. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 220, p. 547-564., Registrované v: WOS*
3. [1.1] PIRES, E. F. C. - LIMA, T. V. - MARINHO, F. J. V. - DE VARGAS, A. S. - MOUNZER, E. C. - DARWISH, F. A. I. - SILVA, F. J. *Physical nonlinearity of precast reinforced geopolymer concrete beams. In JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T. ISSN 2238-7854, 2019, vol. 8, no. 2, p. 2083-2091., Registrované v: WOS*
4. [1.1] SAMARAKOON, M. H. - RANJITH, P. G. - RATHNAWEERA, T. D. - PERERA, M. S. A. *Recent advances in alkaline cement binders: A review. In JOURNAL OF CLEANER PRODUCTION. ISSN 0959-6526, 2019, vol. 227, p. 70-87., Registrované v: WOS*

#### ADMA Vedecké práce v zahraničných impaktovaných časopisoch registrovaných v databázach Web of Science alebo SCOPUS

- ADMA01 FERENČÍKOVÁ, Mária - DARULA, Stanislav. Availability of daylighting in school operating time. In *Light & Engineering*, 2017, vol. 25, no. 2, p. 71-78. (2016: 0.118 - IF, Q4 - JCR, 0.132 - SJR, Q4 - SJR). ISSN 0236-2945.(APVV 0118-12 : Simulovanie denného svetla v umelej oblohe. VEGA 2/0042/17)



Citácie:

1. [1.1] DOLNIKOVA, Erika - KATUNSKY, Dusan. *Visual Comfort Assessment in an Industrial Environment: A Case Study*. In ENVIRONMENTS. ISSN 2076-3298, 2019, vol. 6, no. 5, art. no. 54., Registrované v: WOS
2. [1.1] DOLNIKOVA, Erika. *ASSESSMENT OF DAYLIGHT IN THE SELECTED OFFICE THROUGH SIMULATION PROGRAMS: A CASE STUDY*. In ELECTRONIC JOURNAL OF THE FACULTY OF CIVIL ENGINEERING OSIJEK-E-GFOS. ISSN 1847-8948, 2019, vol. 18, p. 82-92., Registrované v: WOS

ADMA02 KORONTHÁLYOVÁ, Oľga. Moisture storage capacity and microstructure of ceramic brick and autoclaved aerated concrete. In Construction and Building Materials, 2011, vol. 25, no. 2, p. 879-885. (2010: 1.366 - IF, Q1 - JCR, 1.345 - SJR, Q1 - SJR). (2011 - Thomson Reuters Master Journal List). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2010.06.098>

Citácie:

1. [1.1] HE, X. - YIN, J. - YANG, J. W. - LIANG, Q. - WU, S. Y. *Effect of Dry-Wet Circulation on Moisture Absorption of Autoclaved Aerated Concrete*. In ADVANCES IN MATERIALS SCIENCE AND ENGINEERING. ISSN 1687-8434, 2019, vol. 2019, art. no. 4165482., Registrované v: WOS
2. [1.1] MANEewan, S. - JANYOOSUK, K. - HOY-YEN, C. - THONGTHA, A. *Incorporating black dust into autoclaved aerated concrete wall for heat transfer reduction*. In JOURNAL OF METALS MATERIALS AND MINERALS. ISSN 0857-6149, 2019, vol. 29, no. 3, p. 82-87., Registrované v: WOS
3. [1.1] THONGTHA, A. - KHONGTHON, A. - BOONSRI, T. - CHAN, H. Y. *Thermal Effectiveness Enhancement of Autoclaved Aerated Concrete Wall with PCM-Contained Conical Holes to Reduce the Cooling Load*. In MATERIALS, 2019, vol. 12, no. 13, art. no. 2170., Registrované v: WOS
4. [1.1] ZHANG, J. Z. - WU, J. - ZHANG, Y. R. - GAO, Y. H. - WANG, J. D. *Time-varying relationship between pore structures and chloride diffusivity of concrete under the simulated tidal environment*. In EUROPEAN JOURNAL OF ENVIRONMENTAL AND CIVIL ENGINEERING. ISSN 1964-8189, 2019, vol., no., p., Registrované v: WOS

ADMA03 KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - BAČA, Ľuboš - PACH, Ladislav. Preparation of lightweight foam concretes with bulk density less than 200 kg.m(-3) = Przygotowanie lekkich pianobetonów o gęstości pozornej mniejszej niż 200 kg·m-3. In Cement Wapno Beton, 2018, vol. 23, no. 5, p. 369-378. (2017: 0.468 - IF, Q4 - JCR, 0.364 - SJR, Q2 - SJR). ISSN 1425-8129.(VEGA 1/0696/15 : Vysokoporézne anorganické materiály pre tepelno-izolačné aplikácie)

Citácie:

1. [1.1] ABD ELRAHMAN, M. - CHUNG, S. Y. - SIKORA, P. - RUCINSKA, T. - STEPHAN, D. *Influence of Nanosilica on Mechanical Properties, Sorptivity, and Microstructure of Lightweight Concrete*. In MATERIALS, 2019, vol. 12, no. 19, art. no. 3078., Registrované v: WOS

ADMA04 KUZIELOVÁ, Eva - ŽEMLIČKA, Matúš - BARTONIČKOVÁ, Eva - PALOU, Martin T.. The correlation between porosity and mechanical properties of multicomponent systems consisting of Portland cement-slag-silica fume-metakaolin. In Construction and Building Materials, 2017, vol. 135, p. 306-314. (2016: 3.169 - IF, Q1 - JCR, 1.511 - SJR, Q1 - SJR). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2016.12.105> (VEGA 1/0696/15 : Vysokoporézne anorganické materiály pre tepelno-izolačné aplikácie. APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch)

Citácie:

1. [1.1] OGE, M. - OZKAN, D. - CELIK, M. B. - GOK, M. S. - KARAOGLANLI, A. C. *An Overview of Utilization of Blast Furnace and Steelmaking Slag in Various Applications. In MATERIALS TODAY-PROCEEDINGS. ISSN 2214-7853, 2019, vol. 11, p. 516-525., Registrované v: WOS*

ADMA05

KUZIELOVÁ, Eva - PACH, Ladislav - PALOU, Martin T.. Effect of activated foaming agent on the foam concrete properties. In *Construction and Building Materials*, 2016, vol. 125, p. 998-1004. (2015: 2.421 - IF, Q1 - JCR, 1.503 - SJR, Q1 - SJR). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2016.08.122>

Citácie:

1. [1.1] CHICA, L. - ALZATE, A. *Cellular concrete review: New trends for application in construction. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 200, p. 637-647., Registrované v: WOS*
2. [1.1] DONG, B. B. - WANG, F. H. - ABADIKHAH, H. - HAO, L. Y. - XU, X. - KHAN, S. A. - WANG, G. - AGATHOPOULOS, S. *Simple Fabrication of Concrete with Remarkable Self-Cleaning Ability, Robust Superhydrophobicity, Tailored Porosity, and Highly Thermal and Sound Insulation. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, 2019, vol. 11, no. 45, p. 42801-42807., Registrované v: WOS*
3. [1.1] FABIEN, A. - SEBAIBI, N. - BOUTOUIL, M. *Effect of several parameters on non-autoclaved aerated concrete: use of recycling waste perlite. In EUROPEAN JOURNAL OF ENVIRONMENTAL AND CIVIL ENGINEERING. ISSN 1964-8189, 2019., Registrované v: WOS*
4. [1.1] HE, Y. L. - GAO, M. S. - ZHAO, H. C. - ZHAO, Y. C. *Behaviour of Foam Concrete under Impact Loading Based on SHPB Experiments. In SHOCK AND VIBRATION. ISSN 1070-9622, 2019, vol. 2019, art. no. 2065845., Registrované v: WOS*
5. [1.1] LIU, C. - LUO, J. L. - LI, Q. Y. - GAO, S. - SU, D. L. - ZHANG, J. G. - CHEN, S. C. *Calcination of green high-belite sulphoaluminate cement (GHSC) and performance optimizations of GHSC-based foamed concrete. In MATERIALS & DESIGN. ISSN 0264-1275, 2019, vol. 182, art. no. 107986., Registrované v: WOS*
6. [1.1] RAJ, A. - SATHYAN, D. - MINI, K. M. *Physical and functional characteristics of foam concrete: A review. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 221, p. 787-799., Registrované v: WOS*
7. [1.1] WANG, R. - GAO, P. W. - TIAN, M. H. - DAI, Y. C. *Experimental study on mechanical and waterproof performance of lightweight foamed concrete mixed with crumb rubber. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 209, p. 655-664., Registrované v: WOS*
8. [1.1] WANG, Y. H. - WU, Y. P. - ZHENG, C. C. - LUO, Z. H. Z. - ZHOU, M. *Influence of Foaming Agent on Technical Performance of Ceramsite Aerated Concrete Blocks. In ANNALES DE CHIMIE-SCIENCE DES MATERIAUX. ISSN 0151-9107, 2019, vol. 43, no. 5, p. 353-357., Registrované v: WOS*
9. [1.2] LIU, T. - SHI, G. - LI, G. - WANG, Z. *Lightweight foamed concrete with foam agent addition. In IOP Conference Series: Materials Science and Engineering. ISSN 17578981, 2019, 490, 3, art. no. 032033., Registrované v: SCOPUS*
10. [1.2] MOHD ZAMZANI, N. - OTHUMAN MYDIN, M. A. - ABDUL GHANI, A. N. *Mathematical regression models for prediction of durability properties of foamed concrete with the inclusion of coir fibre. In International Journal of*

- Engineering and Advanced Technology*, 2019, 8, 6, p. 3353-3358., Registrované v: SCOPUS
- ADMA06 SLÁDEK, Ján\*\* - NOVAK, P. - BISHAY, P.L. - SLÁDEK, Vladimír. Effective properties of cement-based porous piezoelectric ceramic composites. In *Construction and Building Materials*, 2018, vol. 190, p. 1208–1214. (2017: 3.485 - IF, Q1 - JCR, 1.607 - SJR, Q1 - SJR). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2018.09.127> (VEGA 1/0145/17)
- Citácie:
- [1.1] ROSZKOS, C. S. - BOCKO, J. - KULA, T. - SARLOSI, J. *Static and dynamic analyses of aluminum foam geometric models using the homogenization procedure and the FEA. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, 2019, vol. 171, p. 361-374., Registrované v: WOS*
  - [1.2] KORMANIKOVA, E. - KOTRASOVA, K. *Influence of coupling effect in laminated composite plate. In International Journal of Mechanics. ISSN 19984448, 2019, 13, p. 133-138., Registrované v: SCOPUS*
  - [1.2] KORMANIKOVA, E. *Modal analysis of sandwich panel with composite laminated faces. In Vibroengineering Procedia. ISSN 23450533, 2019, 23, p. 105-109., Registrované v: SCOPUS*
- ADMA07 SOLANO LAMPHAR, H. A. - KOCIFAJ, Miroslav. Light pollution in ultraviolet and visible spectrum: Effect on different visual perceptions. In *PLoS ONE*, 2013, vol. 8., iss. 2, p. 1-15. (2012: 3.730 - IF, Q1 - JCR, 1.982 - SJR, Q1 - SJR). (2013 - MEDLINE). ISSN 1932-6203. Dostupné na: <https://doi.org/10.1371/journal.pone.0056563>
- Citácie:
- [1.1] ROBERTSON, B. A. - HORVATH, G. *Color polarization vision mediates the strength of an evolutionary trap. In EVOLUTIONARY APPLICATIONS. ISSN 1752-4571, 2019, vol. 12, no. 2, p. 175-186., Registrované v: WOS*
- ADMA08 ŽIVICA, Vladimír. Properties of blended sulfoaluminate belite cement. In *Construction and Building Materials*, 2000, vol. 14, p. 433-438. ISSN 0950-0618. Dostupné na: [https://doi.org/10.1016/S0950-0618\(00\)00050-7](https://doi.org/10.1016/S0950-0618(00)00050-7)
- Citácie:
- [1.1] BARAL, A. - ROESLER, J. R. *Self-Cleaning of Photocatalytic Mortar with Glass Aggregate and Calcium Sulfoaluminate-Belite Cement. In TRANSPORTATION RESEARCH RECORD. ISSN 0361-1981, 2019, vol. 2673, no. 11, p. 704-715., Registrované v: WOS*
  - [1.1] GAO, D. - MENG, Y. - YANG, L. - TANG, J. - LV, M. *Effect of ground granulated blast furnace slag on the properties of calcium sulfoaluminate cement. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 227, art. no. 116665., Registrované v: WOS*
  - [1.1] HARGIS, C. W. - LOTHENBACH, B. - MUELLER, C. J. - WINNEFELD, F. *Further insights into calcium sulfoaluminate cement expansion. In ADVANCES IN CEMENT RESEARCH. ISSN 0951-7197, 2019, vol. 31, no. 4, p. 160-177., Registrované v: WOS*
  - [1.1] MA, J. - YU, Z. - NI, C. - SHI, H. - SHEN, X. *Effects of limestone powder on the hydration and microstructure development of calcium sulphoaluminate cement under long-term curing. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 199, p. 688-695., Registrované v: WOS*
  - [1.1] SONG, J. - ZHU, J. *Hydration heat evolution of high-belite cement-phosphate slag binder. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, 2019, vol. 138, no. 1, p. 135-143., Registrované v: WOS*
- ADMA09 ŽIVICA, Vladimír - PALOU, Martin T. - BÁGEL, Ľubomír - KRIŽMA, Martin.

Low-porosity tricalcium aluminate hardened paste. In *Construction and Building Materials*, 2013, vol. 38, p. 1191--1198. (2012: 2.293 - IF, Q1 - JCR, 1.656 - SJR, Q1 - SJR). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2012.09.025>

Citácie:

1. [1.1] LOPEZ, F. A. - MARTIN, M. I. - ALGUACIL, F. J. - RAMIREZ, M. S. - GONZALEZ, J. R. *Synthesis of Calcium Aluminates from Non-Saline Aluminum Dross. In MATERIALS. ISSN 1996-1944, 2019, vol. 12, no. 11, art. no. 1837., Registrované v: WOS*

ADMA10

ŽIVICA, Vladimír - PALOU, Martin T. - KRIŽMA, Martin - BÁGEL, Ľubomír. Acidic attack of cement based materials under the common action of high, ambient temperature and pressure. In *Construction and Building Materials*, 2012, vol. 36, no. 11, p. 623-629. (2011: 1.834 - IF, Q1 - JCR, 1.448 - SJR, Q1 - SJR). (2012 - Thomson Reuters Master Journal List). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2012.04.025>

Citácie:

1. [1.1] LI, L. B. - ZHANG, H. M. - GUO, X. Y. - ZHOU, X. M. - LU, L. C. - CHEN, M. X. - CHENG, X. *Pore structure evolution and strength development of hardened cement paste with super low water-to-cement ratios. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 227, art. no. UNSP 117108., Registrované v: WOS*

2. [1.2] OLIVIA, M. - SITOMPUL, I. R. - SAPUTRA, E. - SUTIKNO, S. - YAMAMOTO, K. *Effectiveness of using pozzolanic material for concrete canal blocks in tropical peatland. In IOP Conference Series: Materials Science and Engineering. ISSN 17578981, 2019, 615, 1, art. no. 012111., Registrované v: SCOPUS*

3. [1.2] PAVLÍK, V. *Acid attack on hardened cement paste by acids forming low soluble calcium salts. In IOP Conference Series: Materials Science and Engineering. ISSN 17578981, 2019, 549, 1, art. no. 012020., Registrované v: SCOPUS*

ADMA11

ŽIVICA, Vladimír. Effects of type and dosage of alkaline activator and temperature on the properties of alkali-activated slag mixtures. In *Construction and Building Materials*, 2007, vol. 21, no. 7, p. 1463-1469. (2006: 0.506 - IF, Q3 - JCR, 1.197 - SJR, Q1 - SJR). (2007 - Thomson Reuters Master Journal List). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2006.07.002>

Citácie:

1. [1.1] BRAKAT, A. - ZHANG, Y. *Shrinkage mitigation of alkali-activated slag with natural cellulose fibres. In ADVANCES IN CEMENT RESEARCH. ISSN 0951-7197, 2019, vol. 31, no. 2, p. 47-57., Registrované v: WOS*

2. [1.1] CHOI, S. G. - PARK, S. S. - WANG, K. *Early-Age Strength of Alkali-Activated Slag Mortar Based on Burned Oyster Shell and Other Chemical Activators. In JOURNAL OF MATERIALS IN CIVIL ENGINEERING. ISSN 0899-1561, 2019, vol. 31, no. 9, art. no. 04019186., Registrované v: WOS*

3. [1.1] CONTE, T. - PLANK, J. *Impact of molecular structure and composition of polycarboxylate comb polymers on the flow properties of alkali-activated slag. In CEMENT AND CONCRETE RESEARCH. ISSN 0008-8846, 2019, vol. 116, p. 95-101., Registrované v: WOS*

4. [1.1] DUNG, N. T. - HOOPER, T. J. N. - UNLUER, C. *Accelerating the reaction kinetics and improving the performance of Na<sub>2</sub>CO<sub>3</sub>-activated GGBS mixes. In CEMENT AND CONCRETE RESEARCH. ISSN 0008-8846, 2019, vol. 126, art. no. 105927., Registrované v: WOS*

5. [1.1] HE, J. - GAO, Q. - SONG, X. - BU, X. - HE, J. *Effect of foaming agent on*



- physical and mechanical properties of alkali-activated slag foamed concrete. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 226, p. 280-287., Registrované v: WOS*
6. [1.1] JIAO, Z. - WANG, Y. - ZHENG, W. - HUANG, W. *Effect of the activator on the performance of alkali-activated slag mortars with pottery sand as fine aggregate. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 197, p. 83-90., Registrované v: WOS*
7. [1.1] KARAM, R. - BULTEEL, D. - WATTEZ, T. - DENELEE, D. *Effect of marine sediments incorporation on the behaviour of alkali-activated GGBFS. In MATERIALS AND STRUCTURES. ISSN 1359-5997, 2019, vol. 52, no. 6, art. no. 110., Registrované v: WOS*
8. [1.1] KIM, T. *The effects of polyaluminum chloride on the mechanical and microstructural properties of alkali-activated slag cement paste. In CEMENT & CONCRETE COMPOSITES. ISSN 0958-9465, 2019, vol. 96, p. 46-54., Registrované v: WOS*
9. [1.1] LI, P. - TANG, J. - BAI, Y. - CHEN, X. - CHEN, J. *Experimental study on the pH for activating ground granulated blast-furnace slag activity at different temperatures. In SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES. ISSN 0256-2499, 2019, vol. 44, no. 10, art. no. UNSP 213., Registrované v: WOS*
10. [1.1] LI, P. - TANG, J. - CHEN, X. - BAI, Y. - LI, Q. *Effect of Temperature and pH on Early Hydration Rate and Apparent Activation Energy of Alkali-Activated Slag. In ADVANCES IN MATERIALS SCIENCE AND ENGINEERING. ISSN 1687-8434, 2019, vol. 2019, art. no. 3531543., Registrované v: WOS*
11. [1.1] YAO, W. - SHI, Y. - XIA, K. - PETERSON, K. *Dynamic fracture behavior of alkali-activated mortars: Effects of composition, curing time and loading rate. In ENGINEERING FRACTURE MECHANICS. ISSN 0013-7944, 2019, vol. 208, p. 119-130., Registrované v: WOS*
12. [1.1] YAO, W. - XIA, K. - LIU, Y. - SHI, Y. - PETERSON, K. *Dependences of dynamic compressive and tensile strengths of four alkali-activated mortars on the loading rate and curing time. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 202, p. 891-903., Registrované v: WOS*
13. [1.2] KANAAN, D. M. - SOLIMAN, A. M. *Effect of activator composition on the performance of alkali-activated SCC. In Proceedings, Annual Conference Canadian Society for Civil Engineering, 2019, 2019-June., Registrované v: SCOPUS*

ADMA12 ŽIVICA, Vladimír - KRIŽMA, Martin. Dependence of efficiency of pressure compaction on the cement type used. In Construction and Building Materials, 2011, vol. 25, p. 3073-3077. (2010: 1.366 - IF, Q1 - JCR, 1.345 - SJR, Q1 - SJR). (2011 - Thomson Reuters Master Journal List). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2010.12.061>

Citácie:

1. [1.1] LI, L. B. - ZHANG, H. M. - GUO, X. Y. - ZHOU, X. M. - LU, L. C. - CHEN, M. X. - CHENG, X. *Pore structure evolution and strength development of hardened cement paste with super low water-to-cement ratios. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 227, art. no. UNSP 117108., Registrované v: WOS*

ADMA13 ŽIVICA, Vladimír. Deterioration of cement based materials due to the action of organic compounds. In Construction and Building Materials, 2006, vol. 20, p. 634-641. (2005: 0.343 - IF, Q3 - JCR, 0.591 - SJR, Q1 - SJR). (2006 - Thomson Reuters Master Journal List). ISSN 0950-0618. Dostupné na: <https://doi.org/10.1016/j.conbuildmat.2005.02.011>

**Citácie:**

1. [1.1] OLIVIA, M. - WIBISONO, G. - SAPUTRA, E. *Early strength of various fly ash based concrete in peat environment. In INTERNATIONAL CONFERENCE ON ADVANCES IN CIVIL AND ENVIRONMENTAL ENGINEERING (ICANCEE 2018). ISSN 2261-236X, 2019, vol. 276, art. no. 01022., Registrované v: WOS*
2. [1.2] STROKOVA, V. - NELYUBOVA, V. - RYKUNOVA, M. - DUKHANINA, U. *Strength and structure of cement stone exposed to domestic chicken coop. In Journal of Physics: Conference Series. ISSN 17426588, 2019, 1145, 1, art. no. 012015., Registrované v: SCOPUS*

**ADMB Vedecké práce v zahraničných neimpaktovaných časopisoch registrovaných v databázach Web of Science alebo SCOPUS**

- ADMB01 BISHAY, P.L. - SAMPAT, Bhavin - SLÁDEK, Ján - PAN, E. - SLÁDEK, Vladimír. Effect of Lattice Mismatch Strain Grading on the Electromechanical Behavior of Functionally Graded Quantum Dots. In Key Engineering Materials, 2017, vol. 759, p. 71-75. (2016: 0.164 - SJR, Q3 - SJR). ISSN 1013-9826. Dostupné na: <https://doi.org/10.4028/www.scientific.net/KEM.759.71>
- Citácie:**
1. [1.2] GAO, J. - LYU, Y. - ZHENG, M. - LIU, M. - LIU, H. - WU, B. - HE, C. *Modeling guided wave propagation in functionally graded plates by state-vector formalism and the Legendre polynomial method. In Ultrasonics. ISSN 0041624X, 2019, 99, art. no. 105953., Registrované v: SCOPUS*
- ADMB02 BISHAY, P.L.\*\* - SLÁDEK, Ján - PAN, E. - SLÁDEK, Vladimír. Analysis of Functionally Graded Quantum-Dot Systems with Graded Lattice Mismatch Strain. In Journal of Computational and Theoretical Nanoscience, 2018, vol. 15, no. 2, p. 542–550. (2017: 0.221 - SJR, Q3 - SJR). ISSN 1546-1955. Dostupné na: <https://doi.org/10.1166/jctn.2018.7120> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch. VEGA 2/0046/16 : Viazané úlohy tepelných a elektromechanických polí v piezoelektrických materiáloch s poréznu mikroštruktúrou)
- Citácie:**
1. [1.1] POPESCU, I. - HRISTACHE, M. - CIOBANU, S. S. - BARSEGHYAN, M. G. - VINASCO, J. A. - MORALES, A. L. - RADU, A. - DUQUE, C. A. *Size or shape What matters most at the nanoscale? In COMPUTATIONAL MATERIALS SCIENCE. ISSN 0927-0256, 2019, vol. 165, p. 13-22., Registrované v: WOS*
- ADMB03 DARULA, Stanislav - CHRISTOFFERSEN, Jens - MALÍKOVÁ, Marta. Sunlight and insolation of building interiors. In Energy Procedia, 2015, vol. 78, p. 1245-1250. (2014: 0.433 - SJR). (2015 - Web of Science, Scopus). ISSN 1876-6102. Dostupné na: <https://doi.org/10.1016/j.egypro.2015.11.266>
- Citácie:**
1. [1.1] AYOUB, M. *100 Years of daylighting: A chronological review of daylight prediction and calculation methods. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 194, p. 360-390., Registrované v: WOS*
  2. [1.1] BOURNAS, I. - DUBOIS, M. C. *Daylight regulation compliance of existing multi-family apartment blocks in Sweden. In BUILDING AND ENVIRONMENT. ISSN 0360-1323, 2019, vol. 150, p. 254-265., Registrované v: WOS*
  3. [1.1] DE LUCA, F. - DOGAN, T. *A novel solar envelope method based on solar ordinances for urban planning. In BUILDING SIMULATION. ISSN 1996-3599, 2019, vol. 12, no. 5, p. 817-834., Registrované v: WOS*
  4. [1.2] BASALAEV, A. A. - TOCHILKIN, M. V. - SHNAYDER, D. A. *Enhancing*



- room thermal comfort conditions modeling in buildings through schedule-based indicator functions for possible variable thermal perturbation inputs. In 2019 International Conference on Industrial Engineering, Applications and Manufacturing, ICIEAM 2019, 2019, art. no. 8742907., Registrované v: SCOPUS 5. [2.1] HRASKA, J. APPROACHES, METHODS AND TOOLS OF RIGHTS OF ACCESS TO SUNLIGHT AROUND THE WORLD. In SLOVAK JOURNAL OF CIVIL ENGINEERING. ISSN 1210-3896, 2019, vol. 27, no. 4, p. 45-52., Registrované v: WOS*
- ADMB04 FERENČÍKOVÁ, Mária - DARULA, Stanislav. Utilization of daylight in school buildings. In LUMEN V4 : proceedings VI. IEEE lighting conference of the Visegrad countries. - 2016, p. 217-220. ISBN 978-1-5090-3304-1. Dostupné na: <https://doi.org/10.1109/LUMENV.2016.7745549>  
Citácie:  
*1. [1.2] AOUN, A. - KASSEM, A. - HAMAD, Mustapha. Sun Stimulator for Daylight System. In ACIT 2018 19th International Arab Conference on Information Technology, 2019, art. no. 8672579., Registrované v: SCOPUS*
- ADMB05 HOLÚBEK, Matúš - KORONTHÁLYOVÁ, Oľga. Comparison of TDR and X-ray method for determining moisture transport parameters. In Energy Procedia, 2017, vol. 132, p. 723-728. (2016: 0.464 - SJR). ISSN 1876-6102. Dostupné na: <https://doi.org/10.1016/j.egypro.2017.10.014> (VEGA 2/0033/15 : Vplyv opakovaného a dlhodobého namáhania na parametre interakcie pri sanácii železobetónových prvkov. APVV-15-0631 : Výskum vysokohodnotných cementových kompozitov za hydrotermálnych podmienok pre potenciálne využitie v hĺbkových vrtoch)  
Citácie:  
*1. [1.1] PARK, E. - KIM, N. - KIM, S. J. - KWON, D. Nondestructive wire fault diagnosis using resistance spectroscopy analysis. In JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY. ISSN 1738-494X, 2019, vol. 33, no. 8, p. 3649-3654., Registrované v: WOS*
- ADMB06 JANSSEN, Hans - VEREECKEN, Evy - HOLÚBEK, Matúš. A confrontation of two concepts for the description of the over-capillary moisture range: air entrapment versus low capillarity. In Energy Procedia, 2015, vol. 78, p. 1490-1494. (2014: 0.433 - SJR). (2015 - Web of Science, Scopus). ISSN 1876-6102. Dostupné na: <https://doi.org/10.1016/j.egypro.2015.11.175>  
Citácie:  
*1. [1.1] FENG, C. - JANSSEN, H. Hygric properties of porous building materials (III): Impact factors and data processing methods of the capillary absorption test. In BUILDING AND ENVIRONMENT. ISSN 0360-1323, 2018, vol. 134, p. 21-34., Registrované v: WOS*
- ADMB07 KOCIFAJ, Miroslav - KUNDRACIK, F. Modeling the night sky brightness distribution via new SkyGlow Simulator. In LUMEN V4 : proceedings VI. IEEE lighting conference of the Visegrad countries. - 2016, p. 239-240. ISBN 978-1-5090-3304-1. Dostupné na: <https://doi.org/10.1109/LUMENV.2016.7745553> (APVV-14-0017 : Zovšeobecnený model jasu/žiary nočnej oblohy a jeho aplikácia pri získavaní emisnej funkcie miest)  
Citácie:  
*1. [1.1] BEČAK, P. - WLOSOKOVA, J. - PICHA, J. - NOVAK, T. - SOKANSKY, K. Modeling of Luminous Flux Radiation to the Upper Hemisphere from Real Model of Town. In PROCEEDINGS OF THE 2019 20TH INTERNATIONAL SCIENTIFIC CONFERENCE ON ELECTRIC POWER ENGINEERING (EPE). ISSN 2376-5623, 2019, p. 164-168., Registrované v: WOS*
- ADMB08 PETRŽALA, Jaromír - KOMAR, Ladislav. Analytical Estimation of Optical

Efficiency of Cylindrical Light-tubes under Various CIE Sky Types. In LUMEN V4 : proceedings of the 2018 VII. Lighting Conference of the Visegrad Countries. - Brno : Czech Lighting Society and Brno University of Technology, 2018, p. 29-31. ISBN 9781-5386-7923-4. Dostupné na: <https://doi.org/10.1109/LUMENV.2018.8521084> (VEGA 2/0016/16 : Optické vlastnosti zalomených svetlovodov za podmienok nehomogénnej oblačnosti s ľubovoľným pokrytím oblohy. Lighting Conference of the Visegrad Countries)

Citácie:

1. [1.2] NEKVAPIL, J. - SKODA, J. - MOTYCKA, M. Influence of changes of material's BRDF on a skylight performance under various exterior conditions. In *Proceedings of the 2019 20th International Scientific Conference on Electric Power Engineering, EPE 2019, 2019, art. no. 8778135., Registrované v: SCOPUS*

ADMB09 SADOVSKÝ, Zoltán - KRIVÁČEK, Jozef - IVANČO, V. - ĎURICOVÁ, Antónia. Buckling strength of lipped channel column with local/distortional interactions. In *Procedia Engineering*, 2012, vol. 40, p. 399-404. (2011: 0.237 - SJR). (2012 - SCOPUS, WOS). ISSN 1877-7058. Dostupné na: <https://doi.org/10.1016/j.proeng.2012.07.115>

Citácie:

1. [1.1] YUAN, W. B. - SHEN, Y. T. - YU, N. T. - BAO, Z. S. An Analytical Solution of Local-Global Interaction Buckling of Cold-Formed Steel Channel-Section Columns. In *INTERNATIONAL JOURNAL OF STEEL STRUCTURES*. ISSN 1598-2351, 2019, vol. 19, no. 5, p. 1578-1591., Registrované v: WOS

ADMB10 SLÁDEK, Ján - SLÁDEK, Vladimír - KASALA, J. - PAN, E. Nonlocal and Gradient Theories of Piezoelectric Nanoplates. In *Procedia Engineering*, 2017, vol. 190, p. 178-185. (2016: 0.286 - SJR). ISSN 1877-7058. Dostupné na: <https://doi.org/10.1016/j.proeng.2017.05.324> (APVV-14-0216 : Multiškálové modelovanie viazaných polí v kompozitných materiáloch. VEGA 2/0046/16 : Viazané úlohy tepelných a elektromechanických polí v piezoelektrických materiáloch s poréznuou mikroštruktúrou)

Citácie:

1. [1.1] SHARIFI, Z. - KHORDAD, R. - GHARAATI, A. - FOROZANI, G. An analytical study of vibration in functionally graded piezoelectric nanoplates: nonlocal strain gradient theory. In *APPLIED MATHEMATICS AND MECHANICS-ENGLISH EDITION*. ISSN 0253-4827, 2019, vol. 40, no. 12, p. 1723-1740., Registrované v: WOS

ADMB11 SLÁDEK, Ján - SLÁDEK, Vladimír. Boundary element method in micropolar thermoelasticity Part III: Numerical solution. In *Engineering Analysis with Boundary Elements*, 1985, vol. 2, no. 3, p. 155-162. ISSN 0955-7997. Dostupné na: [https://doi.org/10.1016/0264-682X\(85\)90021-8](https://doi.org/10.1016/0264-682X(85)90021-8)

Citácie:

1. [1.1] FAHMY, M. A. A new boundary element strategy for modeling and simulation of three-temperature nonlinear generalized micropolar-magneto-thermoelastic wave propagation problems in FGA structures. In *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*. ISSN 0955-7997, 2019, vol. 108, p. 192-200., Registrované v: WOS

ADMB12 SLÁDEK, Vladimír - SLÁDEK, Ján. Boundary integral equation method in two-dimensional thermoelasticity. In *Engineering Analysis*, 1984, vol. 1, iss. 3, p. 135-148. ISSN 0955-7997. Dostupné na: [https://doi.org/10.1016/0264-682X\(84\)90070-4](https://doi.org/10.1016/0264-682X(84)90070-4)

Citácie:

1. [1.1] HWU, C. - HSU, C. L. - HSU, C. W. - SHIAH, Y. C. Fundamental solutions for two-dimensional anisotropic thermo-magneto-electro-elasticity. In

*MATHEMATICS AND MECHANICS OF SOLIDS. ISSN 1081-2865, 2019, vol. 24, no. 11, p. 3575-3596., Registrované v: WOS*

- ADMB13 SLÁDEK, Vladimír - SLÁDEK, Ján. Boundary element method in micropolar thermoelasticity. Part I: Boundary integral equations. In Engineering Analysis, 1985, vol. 2, no. 1, p. 40-50. ISSN 0955-7997. Dostupné na: [https://doi.org/10.1016/0264-682X\(85\)90050-4](https://doi.org/10.1016/0264-682X(85)90050-4)

Citácie:

1. [1.2] FAHMY, M. A. A new boundary element strategy for modeling and simulation of three-temperature nonlinear generalized micropolar-magneto-thermoelastic wave propagation problems in FGA structures. In Engineering Analysis with Boundary Elements. ISSN 09557997, 2019, 108, p. 192-200., Registrované v: SCOPUS

- ADMB14 SLÁDEK, Vladimír - SLÁDEK, Ján. Boundary element method in micropolar thermoelasticity. Part II: Boundary integro-differential equations. In Engineering Analysis, 1985, vol. 2, no. 2, p. 81-91. ISSN 0955-7997. Dostupné na: [https://doi.org/10.1016/0264-682X\(85\)90058-9](https://doi.org/10.1016/0264-682X(85)90058-9)

Citácie:

1. [1.2] FAHMY, M. A. A new boundary element strategy for modeling and simulation of three-temperature nonlinear generalized micropolar-magneto-thermoelastic wave propagation problems in FGA structures. In Engineering Analysis with Boundary Elements. ISSN 09557997, 2019, 108, p. 192-200., Registrované v: SCOPUS

- ADMB15 SLÁDEK, Vladimír - SLÁDEK, Ján. A new approach to transient dynamic analysis of thermoelasticity by the boundary element method. In Engineering Analysis, 1985, vol. 2, no. 4, p. 221-229. ISSN 0955-7997. Dostupné na: [https://doi.org/10.1016/0264-682X\(85\)90036-X](https://doi.org/10.1016/0264-682X(85)90036-X)

Citácie:

1. [1.1] FAHMY, M. A. A new boundary element strategy for modeling and simulation of three-temperature nonlinear generalized micropolar-magneto-thermoelastic wave propagation problems in FGA structures. In ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS. ISSN 0955-7997, 2019, vol. 108, p. 192-200., Registrované v: WOS

#### ADNA Vedecké práce v domácich impaktovaných časopisoch registrovaných v databázach Web of Science alebo SCOPUS

- ADNA01 VALÍČEK, J. - DRŽÍK, Milan - HRYNIEWICZ, T. - HARNIČÁROVÁ, M. - ROKOSZ, K. - KUŠNEROVÁ, M. - BARČOVÁ, K. - BRAŽINA, D. Non-contact method for surface roughness measurement after machining. In Measurement Science Review, 2012, vol. 12, no. 5, p. 184-188. (2011: 0.418 - IF, Q4 - JCR, 0.271 - SJR, Q3 - SJR). (2012 - WOS, SCOPUS). ISSN 1335-8871. Dostupné na: <https://doi.org/10.2478/v10048-012-0028-3>

Citácie:

1. [1.1] MA, W. - ZHANG, Z. - ZHANG, H. - LI, Y. - WU, H. - JIANG, S. - CHAI, G. An origami-inspired cube pipe structure with bistable anti-symmetric CFRP shells driven by magnetic field. In SMART MATERIALS AND STRUCTURES. ISSN 0964-1726, 2019, vol. 28, no. 2, art. no. 025028., Registrované v: WOS  
2. [1.1] SWIERCZ, R. - ONISZCZUK-SWIERCZ, D. - CHMIELEWSKI, T. Multi-Response Optimization of Electrical Discharge Machining Using the Desirability Function. In MICROMACHINES. ISSN 2072-666X, 2019, vol. 10, no. 1, art. no. 72., Registrované v: WOS  
3. [1.2] ZAJAC, J. - BOTKO, F. - RADCHENKO, S. - RADIČ, P. - BERNAT, A. -

*ROMAN, J. - ZAJAC, B. Evaluation of Roughness Parameters of Machined Surface of Selected Wood Plastic Composite. In EAI/Springer Innovations in Communication and Computing. ISSN 25228595, 2019, p. 345-352., Registrované v: SCOPUS*

**ADNB Vedecké práce v domácich neimpaktovaných časopisoch registrovaných v databázach Web of Science alebo SCOPUS**

- ADNB01 BARTOŠOVÁ, Nina - HABERLANDOVÁ, Katarína. Hodnoty industriálneho dedičstva a ich skúmanie: prípad Bratislava = Values of the modern industrial heritage and its research: The Case of Bratislava. In Muzeológia a kultúrne dedičstvo : vedecký recenzovaný časopis, 2017, roč. 5, č. 2, s. 107-123. (2016: 0.101 - SJR, Q4 - SJR). ISSN 1339-2204.(VEGA 2/0074/17 : Neplánované mesto: architektonické a urbanistické koncepcie 20. storočia a ich priemet do mestskej štruktúry Bratislavy. VEGA 1/0444/17 : Tradícia a inovácia v architektúre ako fenomén dlhého storočia. APVV-16-0584 : Nezamýšľané mesto: Architektonické a urbanistické koncepcie 19. a 20. storočia v mestskej štruktúre Bratislavy)

**Citácie:**

*1. [2.1] JANTO, J. Modern City and Its Cultural Heritage the example of Partizanske and Nova Dubnica. In MUZEOLOGIA A KULTURNE DEDICSTVO-MUSEOLOGY AND CULTURAL HERITAGE. ISSN 1339-2204, 2019, vol. 7, no. 2, p. 109-121., Registrované v: WOS*

**\*AEC Vedecké práce v zahraničných recenzovaných vedeckých zborníkoch, monografiách**

- AEC01 JAKOVENKO, J. - HUSÁK, M. - LALINSKÝ, Tibor - DRŽÍK, Milan - VANKO, Gabriel. Design and modeling of GaAs based hot plate for Gas sensors. In DTIP 2007 : proceedings of the Symposium on Design, Test, Integration and Packing of MEMS/MOEMS. Editor K. Chakrabarty. - EDA Publishing, 2007, p. 147-150. ISBN 978-2-35500-000-3.

**Citácie:**

*1. [1.1] KAMATI, K.S.C. - NAGIREDDY, S.R. - MISHRA, R.B. - HUSSAIN, A.M. Design of Micro-heaters Inspired by Space Filling Fractal Curves. In PROCEEDINGS OF 2019 IEEE REGION 10 SYMPOSIUM (TENSYP). ISSN 2640-821X, 2019, p. 231-236., Registrované v: WOS*

- AEC02 SLÁDEK, Ján - SLÁDEK, Vladimír - ZHANG, Chuanzeng. Heat conduction analysis in nonhomogeneous anisotropic solids. In Computational Mechanics : Proceedings 6th World Congress in Computational Mechanics. Editors Z.H. Zao, M.W. Yuan, W.X. Zhong. - Beijin : Tsinghua University. Press & Springer – Verlag, 2004, p. 609-614.

**Citácie:**

*1. [1.1] HUANG, T. - PAN, Q. X. - JIN, J. - ZHENG, J. L. - WEN, P. H. Continuous constitutive model for bimodulus materials with meshless approach. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-904X, 2019, vol. 66, p. 41-58., Registrované v: WOS*  
*2. [1.1] LI, Y. - LI, J. - WEN, P. H. Finite and infinite block Petrov-Galerkin method for cracks in functionally graded materials. In APPLIED MATHEMATICAL MODELLING. ISSN 0307-904X, 2019, vol. 68, p. 306-326., Registrované v: WOS*

- AEC03 ZHANG, Chuanzeng - SLÁDEK, Ján - SLÁDEK, Vladimír. 2-D elastodynamic crack analysis in FGMs by a time-domain BIEM. In Advances in Boundary Elements Techniques V : Lisabon, 21-23 July 2004. Editori V. Leitao, M. Aliabadi. -



Eastleigh : EC Ltd, 2004, p. 181-190.

Citácie:

1. [1.1] LI, Y. - ZHANG, J. - ZHONG, Y. D. - SHU, X. M. - DONG, Y. Q. *Transient elastodynamic analysis with a combination of convolution quadrature method and pseudo-initial condition method. In ENGINEERING COMPUTATIONS. ISSN 0264-4401, 2019, vol. 36, no. 1, p. 334-355., Registrované v: WOS*

**\*AED Vedecké práce v domácich recenzovaných vedeckých zborníkoch, monografiách**

AED01 MORAVČÍKOVÁ, Henrieta. Moderná architektúra ako kultúrne dedičstvo: predpoklady a paradoxy ochrany = Modern architecture as cultural heritage: presumptions and paradoxes of protection. In Monumentorum Tutela : Ochrana pamiatok 20. I. Hodnoty a perspektívy ochrany architektúry a urbanistických štruktúr 50. a 60. rokov 20. storočia. Zodpovedná redaktorka Katarína Kosová. - Bratislava : Pamiatkový úrad Slovenskej republiky, p. 117-123. ISBN 978-80-89175-30-7.

Citácie:

1. [2.1] JANTO, J. *Modern City and Its Cultural Heritage the example of Partizanske and Nova Dubnica. In MUZEOLOGIA A KULTURNE DEDICSTVO-MUSEOLOGY AND CULTURAL HERITAGE. ISSN 1339-2204, 2019, vol. 7, no. 2, p. 109-121., Registrované v: WOS*

**AEDA Vedecké práce v domácich recenzovaných zborníkoch, kratšie kapitoly/state v domácich monografiách alebo VŠ učebniciach**

AEDA01 DRAGOMIROVÁ, Janette - PALOU, Martin T.. Príprava a vlastnosti vysokopevnostných ťažkých betónov. In Betonárske dni 2018 : zborník príspevkov. Sekcia A4. Nové materiály a technológie. - Bratislava : Slovenská technická univerzita v Bratislave, 2018, s. 165-170. ISBN 978-80-227-4852-0. (V4-KOREA\_RADCON : Vplyv chemického zloženia betónu na jeho dlhodobú trvanlivosť v (ionizujúcom) ionizovanom prostredí. Betonárske dni 2018)

Citácie:

1. [3.1] BRODŇAN, M. - KOTEŠ P. - STRIEŠKA M. *Využitie výsledkov zrýchlených korózných skúšok na predikciu korózie výstuže. In TZB-info, ISSN 1801-4399, 2019. Dostupné na internete: <https://stavba.tzb-info.cz/beton-malty-omitky/18658-vyuzitie-vysledkov-zrychlenych-koroznych-skusok-na-predikciu-korozie-vystuze>.*

**\*AEF Vedecké práce v domácich nerecenzovaných vedeckých zborníkoch, monografiách**

AEF01 KORONTHÁLYOVÁ, Oľga - MATIAŠOVSKÝ, Peter. Pore Structure and Thermal Conductivity of Burnt Clay Bricks. In Thermophysics 2007 : proceedings. Editor J. Leja. - Bratislava : Vydavateľstvo STU, 2007, p. 100-106. ISBN 978-80-227-27465-4.

Citácie:

1. [1.1] POKHARA, P. - EKAMPARAM, A. S. S. - GUPTA, A. B. - RAI, D. C. - SINGH, A. *Activated alumina sludge as partial substitute for fine aggregates in brick making. In CONSTRUCTION AND BUILDING MATERIALS. ISSN 0950-0618, 2019, vol. 221, p. 244-252., Registrované v: WOS*

**AFC Publikované príspevky na zahraničných vedeckých konferenciách**



- AFC01 DARULA, Stanislav - KITTLER, Richard. CIE General Sky standard defining luminance distributions. In Proceeding Conference eSim 2002. The Canadian conference on building energy simulation : september 11th - 13th, 2002, Montreal. Dostupné na internete: <[http://www.ustarch.sav.sk/wp-content/uploads/darula\\_kittler\\_proc\\_conf\\_esim\\_2002.pdf](http://www.ustarch.sav.sk/wp-content/uploads/darula_kittler_proc_conf_esim_2002.pdf)>

Citácie:

1. [1.1] *KIM, C. H. - KIM, K. S. Development of Sky Luminance and Daylight Illuminance Prediction Methods for Lighting Energy Saving in Office Buildings. In ENERGIES. ISSN 1996-1073, 2019, vol. 12, no. 4, art. no. 592., Registrované v: WOS*
2. [1.1] *LEE, S. - LEE, K. S. A Study on the Improvement of the Evaluation Scale of Discomfort Glare in Educational Facilities. In ENERGIES, 2019, vol. 12, no. 17., Registrované v: WOS*
3. [1.1] *SCHNEIDER-ZAPP, K. - CUBERO-CASTAN, M. - SHI, D. - STRECHA, C. A new method to determine multi-angular reflectance factor from lightweight multispectral cameras with sky sensor in a target-less workflow applicable to UAV. In REMOTE SENSING OF ENVIRONMENT. ISSN 0034-4257, 2019, vol. 229, p. 60-68., Registrované v: WOS*
4. [1.1] *ZHANG, Y. Q. - ZHUO, X. - GUO, W. - WANG, X. Y. - ZHAO, Z. L. Lighting Environment Optimization of Highway Tunnel Entrance Based on Simulation Research. In INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH, 2019, vol. 16, no. 12, art. no. 2195., Registrované v: WOS*

- AFC02 KITTLER, Richard - PEREZ, Richard - DARULA, Stanislav. A new generation of sky standard. In Proceedings of the Lux Europa Conference. - Amsterdam, 1997, p. 359-373.

Citácie:

1. [1.1] *AYOUB, M. 100 Years of daylighting: A chronological review of daylight prediction and calculation methods. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 194, p. 360-390., Registrované v: WOS*

- AFC03 KITTLER, Richard - DARULA, Stanislav. A catalogue of fifteen sky luminance patterns between the CIE standard skies. In Proceedings : 24th Session of the CIE. - Warsaw : CIE, 1999, p. 7-9. ISBN 3-900-734-93-3.(24th Session of the CIE)

Citácie:

1. [1.1] *MOLKOV, A. A. - DOLIN, L. S. The Snell's Window Image for Remote Sensing of the Upper Sea Layer: Results of Practical Application. In JOURNAL OF MARINE SCIENCE AND ENGINEERING, 2019, vol. 7, no. 3, art. no. 70., Registrované v: WOS*

## AGI Správy o vyriešených vedeckovýskumných úlohách

- AGI01 DARULA, Stanislav - ASHDOWN, I. - BARTZOKAS, A. - BISEGNA, F. - DUMORTIER, D. - GREENUP, P. - KAMBEZIDIS, H.D. - KENDRICK, D. - KITTLER, Richard - KOBAY, M. - KOGA, Y. - LO VERSO, V. R. M. - MARDALJEVIC, J. - MARKOU, M.T. - NG, E. - ROY, G. - UETANI, Y. - WITTKOPF, S. CIE Standard General Sky Guide : CIE 215:2014 technical report. Recenzent P. Zwick. Vienna : CIE Central Bureau, 2014. 78 p. ISBN 978-3-902842-54-1

Citácie:

1. [1.1] *KIM, C. H. - KIM, K. S. Development of Sky Luminance and Daylight Illuminance Prediction Methods for Lighting Energy Saving in Office Buildings.*

*In ENERGIES. ISSN 1996-1073, 2019, vol. 12, no. 4, art. no. 592., Registrované v: WOS*

- AGI02 KINZEY, Bruce - PERRIN, Tess E. - MILLER, Naomi J. - KOCIFAJ, Miroslav - AUBÉ, Martin - SOLANO LAMPHAR, H. A. An Investigation of LED Street Lighting's Impact on Sky Glow. Richland, Washington : Pacific Northwest National Laboratory, 2017. 38 p. Dostupné na internete:  
<[https://energy.gov/sites/prod/files/2017/05/f34/2017\\_led-impact-sky-glow.pdf](https://energy.gov/sites/prod/files/2017/05/f34/2017_led-impact-sky-glow.pdf)>

*Citácie:*

*1. [1.1] SCHULTE-ROEMER, N. - MEIER, J. - SOEDING, M. - DANNEMANN, E. The LED Paradox: How Light Pollution Challenges Experts to Reconsider Sustainable Lighting. In SUSTAINABILITY, 2019, vol. 11, no. 21, art. no. 6160., Registrované v: WOS*

#### **BAB Odborné knižné publikácie vydané v domácich vydavateľstvách**

- BAB01 KITTLER, Richard - DARULA, Stanislav - PEREZ, Richard. A set of standard skies characterising daylight conditions for computer and energy conscious design. Bratislava : Polygrafia SAV, 1998. 52 p.

*Citácie:*

*1. [1.1] LIU, Y. - CHEN, Youming. A normal distribution model for diffuse radiation versus incidence angle. In SOLAR ENERGY. ISSN 0038-092X, 2019, vol. 186, p. 60-71., Registrované v: WOS*

*2. [1.1] LOU, Siwei - LI, Danny. H. W. - CHEN, Wenqiang. Identifying overcast, partly cloudy and clear skies by illuminance fluctuations. In RENEWABLE ENERGY. ISSN 0960-1481, 2019, vol. 138, p. 198-211., Registrované v: WOS*

#### **BEE Odborné práce v zahraničných zborníkoch (konferenčných aj nekonferenčných, recenzovaných a nerecenzovaných)**

- BEE01 DARULA, Stanislav - OBERMAN, Peter. Jas okna v noci. In Kurz osvetľovací techniky XXVII. - Ostrava : VŠB-Technická univerzita Ostrava, 2009, p. 24-29. ISBN 978-80-248-2087-3.(Kurz osvetľovací techniky)

*Citácie:*

*1. [1.1] BECAK, P. - WLOSOKOVA, J. - PICHA, J. - NOVAK, T. - SOKANSKY, K. Modeling of Luminous Flux Radiation to the Upper Hemisphere from Real Model of Town. In PROCEEDINGS OF THE 2019 20TH INTERNATIONAL SCIENTIFIC CONFERENCE ON ELECTRIC POWER ENGINEERING (EPE). ISSN 2376-5623, 2019, p. 164-1*

## **Príloha D**

### **Údaje o pedagogickej činnosti organizácie**

#### Semestrálne prednášky:

doc. Ing. Stanislav Darula, CSc.

Názov semestr. predmetu: Building Physics - Daylighting

Počet hodín za semester: 10

Názov katedry a vysokej školy: Slovenská technická univerzita v Bratislave, Katedra konštrukcií pozemných stavieb

Prof.Dr.Ing. Martin-Tchingnabé Palou

Názov semestr. predmetu: Priemyselná anorganická chémia

Počet hodín za semester: 12

Názov katedry a vysokej školy: Slovenská technická univerzita v Bratislave, Ústav anorganickej chémie, technológie a materiálov/FCHPT

Prof.Dr.Ing. Martin-Tchingnabé Palou

Názov semestr. predmetu: Procesy a zariadenia silikátového priemyslu

Počet hodín za semester: 12

Názov katedry a vysokej školy: Slovenská technická univerzita v Bratislave, Ústav anorganickej chémie, technológie a materiálov/FCHPT

Prof.Dr.Ing. Martin-Tchingnabé Palou

Názov semestr. predmetu: Špeciálna technológia anorganických materiálov

Počet hodín za semester: 12

Názov katedry a vysokej školy: Slovenská technická univerzita v Bratislave, Ústav anorganickej chémie, technológie a materiálov/FCHPT

#### Semestrálne cvičenia:

#### Semináre:

#### Terénne cvičenia:

#### Individuálne prednášky:

Prof.Dr.Ing. Martin-Tchingnabé Palou

Názov semestr. predmetu: Technológia silikátov

Počet hodín za semester: 30

Názov katedry a vysokej školy: Slovenská technická univerzita v Bratislave, Fakulta chemickej a potravinárskej technológie

Doc. Ing. Stanislav Darula, CSc.

Počet hodín za semester: 2

Názov katedry a vysokej školy: FEKT VUT Brno

**Príloha E****Medzinárodná mobilita organizácie****(A) Vyslanie vedeckých pracovníkov do zahraničia na základe dohôd:**

Krajina	D r u h d o h o d y					
	MAD, KD, VTS		Medziústavná		Ostatné	
	Meno pracovníka	Počet dní	Meno pracovníka	Počet dní	Meno pracovníka	Počet dní
Počet vyslaní spolu						

**(B) Prijatie vedeckých pracovníkov zo zahraničia na základe dohôd:**

Krajina	D r u h d o h o d y					
	MAD, KD, VTS		Medziústavná		Ostatné	
	Meno pracovníka	Počet dní	Meno pracovníka	Počet dní	Meno pracovníka	Počet dní
Počet prijatí spolu						

**(C) Účasť pracovníkov pracoviska na konferenciách v zahraničí (nezahrnutých v "A"):**

Krajina	Názov konferencie	Meno pracovníka	Počet dní
Spolu			

Vysvetlivky: MAD - medziakademické dohody, KD - kultúrne dohody, VTS - vedecko-technická spolupráca v rámci vládnych dohôd

Skratky použité v tabuľke C:

**Príloha F****Vedecko-popularizačná činnosť pracovníkov organizácie SAV**

<b>Meno</b>	<b>Spoluautori</b>	<b>Typ<sup>1</sup></b>	<b>Názov</b>	<b>Miesto zverejnenia</b>	<b>Dátum alebo počet za rok</b>
Darula S.		PB	Navrhujeme a stavíme budovy s takmer nulovou potrebou	SKSI Bratislava	23.11.2020
Darula S.		PB	HYGIENA OSVĚTLOVÁNÍ	NCONZO, Brno	2.3.2020
Darula S.		PB	Hodnotenie energetickej hospodárnosti osvetlenia v budovách v zmysle aktuálnych predpisov	SKSI Bratislava	25.11.2020
Kocifaj M.		IN	Vedci SAV navrhujú nové možnosti využitia satelitného monitorovania zdrojov svetelného znečistenia	<a href="https://www.sav.sk/index.php?lang=sk&amp;doc=services-news&amp;source_no=20&amp;news_no=8917">https://www.sav.sk/index.php?lang=sk&amp;doc=services-news&amp;source_no=20&amp;news_no=8917</a>	18.6.2020
Kocifaj M.		IN	Vedci poznajú nové možnosti využitia satelitného monitorovania zdrojov svetelného znečistenia	<a href="https://www.webnoviny.sk/nasvidiek/vedci-poznaju-nove-moznosti-vyuzitia-satelitneho-monitorovania-zdrojov-svetelneho-znečistenia/">https://www.webnoviny.sk/nasvidiek/vedci-poznaju-nove-moznosti-vyuzitia-satelitneho-monitorovania-zdrojov-svetelneho-znečistenia/</a>	18.6.2020
Palou M.-T.		IN	Popularizácia vedy	<a href="https://www.sav.sk/index.php?lang=sk&amp;doc=services-news&amp;source_no=20&amp;news_no=9126">https://www.sav.sk/index.php?lang=sk&amp;doc=services-news&amp;source_no=20&amp;news_no=9126</a>	6.11.2020
Palou M.-T.		TL	Nové betóny môžu prispieť k ochrane životného prostredia	<a href="https://vat.pravda.sk/clovek/clanok/568195-nove-betony-mozu-prispieť-k-ochrane-zivotneho-prostredia/">https://vat.pravda.sk/clovek/clanok/568195-nove-betony-mozu-prispieť-k-ochrane-zivotneho-prostredia/</a>	10.11.2020
Žemlička M.		IN	Oddelenie stavebných hmôt a konštrukcií USTARCH SAV	<a href="https://www.youtube.com/watch?v=bRHfDXgJjFM">https://www.youtube.com/watch?v=bRHfDXgJjFM</a>	5.11.2020
Žemlička M.		IN	Oficiálne webové stránky Oddelenia stavebných hmôt a konštrukcií	<a href="http://www.geomat.sav.sk">http://www.geomat.sav.sk</a>	2020

<sup>1</sup> PB - prednáška/beseda, TL - tlač, TV - televízia, RO - rozhlas, IN - internet, EX - exkurzia, PU - publikácia, MM - multimédiá, DO - dokumentárny film