

Publikácie / Publications

Department: SAVMATVY - Ústav materiálového výskumu SAV
Year of publication 2012~2015

Statistics publication category

| | | |
|------|--|-----|
| AAA | Scientific monographs published abroad | 3 |
| ABC | Chapters in scientific monographs published abroad | 8 |
| ACB | Academic/university textbooks published in Slovak publishing houses | 2 |
| ADCA | Scientific papers in foreign journals registered in Current Contents Connect with IF (impacted) | 169 |
| ADCB | Scientific papers in foreign journals registered in Current Contents Connect without IF (non-impacted) | 3 |
| ADDA | Scientific papers in domestic journals registered in Current Contents Connect with IF (impacted) | 10 |
| ADEA | Scientific papers in other foreign journals not registered in Current Contents Connect with IF (impacted) | 1 |
| ADEB | Scientific papers in other foreign journals not registered in Current Contents Connect without IF (non-impacted) | 18 |
| ADFB | Scientific papers in other domestic journals not registered in Current Contents Connect without IF (non-impacted) | 77 |
| ADMA | Scientific papers in foreign impacted journals registered in Web of Sciences or Scopus | 11 |
| ADMB | Scientific papers in foreign non-impacted journals registered in Web of Sciences or Scopus | 58 |
| ADNA | Scientific papers in domestic impacted journals registered in Web of Sciences or Scopus | 2 |
| ADNB | Scientific papers in domestic non-impacted journals registered in Web of Sciences or Scopus | 7 |
| AEC | Scientific papers in foreign peer-reviewed proceedings, monographs | 32 |
| AED | Scientific papers in domestic peer-reviewed proceedings, monographs | 45 |
| AEMA | Abstracts of scientific papers published in foreign impacted journals registered in Web of Science Core Collection or Scopus | 2 |
| AFA | Published invited papers from foreign scientific conferences | 3 |
| AFB | Published invited papers from domestic scientific conferences | 4 |
| AFC | Published papers from foreign scientific conferences | 60 |
| AFD | Published papers from domestic scientific conferences | 39 |
| AFDB | Published papers from domestic scientific conferences | 2 |
| AFE | Abstracts of invited papers from foreign conferences | 16 |
| AFF | Abstracts of invited papers from domestic conferences | 11 |
| AFG | Abstracts of papers from foreign conferences | 61 |
| AFH | Abstracts of papers from domestic conferences | 44 |
| AFHA | Abstracts of papers from international conferences in Slovakia | 92 |

| | | |
|--------------|---|------------|
| AFHB | Abstracts of papers from domestic conferences | 36 |
| AFL | Domestic conferences posters | 4 |
| AGJ | Patent applications, utility model applications, design applications, trademark applications, applications for granting supplementary protection certificate, applications for registration of topographies of semiconductor products, designations of origin applications, geographical indications of goods and products applications, breeder's certificate applications | 9 |
| DAI | Dissertations and habilitation theses | 23 |
| FAI | Editorial work on book publications (bibliographies, encyclopedias, catalogues, dictionaries, collective publications/proceedings, atlases ...) | 15 |
| Count | | 867 |

AAA Scientific monographs published abroad

- AAA01 BESTERCI, Michal. *Nanostructural Al composites : Mechanical alloying, microstructure and mechanical properties of micro- and nanostructural Al-Al4C3 composites.* Saarbrücken : LAP LAMBERT Academic Publ., 2015. 143 p. ISBN 978-3-659-77387-7.
- AAA02 CENIGA, Ladislav. *Analytical models of thermal stresses in composite materials IV.* Nova Science Publishers, 2015. 207 p. ISBN 978-1-63463-780-3.
- AAA03 ŠALAK, Andrej - SELECKÁ, Marcela. *Manganese in powder metallurgy steels.* Cambridge : Cambridge International Science Publishing, 2012. 477 p. ISBN 978-1-907343-74-2.

ABC Chapters in scientific monographs published abroad

- ABC01 BESTERCI, Michal - SÜLLEIOVÁ, Katarína - VELGOSOVÁ, Oksana. Kinetic of mechanical alloying, quantification of microstructural parameters and mechanical properties of Al-Al4C3 composites. In BESTERCI, Michal. *Nanostructural Al composites : Mechanical alloying, microstructure and mechanical properties of micro- and nanostructural Al-Al4C3 composites.* - Saarbrücken : LAP LAMBERT Academic Publ., 2015, p. 3-24. ISBN 978-3-659-77387-7.
- ABC02 DOBEŠ, Ferdinand - DYMÁČEK, Petr - BESTERCI, Michal. Small punch testing of Al-Al4C3 micro- and nanocomposites. In BESTERCI, Michal. *Nanostructural Al composites : Mechanical alloying, microstructure and mechanical properties of micro- and nanostructural Al-Al4C3 composites.* - Saarbrücken : LAP LAMBERT Academic Publ., 2015, p. 85-118. ISBN 978-3-659-77387-7.
- ABC03 HVIZDOŠ, Pavol - TATARKO, Peter - DUSZOVÁ, Annamária - DUSZA, Ján. Failure mechanisms of ceramic nanocomposites. In *Ceramic nanocomposites.* - Cambridge : Woodhead Publishing, 2013, p. 117-152. ISBN 978-0-85709-338-7.

- ABC04 KOVAL', Vladimír - VIOLA, Giusuppe - TAN, Yongqiang. Biasing effects in ferroic materials. In *Ferroelectric materials - synthesis and characterization.* - Rijeka : InTech, 2015, p. 205-245. ISBN 978-953-51-2147-3.
- ABC05 OROLÍNOVÁ, Mária - ĎURIŠIN, Juraj - DANKOVÁ, Zuzana - ĎURIŠINOVÁ, Katarína - BESTERCI, Michal. Analyse of microstructure and thermal stability of Al-Al4C3 composites. In BESTERCI, Michal. *Nanostructural Al composites : Mechanical alloying, microstructure and mechanical properties of micro- and nanostructural Al-Al4C3 composites.* - Saarbrücken : LAP LAMBERT Academic Publ., 2015, p. 51-84. ISBN 978-3-659-77387-7.
- ABC06 PEŠEK, Ladislav - ZUBKO, Pavol - BESTERCI, Michal. Local mechanical properties of Al-Al4C3 composite. In BESTERCI, Michal. *Nanostructural Al composites : Mechanical alloying, microstructure and mechanical properties of micro- and nanostructural Al-Al4C3 composites.* - Saarbrücken : LAP LAMBERT Academic Publ., 2015, p. 25-50. ISBN 978-3-659-77387-7.
- ABC07 TATARKO, Peter - KAŠIAROVÁ, Monika. Silicon nitride based ceramic composites toughened by rare-earth oxide additives. In *Toughening mechanisms in composite materials.* - Cambridge : Elsevier Ltd. and Woodhead Publ., 2015, p. 35-71.
- ABC08 VELGOSOVÁ, Oksana - BESTERCI, Michal - HVIZDOŠ, Pavol - KVAČKAI, Tibor - SÜLLEIOVÁ, Katarína. fracture of micro- and nanostructural Al-Al4C3 systems. In BESTERCI, Michal. *Nanostructural Al composites : Mechanical alloying, microstructure and mechanical properties of micro- and nanostructural Al-Al4C3 composites.* - Saarbrücken : LAP LAMBERT Academic Publ., 2015, p. 119-143. ISBN 978-3-659-77387-7.

ACB Academic/university textbooks published in Slovak publishing houses

- ACB01 LOFAJ, František - RÍZEKOVÁ TRNKOVÁ, Lýdia - MORAVČÍK, Roman - HAZLINGER, Marián. *Mechanické skúšky a defektoskopia materiálov*. Rec. Otakar Bokůvka, Ján Dusza. Trnava : MTF STU, 2014. 244 s. ISBN 978-80-8096-208-1.
- ACB02 MORAVČÍK, Roman - ČIČKA, R. - HAZLINGER, Marián - HVIZDOŠ, Pavol - JANOVEC, Jozef. *Úvod do materiálového inžinierstva I.* Bratislava : Slovenská technická univerzita, 2015. 374 s. ISBN 978-80-227-4405-8.

ADCA Scientific papers in foreign journals registered in Current Contents Connect with IF (impacted)

- ADCA01 AZHNIUK, Y.M. - GOMONNAI, A.V. - RUBISH, V.M. - RIGAN, M.Y. - SOLOMON, A.M. - GOMONNAI, O.O. - GURANICH, O.G. - PETRYSHYNETS, Ivan - ZAHN, D.R.T. In situ Raman observation of laser-induced formation of TlInSe₂ crystallites in Tl-In-As-Se glass. In *Journal of Physics and Chemistry of Solids*, 2013, vol. 74, p. 1452-1458. (1.527 - IF2012). (2013 - Current Contents). ISSN 0022-3697.
- ADCA02 AZHNIUK, Y.M. - STOYKA, Volodymyr - PETRYSHYNETS, Ivan - RUBISH, V.M. - GURANICH, O.G. - GOMONNAI, A.V. - ZAHN, D.R.T. SbSI nanocrystal formation in As-Sb-S-I glass under laser beam. In *Materials Research*

Bulletin, 2012, vol. 47, p. 1520-1522. (2.105 - IF2011). (2012 - Current Contents). ISSN 0025-5408.

- ADCA03 BALÁŽ, Matej - ZORKOVSKÁ, Anna - FABIÁN, Martin - GIRMAN, Vladimír - BRIANČIN, Jaroslav. Eggshell biomaterial: Characterization of nanophase and polymorphs after mechanical activation. In *Advanced Powder Technology*, 2015, vol. 26, 1597-1608. (2.638 - IF2014). (2015 - Current Contents). ISSN 0921-8831.
- ADCA04 BALGA, Dušan - OSTROUSHKO, Dmytro - SAKSL, Karel - MAZANCOVÁ, Eva - MILKOVIČ, Ondrej. Structure and mechanical properties of explosive welded Mg/Al bimetal. In *Archives of Metallurgy and Materials*, 2014, vol. 59, no. 4, p. 1593-1597. (0.763 - IF2013). (2014 - Current Contents). ISSN 1733-3490.
- ADCA05 BALKO, Ján - HVIZDOŠ, Pavol - DUSZA, Ján - BALÁZSI, Csaba - GAMCOVÁ, Jana. Wear damage of Si₃N₄-graphene nanocomposites at room and elevated temperatures. In *Journal of the European Ceramic Society*, 2014, vol. 34, p. 3309-3317. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA06 BALLÓKOVÁ, Beáta - BESTERCI, Michal - HVIZDOŠ, Pavol. Creep behaviour and fracture analysis of MoSi₂ based composites. In *High Temperature Materials and Processes*, 2015, vol. 34, no. 4, p. 317-323. (2015 - Current Contents). ISSN 0334-6455.
- ADCA07 BAŤKO, Ivan - BAŤKOVÁ, Marianna - LOFAJ, František. Electrical Resistivity of CrN Thin Films. In *Acta Physica Polonica A*, 2014, vol. 126, no. 1, p. 415-416. (0.604 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1898-794X.
- ADCA08 BESTERCI, Michal - VARCHOLA, Marián - KOVÁČ, Ladislav - VELGOSOVÁ, Oksana. Contribution to kinetics of superplastic deformation of dispersion strengthened Al-Al₄C₃ system. In *High Temperature Materials and Processes*, 2012, vol. 31, p. 3-5. (0.242 - IF2011). (2012 - Current Contents). ISSN 0334-6455.
- ADCA09 BESTERCI, Michal - SÜLLEIOVÁ, Katarína - VELGOSOVÁ, Oksana. Kinetics of mechanical alloying, mechanical properties of micro and nanostructural Al-C systems. In *High Temperature Materials and Processes*, 2012, vol. 31, no. 4-5, p. 359-369. (0.242 - IF2011). (2012 - Current Contents). ISSN 0334-6455.
- ADCA10 BILANYCH, V.S. - LOFAJ, František - FLACHBART, Karol - CSACH, Kornel - KUŽMA, V.V. - RIZAK, V.M. Nanoindentation of amorphous Ge-As-Se films. In *Physics of the Solid State*, 2014, vol. 56, no. 6, p. 1163-1167. (0.782 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1063-7834.
- ADCA11 BIRČÁKOVÁ, Zuzana - KOLLÁR, P. - FÜZER, J. - LAUDA, M. - BUREŠ, Radovan - FÁBEROVÁ, Mária. Influence of the resin content on the dynamic energy losses in iron-phenolphormaldehyde resin composites. In *IEEE Transactions*

on Magnetics, 2014, vol. 50, no. 12, 6301507. (1.213 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0018-9464.

- ADCA12 BIRČÁKOVÁ, Zuzana - KOLLÁR, P. - VOJTEK, Vladimír - BUREŠ, Radovan - FÁBEROVÁ, Mária. Influence of vitroperm content on the energy losses in composite materials based on the mixture of two ferromagnets. In *Acta Physica Polonica A*, 2014, vol. 126, no. 1, p. 114-115. (0.604 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1898-794X.
- ADCA13 BIRČÁKOVÁ, Zuzana - KOLLÁR, P. - WEIDENFELLER, Bernd - FÜZER, J. - FÁBEROVÁ, Mária - BUREŠ, Radovan. Reversible and irreversible DC magnetization processes in the frame of magnetic, thermal and electrical properties of Fe-based composite materials. In *Journal of Alloys and Compounds*, 2015, vol. 645, p. 283-289. (2.999 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 0925-8388.
- ADCA14 BLACH, Juraj - FALAT, Ladislav. The influence of thermal exposure and hydrogen charging on the notch tensile properties and fracture behaviour of dissimilar T91/TP316H weldments. In *High Temperature Materials and Processes*, 2014, vol. 33, no. 4, p. 329-337. (0.356 - IF2013). (2014 - Current Contents). ISSN 0334-6455.
- ADCA15 BLANDA, Marek - DUSZOVÁ, Annamária - CSANÁDI, Tamás - HVIZDOŠ, Pavol - LOFAJ, František - DUSZA, Ján. Indentation fatigue of WC grains in WC-Co composite. In *Journal of the European Ceramic Society*, 2014, vol. 34, p. 3407-3412. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA16 BLANDA, Marek - DUSZOVÁ, Annamária - CSANÁDI, Tamás - HVIZDOŠ, Pavol - LOFAJ, František - DUSZA, Ján. Indentation hardness and fatigue of the constituents of WC-Co composites. In *International Journal of Refractory Metals and Hard Materials*, 2015, vol. 49, p. 178-183. (1.989 - IF2014). (2015 - Current Contents). ISSN 0263-4368.
- ADCA17 BODIŠOVÁ, Katarína - KAŠIAROVÁ, Monika - PRAMUKOVÁ, Zuzana - DOMANICKÁ, Magdaléna - LENČÉŠ, Zoltán - HNATKO, Miroslav - GROMOŠOVÁ, Silvia - ŠAJGALÍK, Pavol. Mechanical properties of macroporous silicon nitride-based ceramics designed for bone substitutes. In *Ceramics-Silikáty*, 2014, vol. 58, no. 2, p. 99-105. (0.434 - IF2013). (2014 - Current Contents). ISSN 0862-5468.
- ADCA18 BODIŠOVÁ, Katarína - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - LENČÉŠ, Zoltán - VARCHULOVÁ NOVÁKOVÁ, Zuzana - VOJTAŠŠÁK, Ján - GROMOŠOVÁ, Silvia - ŠAJGALÍK, Pavol. Porous silicon nitride ceramics designed for bone substitute applications. In *Ceramics International*, 2013, vol. 39, p. 8355-8362. (1.789 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0272-8842.
- ADCA19 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - HVIZDOŠ, Pavol - GIRMAN, Vladimír. Effect of solvent on phase composition and particle

morphology of lanthanum niobates prepared by polymeric complex sol-gel method. In *Journal of Sol-Gel Science and Technology*, 2014, vol. 69, p. 272-280. (1.547 - IF2013). (2014 - Current Contents). ISSN 0928-0707.

- ADCA20 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - HVIZDOŠ, Pavol. Effect of substrate on microstructure and mechanical properties of sol-gel prepared (K, Na)NbO₃ thin films. In *Materials Science and Engineering B - Solid-State Materials for Advanced Technology*, 2013, vol. 178, p. 254-262. (1.846 - IF2012). (2013 - Current Contents). ISSN 0921-5107.
- ADCA21 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - ĎURIŠIN, Juraj - HVIZDOŠ, Pavol. Phase and morphology formation of Na doped PMN thin films prepared by modified sol-gel method. In *Ceramics-Silikáty*, 2013, vol. 57, no. 1, p. 22-27. (0.418 - IF2012). (2013 - Current Contents). ISSN 0862-5468.
- ADCA22 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - ĎURIŠIN, Juraj - GIRMAN, Vladimír. Phase transformation and particle morphology of perovskite La_{1/3}TaO₃ precursors prepared by polymeric tartrate complex sol-gel method. In *Materials Letters*, 2014, vol. 115, p. 184-186. (2.269 - IF2013). (2014 - Current Contents). ISSN 0167-577X.
- ADCA23 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - HVIZDOŠ, Pavol - ĎURIŠIN, Juraj - GIRMAN, Vladimír. Structural and mechanical properties of sol-gel prepared pyrochlore lanthanum niobates. In *Journal of Materials Science*, 2015, vol. 50, p. 7197-7207. (2.371 - IF2014). (2015 - Current Contents). ISSN 0022-2461.
- ADCA24 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - HVIZDOŠ, Pavol - ĎURIŠIN, Juraj. Structural and nanomechanical properties of sol-gel prepared (K, Na)NbO₃ thin films. In *Surface and Interface Analysis*, 2015, vol. 47, p. 1063-1071. (1.245 - IF2014). (2015 - Current Contents). ISSN 0142-2421.
- ADCA25 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - ĎURIŠIN, Juraj - HVIZDOŠ, Pavol - GIRMAN, Vladimír. Structural properties and phase transformation of sol-gel prepared lanthanum tantalates. In *Journal of Materials Science*, 2014, vol. 49, p. 8423-8435. (2.305 - IF2013). (2014 - Current Contents). ISSN 0022-2461.
- ADCA26 BRZÓZKA, K. - KOLLÁR, P. - SZUMIATA, T. - SOVÁK, Pavol - FÜZER, J. - FÁBEROVÁ, Mária - BUREŠ, Radovan - GÓRKA, B. - GAWROŃSKI, M. - GZIK-SZUMIATA, M. Mössbauer and magnetic study of Fe + vitroperm + plastic system. In *Acta Physica Polonica A*, 2014, vol. 126, no. 1, p. 148-149. (0.604 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1898-794X.
- ADCA27 BUREŠ, Radovan - FÁBEROVÁ, Mária - STREČKOVÁ, Magdaléna - BIRČÁKOVÁ, Zuzana - KOLLÁR, P. - FÜZER, J. Structure and properties of composites based on mixed morphology of ferromagnetic particles. In *Acta Physica Polonica A*, 2014, vol. 126, no. 1, p. 140-141. (0.604 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1898-794X.

- ADCA28 BURIAN, Tomáš - HÁJKOVÁ, V. - CHALUPSKÝ, Jaromír - VYŠÍN, Luděk - BOHÁČEK, Pavel - PŘEČEK, Martin - WILD, Jan - ÖZKAN, Cigdem - COPPOLA, Nicola - FARAHANI, Shafagh Dastjani - SCHULZ, Joachim - SINN, Harald - TSCHENTSCHER, Thomas - GAUDIN, Jérôme - BAJT, Saša - TIEDTKE, Kai - TOLEIKIS, Sven - CHAPMAN, Henry N. - LOCH, Rolf A. - JUREK, Marek - SOBIERAJSKI, Ryszard - KRZYWINSKI, Jacek - MOELLER, Stefan - HARMAND, Marion - GALASSO, Germano - NAGASONO, Mitsuru - SAKSL, Karel - SOVÁK, Pavol - JUHA, Libor. Soft x-ray free-electron laser induced damage to inorganic scintillators. In *Optical Materials Express*, 2015, vol. 5, no. 2, p. 254-264. (2.844 - IF2014). (2015 - Current Contents). ISSN 2159-3930.
- ADCA29 CAPIK, Marek - ŠVEC, Peter Jr. - MARCIN, Jozef - KOVÁČ, Jozef - SOPKO, Martin - JANIČKOVIČ, Dušan - ŠVEC, Peter - ŠKORVÁNEK, Ivan. Effect of Temperature on Magnetization Processes in Amorphous Rapidly Solidified FeSiB/CoSiB Bilayer Ribbons. In *Acta Physica Polonica A*, 2014, vol. 126, no. 1, p. 120-121. (0.604 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1898-794X.
- ADCA30 CEMPURA, Grzegorz - MOSKAŁEWICZ, Tomasz - WENDLER, Bogdan - LOFAJ, František - CZYRSKA-FILEMONOWICZ, Aleksandra. Microstructure and properties of nc-WC/a-C coating deposited on high speed steel by magnetron sputtering. In *Chemické listy*, 2012, vol. 106, p. s393-s394. (0.529 - IF2011). (2012 - Current Contents, WOS, CCC, SCOPUS). ISSN 0009-2770.
- ADCA31 CENIGA, Ladislav. A novel analytical model and energy analysis of thermal stresses in two-phase composites. In *Meccanica*, 2012, vol. 47, p. 845-855. (1.558 - IF2011). (2012 - Current Contents). ISSN 0025-6455.
- ADCA32 CENIGA, Ladislav. Analytical modelling of thermal stresses in anisotropic composites. In *Mechanics Research Communications*, 2015, vol. 69, p. 159-163. (1.502 - IF2014). (2015 - Current Contents). ISSN 0093-6413.
- ADCA33 CENIGA, Ladislav. Thermal stresses in multi-component anisotropic materials. In *Meccanica*, 2015, vol. 50, p. 2421-2430. (1.949 - IF2014). (2015 - Current Contents). ISSN 0025-6455.
- ADCA34 CSANÁDI, Tamás - NOVÁK, Michal - DUSZOVÁ, Annamária - DUSZA, Ján. Anisotropic nanoscratch resistance of WC grains in WC-Co composite. In *International Journal of Refractory Metals and Hard Materials*, 2015, vol. 51, p. 188-191. (1.989 - IF2014). (2015 - Current Contents). ISSN 0263-4368.
- ADCA35 CSANÁDI, Tamás - BL'ANDA, Marek - DUSZOVÁ, Annamária - CHINH, Nguyen Quang - SZOMMER, Péter - DUSZA, Ján. Deformation characteristics of WC micropillars. In *Journal of the European Ceramic Society*, 2014, vol. 34, p. 4099-4103. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA36 CSANÁDI, Tamás - CHINH, Nguyen Quang - SZOMMER, Péter - DUSZA, Ján - LENČEŠ, Zoltán - ŠAJGALÍK, Pavol. Deformation and fracture of β -silicon

nitride micropillars. In *Journal of the American Ceramic Society*, 2015, vol. 98, no. 2, p. 374-377. (2.610 - IF2014). (2015 - Current Contents). ISSN 0002-7820.

ADCA37 CSANÁDI, Tamás - BLANDA, Marek - CHINH, Nguyen Quang - HVIZDOŠ, Pavol - DUSZA, Ján. Orientation-dependent hardness and nanoindentation-induced deformation mechanisms of WC crystals. In *Acta Materialia*, 2015, vol. 83, p. 397-407. (4.465 - IF2014). (2015 - Current Contents). ISSN 1359-6454.

ADCA38 DOBEŠ, Ferdinand - BESTERCI, Michal - BALLÓKOVÁ, Beáta - SÜLLEIOVÁ, Katarína - DYMÁČEK, Petr. Analysis of creep fracture in Al-Al4C3 composite after ECAP. In *Materials Science and Engineering A - Structural Materials Properties Microstructure and Processing*, 2012, vol. 532, p. 567-572. (2.003 - IF2011). (2012 - Current Contents, SCOPUS, WOS). ISSN 0921-5093.

ADCA39 DOBEŠ, Ferdinand - DYMÁČEK, Petr - BESTERCI, Michal. Estimation of the mechanical properties of aluminium and an aluminium composite after equal channel angular pressing by means of the small punch test. In *Materials Science and Engineering A - Structural Materials Properties Microstructure and Processing*, 2015, vol. 626, p. 313-321. (2.567 - IF2014). (2015 - Current Contents). ISSN 0921-5093.

ADCA40 DUDROVÁ, Eva - KABÁTOVÁ, Margita - HVIZDOŠ, Pavol - ORIŇÁKOVÁ, Renáta. Sintered composite materials on the basis of Fe/FePO₄-coated powders. In *Surface and Interface Analysis*, 2015, vol. 47, p. 350-356. (1.245 - IF2014). (2015 - Current Contents). ISSN 0142-2421.

ADCA41 ĎURIŠIN, Juraj Jr. - BALGA, Dušan - SAKSL, Karel - PIETRIKOVÁ, A. Atomic structure of Cu-Zr-Ti metallic glasses subjected to high temperature annealing. In *Journal of Alloys and Compounds*, 2014, vol. 608, p. 241-246. (2.726 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0925-8388.

ADCA42 ĎURIŠINOVÁ, Katarína - ĎURIŠIN, Juraj - OROLÍNOVÁ, Mária - ĎURIŠIN, Martin. Effect of particle additions on microstructure evolution of aluminium matrix composite. In *Journal of Alloys and Compounds*, 2012, vol. 525, p. 137-142. (2.289 - IF2011). (2012 - Current Contents, WOS, SCOPUS). ISSN 0925-8388.

ADCA43 ĎURIŠINOVÁ, Katarína - ĎURIŠIN, Juraj - OROLÍNOVÁ, Mária - ĎURIŠIN, Martin - SZABÓ, Juraj. Effect of mechanical milling on nanocrystalline grain stability and properties of Cu-Al₂O₃ composite prepared by thermo-chemical technique and hot extrusion. In *Journal of Alloys and Compounds*, 2015, vol. 618, p. 204-209. (2.999 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 0925-8388.

ADCA44 DUSZA, Ján - MORGIEL, Jerzy - DUSZOVÁ, Annamária - KVETKOVÁ, Lenka - NOSKO, Martin - KUN, Péter - BALÁZSI, Csaba. Microstructure and fracture toughness of Si₃N₄+graphene platelet composites. In *Journal of the European Ceramic Society*, 2012, vol. 32, p. 3389-3397. (2.353 - IF2011). (2012 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.

- ADCA45 DUSZOVÁ, Annamária - MORGIEL, Jerzy - BASTL, Zdeněk - MIHÁLY, J. - DUSZA, Ján. Characterization of carbon nanofibers/ZrO₂ ceramic matrix composite. In *Archives of Metallurgy and Materials*, 2013, vol. 58, no. 2, p. 459-463. (0.431 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 1733-3490.
- ADCA46 DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - LOFAJ, František - MAJOR, Lukasz - DUSZA, Ján - MORGIEL, Jerzy. Indentation fatigue of WC-Co cemented carbides. In *International Journal of Refractory Metals and Hard Materials*, 2013, vol. 41, p. 229-235. (1.858 - IF2012). (2013 - Current Contents). ISSN 0263-4368.
- ADCA47 DUSZOVÁ, Annamária - HALGAŠ, Radoslav - BIĽANDA, Marek - HVIZDOŠ, Pavol - LOFAJ, František - DUSZA, Ján - MORGIEL, Jerzy. Nanoindentation of WC-Co hardmetals. In *Journal of the European Ceramic Society*, 2013, vol. 33, p. 2227-2232. (2.360 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA48 DŽUPON, Miroslav - FALAT, Ladislav - SLOTA, Ján - HVIZDOŠ, Pavol. Failure analysis of overhead power line yoke connector. In *Engineering Failure Analysis*, 2013, vol. 33, p. 66-74. (0.855 - IF2012). (2013 - Current Contents). ISSN 1350-6307.
- ADCA49 FABIÁN, Martin - BOTTKE, Patrick - GIRMAN, Vladimír - DÜVEL, A. - DA SILVA, K. L. - WILKENING, Martin - HAHN, Horst - HEITJANS, Paul - ŠEPELÁK, Vladimír. A simple and straightforward mechanochemical synthesis of the far-from-equilibrium zinc aluminate, ZnAl₂O₄, and its response to thermal treatment. In *RSC Advances*, 2015, vol. 5, no. 67, p. 54321-54328. (3.840 - IF2014). (2015 - Current Contents). ISSN 2046-2069.
- ADCA50 FADEEVA, Inna V. - BAKUNOVA, Natalia V. - KOMLEV, Vladimir S. - MEDVECKÝ, Ľubomír - FOMIN, Alexander S. - GURIN, A.N. - BARINOV, S.M. Zinc- and silver-substituted hydroxyapatite: synthesis and properties. In *Doklady Chemistry*, 2012, vol. 442, p. 63-65. (0.315 - IF2011). (2012 - Current Contents). ISSN 0012-5008.
- ADCA51 FALAT, Ladislav - ČIRIPOVÁ, Lucia - KEPIČ, Ján - BURŠÍK, Jiří - PODSTRANSKÁ, Ivana. Correlation between microstructure and creep performance of martensitic/austenitic transition weldment in dependence of its post-weld heat treatment. In *Engineering Failure Analysis*, 2014, vol. 40, p. 141-152. (1.130 - IF2013). (2014 - Current Contents). ISSN 1350-6307.
- ADCA52 FALAT, Ladislav - SVOBODA, Milan - VÝROSTKOVÁ, Anna - PETRYSHYNETS, Ivan - SOPKO, Martin. Microstructure and creep characteristics of dissimilar T91/TP316H martensitic/austenitic welded joint with Ni-based weld metal. In *Materials Characterization*, 2012, vol. 72, p. 15-23. (1.572 - IF2011). (2012 - Current Contents). ISSN 1044-5803.
- ADCA53 FALAT, Ladislav - VÝROSTKOVÁ, Anna - KEPIČ, Ján - ČIRIPOVÁ, Lucia. The influence of isothermal annealing on degradation of mechanical properties of homogeneous weldment of the 9Cr-Mo steel. In *Chemické listy*, 2012, vol. 106, p.

s405-s406. (0.529 - IF2011). (2012 - Current Contents, WOS, CCC, SCOPUS).
ISSN 0009-2770.

- ADCA54 FEDORKOVÁ, Andrea - ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - KUPKOVÁ, Miriam - WIEMHÖFER, H.-D. - AUDINOT, Jean Nicolas - GUILLOT, J. Electrochemical and XPS study of LiFePO₄ cathode nanocomposite with PPy/PEG conductive network. In *Solid State Sciences*, 2012, vol. 14, p. 1238-1243. (1.856 - IF2011). (2012 - Current Contents, WOS, SCOPUS). ISSN 1293-2558.
- ADCA55 FIAL, C. - DUDROVÁ, Eva - KABÁTOVÁ, Margita - KUPKOVÁ, Miriam - SELECKÁ, Marcela - SULOWSKI, Maciej - CIAS, A. Sinteraustempering of two Mo-(Cu)-(Cr)-(Ni)-(Mn)-C steels in semi-closed container in flowing nitrogen. In *Archives of Metallurgy and Materials*, 2015, vol. 60, no. 2, p. 783-788. (1.090 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 1733-3490.
- ADCA56 FÜZEROVÁ, Jana - FÜZER, J. - KOLLÁR, P. - HEGEDÜS, L. - BUREŠ, Radovan - FÁBEROVÁ, Mária. Analysis of the complex permeability versus frequency of soft magnetic composites consisting of iron and Fe₇₃Cu₁Nb₃Si₁₆B₇. In *IEEE Transactions on Magnetics*, 2012, vol. 48, no. 4, p. 1545-1548. (1.363 - IF2011). (2012 - Current Contents). ISSN 0018-9464.
- ADCA57 FÜZEROVÁ, Jana - FÜZER, J. - KOLLÁR, P. - BUREŠ, Radovan - FÁBEROVÁ, Mária. Complex permeability and core loss of soft magnetic Fe-based nanocrystalline powder cores. In *Journal of Magnetism and Magnetic Materials*, 2013, vol. 345, p. 77-81. (1.826 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0304-8853.
- ADCA58 GALUSKOVÁ, Dagmar - KAŠIAROVÁ, Monika - HNATKO, Miroslav - GALUSEK, Dušan - DUSZA, Ján - ŠAJGALÍK, Pavol. Hydrothermal corrosion and flexural strength of Si₃N₄-based ceramics. In *Corrosion Science*, 2014, vol. 85, p. 94-100. (3.686 - IF2013). (2014 - Current Contents). ISSN 0010-938X.
- ADCA59 GAUDIN, Jérôme - OZKAN, Cigdem - CHALUPSKÝ, Jaromír - BAJT, Saša - BURIAN, Tomáš - VYŠÍN, Luděk - COPPOLA, Nicola - FARAHANI, Shafagh Dastjani - CHAPMAN, Henry N. - GALASSO, Germano - HÁJKOVÁ, Věra - HARMAND, Marion - JUHA, Libor - JUREK, Marek - LOCH, Rolf A. - MÖLLER, Stefan - NAGASONO, Mitsuru - STÖRMER, Michael - SINN, Harald - SAKSL, Karel - SOBIERAJSKI, Ryszard - SCHULZ, Joachim - SOVÁK, Pavol - TOLEIKIS, Sven - TIEDTKE, Kai - TSCHENTSCHER, Thomas - KRZYWINSKI, Jacek. Investigating the interaction of x-ray free electron laser radiation with grating structure. In *Optics Letters*, 2012, vol. 37, no. 15, p. 3033-3035. (3.399 - IF2011). (2012 - Current Contents). ISSN 0146-9592.
- ADCA60 GAVENDOVÁ, Petra - ČTVRTLÍK, Radim - KOVÁČ, František - PEŠEK, Ladislav - PETRYSHYNETS, Ivan. Dependence of indentation properties of electrotechnical steel on temperature and grain orientation. In *Chemické listy*, 2012, vol. 106, p. s413-s416. (0.529 - IF2011). (2012 - Current Contents, WOS, CCC, SCOPUS). ISSN 0009-2770.

- ADCA61 GIEWEKEMEYER, K. - HACKENBERG, C. - AQUILA, A. - WILKE, R.N. - GROVES, M.R. - JORDANOVA, R. - LAMZIN, V.S. - BORCHERS, G. - SAKSL, Karel - ZOZULYA, A.V. - SPRUNG, M. - MANCUSO, A.P. Tomography of a cryo-immobilized yeast cell using ptychographic coherent x-ray diffractive imaging. In *Biophysical Journal*, 2015, vol. 109, p. 1986-1995. (3.972 - IF2014). (2015 - Current Contents). ISSN 0006-3495.
- ADCA62 GOMONNAI, A.V. - PETRYSHYNETS, Ivan - AZHNIUK, Y.M. - GOMONNAI, O.O. - ROMAN, I.Yu. - TUROK, I.I. - SOLOMON, A.M. - ROSUL, R.R. - ZAHN, D.R.T. Growth and characterisation of sulphur-rich $TlIn(S1-xSex)2$ single crystals. In *Journal of Crystal Growth*, 2013, vol. 367, p. 35-41. (1.552 - IF2012). (2013 - Current Contents). ISSN 0022-0248.
- ADCA63 GRASSO, Salvatore - TATARKO, Peter - RIZZO, Stefano - PORWAL, Harshit - HU C, Chunfeng - KATOH, Yutai - SALVO, Milena - REECE, Michael J. - FERRARIS, Monica. Joining of Beta-SiC by spark plasma sintering. In *Journal of the European Ceramic Society*, 2014, vol. 34, p. 1681-1686. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA64 HAGAROVÁ, Mária - JAKUBÉCZYOVÁ, Dagmar - CEROVOVÁ, Jana. Microstructure and properties of electroplated Ni-Co alloy coatings. In *International Journal of Electrochemical Science*, 2015, vol. 10, p. 9968-9974. (1.500 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 1452-3981.
- ADCA65 HALGAŠ, Radoslav - DUSZA, Ján - KOVÁCSOVÁ, Lucia - KAIFEROVÁ, Jana - MARKOVSKÁ, Neda. Indentation testing of human enamel. In *Chemické listy*, 2012, vol. 106, p. s417-s418. (0.529 - IF2011). (2012 - Current Contents, WOS, CCC, SCOPUS). ISSN 0009-2770.
- ADCA66 HALGAŠ, Radoslav - DUSZA, Ján - KAIFEROVÁ, Jana - KOVÁCSOVÁ, Lucia - MARKOVSKÁ, Neda. Nanoindentation testing of human enamel and dentin. In *Ceramics-Silikáty*, 2013, vol. 57, no. 2, p. 92-99. (0.418 - IF2012). (2013 - Current Contents). ISSN 0862-5468.
- ADCA67 HEGEDÜSOVÁ, Lucia - CENIGA, Ladislav - DUSZA, Ján. Bending and contact strength of monolithic ceramic materials. In *International Journal of Damage Mechanics*, 2012, vol. 21, p. 293-305. (1.928 - IF2011). (2012 - Current Contents). ISSN 1056-7895.
- ADCA68 HEGEDÜSOVÁ, Lucia - CENIGA, Ladislav. Contact strength and cracking of laminar ceramics. In *High Temperature Materials and Processes*, 2012, vol. 31, p. 173-179. (0.242 - IF2011). (2012 - Current Contents). ISSN 0334-6455.
- ADCA69 HOMOLOVÁ, Viera - KROUPA, Aleš - VÝROSTKOVÁ, Anna. Calculation of Fe-B-V ternary phase diagram. In *Journal of Alloys and Compounds*, 2012, vol. 520, p. 30-35. (2.289 - IF2011). (2012 - Current Contents, WOS, SCOPUS). ISSN 0925-8388.
- ADCA70 HOMOLOVÁ, Viera - REPOVSKÝ, Peter - VÝROSTKOVÁ, Anna - KROUPA, Aleš. Experimental and theoretical determination of phase fraction in the

Fe-B-V alloys. In *Journal of Phase Equilibria and Diffusion*, 2014, vol. 35, no. 2, p. 172-177. (0.490 - IF2013). (2014 - Current Contents). ISSN 1547-7037.

ADCA71 HRUBOVČÁKOVÁ, Monika - DUDROVÁ, Eva - HYRYHA, Eduard - KABÁTOVÁ, Margita - HARVANOVÁ, Jarmila. Parameters controlling the oxide reduction during sintering of chromium prealloyed steel. In *Advances in Materials Science and Engineering*, 2013, article ID 789373. (0.500 - IF2012). ISSN 1687-6822.

ADCA72 HYRYHA, Eduard - DUDROVÁ, Eva - NYBORG, Lars. On-line control of processing atmospheres for proper sintering of oxidation-sensitive PM steels. In *Journal of Materials Processing Technology*, 2012, vol. 212, p. 977-987. (1.783 - IF2011). (2012 - Current Contents). ISSN 0924-0136.

ADCA73 HURÁKOVÁ, Mária - CSACH, Kornel - JURÍKOVÁ, Alena - MIŠKUF, Jozef - RAJŇÁK, Michal - ĎURIŠIN, Martin - KVAČKAJ, Tibor. Structural stability of amorphous alloy of modified finemet type. In *Acta Physica Polonica A*, 2015, vol. 127, no. 2, p. 564-566. (0.530 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 1898-794X.

ADCA74 HVIZDOŠ, Pavol - BALKO, Ján - CÓRDOBA, J.M. - CHICARDI, E. Nanoindentation of (Ti,Ta)(C,N)-Co cermets prepared by methods of mechanochemistry. In *International Journal of Refractory Metals and Hard Materials*, 2015, vol. 49, p. 219-224. (1.989 - IF2014). (2015 - Current Contents). ISSN 0263-4368.

ADCA75 HVIZDOŠ, Pavol - DUSZA, Ján - BALÁZSI, Csaba. Tribological properties of Si₃N₄-graphene nanocomposites. In *Journal of the European Ceramic Society*, 2013, vol. 33, p. 2359-2364. (2.360 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.

ADCA76 HVIZDOŠ, Pavol - PUCHÝ, Viktor - DUSZOVÁ, Annamária - DUSZA, Ján - BALÁZSI, Csaba. Tribological and electrical properties of ceramic matrix composites with carbon nanotubes. In *Ceramics International*, 2012, vol. 38, p. 5669-5676. (1.751 - IF2011). (2012 - Current Contents). ISSN 0272-8842.

ADCA77 HVIZDOŠ, Pavol - BESTERCI, Michal - KULU, Priit - KVAČKAJ, Tibor. Tribological characteristics of copper based composites with Al₂O₃ particles at various temperatures. In *High Temperature Materials and Processes*, 2013, vol. 32, no. 5, p. 437-442. (0.252 - IF2012). (2013 - Current Contents). ISSN 0334-6455.

ADCA78 CHICARDI, E. - TORRES, Y. - CÓRDOBA, J.M. - HVIZDOŠ, Pavol - GOTOR, Francisco José. Effect of tantalum content on the microstructure and mechanical behavior of cermets based on (TixTa_{1-x})(C0.5N0.5) solid solutions. In *Materials and Design*, 2014, vol. 53, p. 435-444. (3.171 - IF2013). (2014 - Current Contents). ISSN 0261-3069.

ADCA79 JAKUBÉCZYOVÁ, Dagmar - HVIZDOŠ, Pavol - SELECKÁ, Marcela. Investigation of thin layers deposited by two PVD techniques on high speed steel

produced by powder metallurgy. In *Applied Surface Science*, 2012, vol. 258, p. 5105-5110. (2.103 - IF2011). (2012 - Current Contents). ISSN 0169-4332.

- ADCA80 JAKUBÉCZYOVÁ, Dagmar - HAGAROVÁ, Mária - HVIZDOŠ, Pavol - CERVOVÁ, Jana - FRENÁK, Matúš. Tribological tests of modern coatings. In *International Journal of Electrochemical Science*, 2015, vol. 10, p. 7803-7810. (1.500 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 1452-3981.
- ADCA81 KABAN, I. - JÓVÁRI, P. - KOKOTIN, V. - SHULESHOVA, O. - BEUNEU, B. - SAKSL, Karel - MATTERN, N. - ECKERT, J. - GREER, A.L. Local atomic arrangements and their topology in Ni-Zr and Cu-Zr glassy and crystalline alloys. In *Acta Materialia*, 2013, vol. 61, p. 2509-2520. (3.941 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 1359-6454.
- ADCA82 KABÁTOVÁ, Margita - FÜZER, J. - FÜZEROVÁ, Jana - DUDROVÁ, Eva - KOLLÁR, P. Preparation and characterization of Fe/SiO₂ powder composites using impregnation method. In *Acta Physica Polonica A*, 2014, vol. 126, no. 1, p. 134-135. (0.604 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1898-794X.
- ADCA83 KABÁTOVÁ, Margita - DUDROVÁ, Eva - BRUNCKOVÁ, Helena. The effect of calcination on morphology of phosphate coating and microstructure of sintered iron phosphated powder. In *Surface and Interface Analysis*, 2013, vol. 45, p. 1166-1173. (1.220 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0142-2421.
- ADCA84 KAŠIAROVÁ, Monika - TATARKO, Peter - BURIK, Peter - DUSZA, Ján - ŠAJGALÍK, Pavol. Thermal shock resistance of Si₃N₄ and Si₃N₄-SiC ceramics with rare-earth oxide sintering additives. In *Journal of the European Ceramic Society*, 2014, vol. 34, no. 14, p. 3301-3308. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA85 KOBERA, Libor - CZERNEK, Jiří - STREČKOVÁ, Magdaléna - URBANOVÁ, Martina - ABBRENT, Sabina - BRUS, Jiří. Structure and distribution of cross-links in boron-modified phenol-formaldehyde resins designed for soft magnetic composites: A multiple-quantum ¹¹B-¹¹B MAS NMR correlation spectroscopy study. In *Macromolecules*, 2015, vol. 48, no. 14, p. 4874-4881. (5.800 - IF2014). (2015 - Current Contents). ISSN 0024-9297.
- ADCA86 KOLLÁR, P. - BIRČÁKOVÁ, Zuzana - VOJTEK, Vladimír - FÜZER, J. - BUREŠ, Radovan - FÁBEROVÁ, Mária. Dependence of demagnetizing fields in Fe-based composite materials on magnetic particle size and the resin content. In *Journal of Magnetism and Magnetic Materials*, 2015, vol. 388, p. 76-81. (1.970 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 0304-8853.
- ADCA87 KOLLÁR, P. - BIRČÁKOVÁ, Zuzana - FÜZER, J. - BUREŠ, Radovan - FÁBEROVÁ, Mária. Power loss separation in Fe-based composite materials. In *Journal of Magnetism and Magnetic Materials*, 2013, vol. 327, p. 146-150. (1.826 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0304-8853.

- ADCA88 KOLLÁR, P. - VOJTEK, Vladimír - BIRČÁKOVÁ, Zuzana - FÜZER, J. - FÁBEROVÁ, Mária - BUREŠ, Radovan. Steinmetz law in iron-phenolformaldehyde resin soft magnetic composites. In *Journal of Magnetism and Magnetic Materials*, 2014, vol. 353, p. 65-70. (2.002 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0304-8853.
- ADCA89 KOTTFER, Daniel - MARTON, Marián - FERDINANDY, Milan - TREBUŇA, Peter - KACZMAREK, Lukasz. A study of structural and wear properties of PACVD deposited a-C:H thin films for application as protective layers on Al alloys. In *Physica status solidi A. Applied research*, 2015, vol. 212, no. 10, p. 2271-2277. ISSN 0031-8965.
- ADCA90 KOTTFER, Daniel - FERDINANDY, Milan - KACZMAREK, Lukasz - MAŇKOVÁ, Ildikó - BEŇO, J. Investigation of Ti and Cr based PVD coatings deposited onto HSS Co 5 twist drills. In *Applied Surface Science*, 2013, vol. 282, p. 770-776. (2.112 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0169-4332.
- ADCA91 KOVÁČ, František - PETRYSHYNETS, Ivan - MARCIN, Jozef - ŠKORVÁNEK, Ivan. Effect of VC nano-inhibitors and dynamic continuous annealing on the magnetic properties of GO steels. In *IEEE Transactions on Magnetics*, 2013, vol. 49, no. 7, p. 4196-4199. (1.422 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0018-9464.
- ADCA92 KOVAL, Vladimír - ŠKORVÁNEK, Ivan - REECE, Michael J. - MITOSERIU, L. - YAN, Haixue. Effect of dysprosium substitution on crystal structure and physical properties of multiferroic BiFeO₃ ceramics. In *Journal of the European Ceramic Society*, 2014, vol. 34, no. 3, p. 641-651. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA93 KOVAL, Vladimír - ŠKORVÁNEK, Ivan - YAN, Haixue. Low-temperature magnetic and dielectric anomalies in rare-earth-substituted BiFeO₃ ceramics. In *Journal of the American Ceramic Society*, 2014, vol. 97, no. 12, p. 3729-3732. (2.428 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0002-7820.
- ADCA94 KOVAL, Vladimír. Template-assisted fabrication and dielectrophoretic manipulation of PZT microtubes. In *Ceramics-Silikáty*, 2012, vol. 56, no. 3, p. 177-186. (0.382 - IF2011). (2012 - Current Contents). ISSN 0862-5468.
- ADCA95 KOVALČÍKOVÁ, Alexandra - KUREK, Pavel - BALKO, Ján - DUSZA, Ján - ŠAJGALÍK, Pavol - MIHALIKOVÁ, Mária, Ing., PhD. Effect of the counterpart material on wear characteristics of silicon carbide ceramics. In *International Journal of Refractory Metals and Hard Materials*, 2014, vol. 44, p. 12-18. (1.764 - IF2013). (2014 - Current Contents). ISSN 0263-4368.
- ADCA96 KOVALČÍKOVÁ, Alexandra - DUSZA, Ján - ŠAJGALÍK, Pavol. Influence of the heat treatment on mechanical properties and oxidation resistance of SiC-Si₃N₄ composites. In *Ceramics International*, 2013, vol. 39, no. 7, p. 7951-7957. (1.789 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0272-8842.

- ADCA97 KOVALČÍKOVÁ, Alexandra - BALKO, Ján - BALÁZSI, Csaba - HVIZDOŠ, Pavol - DUSZA, Ján. Influence of hBN content on mechanical and tribological properties of Si₃N₄/BN ceramic composites. In *Journal of the European Ceramic Society*, 2014, vol. 34, p. 3319-3328. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA98 KOVALČÍKOVÁ, Alexandra - BALÁZSI, Csaba - DUSZA, Ján - TAPASZTÓ, Orsolya. Mechanical properties and electrical conductivity in a carbon nanotube reinforced silicon nitride composite. In *Ceramics International*, 2012, vol. 38, p. 527-533. (1.751 - IF2011). (2012 - Current Contents). ISSN 0272-8842.
- ADCA99 KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - KUPKA, Martin - ORIŇÁKOVÁ, Renáta - MOROVSKÁ TUROŇOVÁ, Andrea. Corrosion behaviour of powder metallurgy biomaterials from phosphated carbonyl-iron powders. In *International Journal of Electrochemical Science*, 2015, vol. 10, no. 1, p. 671-681. (1.500 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 1452-3981.
- ADCA100 KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - ZELEŇÁK, Adam - SULOWSKI, Maciej - CIAS, A. - ORIŇÁKOVÁ, Renáta - MOROVSKÁ TUROŇOVÁ, Andrea - ŽÁKOVÁ, K. - KUPKA, Martin. Dimensional changes, microstructure, microhardness distributions and corrosion properties of iron and iron-manganese sintered materials. In *Archives of Metallurgy and Materials*, 2015, vol. 60, no. 2, p. 639-642. (1.090 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 1733-3490.
- ADCA101 KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - KUPKA, Martin - ORIŇÁKOVÁ, Renáta - MOROVSKÁ TUROŇOVÁ, Andrea. Sintering behaviour, graded microstructure and corrosion performance of sintered Fe-Mn biomaterials. In *International Journal of Electrochemical Science*, 2015, vol. 10, p. 9256-9268. (1.500 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 1452-3981.
- ADCA102 KUPKOVÁ, Miriam - KUPKA, Martin. Size-dependent microhardness of two-component sintered materials. In *Chemické listy*, 2012, vol. 106, sp. iss. s3, p. s462-s463. (0.529 - IF2011). (2012 - Current Contents, WOS, CCC, SCOPUS). ISSN 0009-2770. *LMP 2011: Local Mechanical Properties, Olomouc, Czech Republic, 9-11 November 2011*. (0.529 - IF2011).
- ADCA103 KVETKOVÁ, Lenka - DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - DUSZA, Ján - KUN, Péter - BALÁZSI, Csaba. Fracture toughness and toughening mechanisms in graphene platelet reinforced Si₃N₄ composites. In *Scripta Materialia*, 2012, vol. 66, p. 793-796. (2.699 - IF2011). (2012 - Current Contents). ISSN 1359-6462.
- ADCA104 KVETKOVÁ, Lenka - DORČÁKOVÁ, Františka - NOSKO, Martin - DUSZA, Ján - KUN, Péter - BALÁZSI, Csaba. Indentation toughness of Si₃N₄ reinforced with graphene platelets. In *Chemické listy*, 2012, vol. 106, p. s407-s408. (0.529 - IF2011). (2012 - Current Contents, WOS, CCC, SCOPUS). ISSN 0009-2770.

- ADCA105 KVETKOVÁ, Lenka - DUSZOVÁ, Annamária - KAŠIAROVÁ, Monika - DORČÁKOVÁ, Františka - DUSZA, Ján - BALÁZSI, Csaba. Influence of processing on fracture toughness of Si₃N₄ + graphene platelet composites. In *Journal of the European Ceramic Society*, 2013, vol. 33, p. 2299-2304. (2.360 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA106 LAUDA, M. - FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. - STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária. Magnetic properties of soft magnetic FeSi composite powder cores. In *Acta Physica Polonica A*, 2014, vol. 126, no. 1, p. 144-145. (0.604 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1898-794X.
- ADCA107 LOFAJ, František - KUČERA, Ján - NÉMETH, Dušan - KVETKOVÁ, Lenka. Finite element analysis of stress distributions in mono- and bi-cortical dental implants. In *Materials Science and Engineering C - Biomimetic and Supramolecular Systems*, 2015, vol. 50, p. 85-96. (3.088 - IF2014). (2015 - Current Contents). ISSN 0928-4931.
- ADCA108 LOFAJ, František - MOSKALEWICZ, Tomasz - CEMPURA, Gregorz - MIKULA, Marian - DUSZA, Ján - CZYRSKA-FILEMONOWICZ, Aleksandra. Nanohardness and tribological properties of nc-TiB₂ coatings. In *Journal of the European Ceramic Society*, 2013, vol. 33, p. 2347-2353. (2.360 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA109 LOFAJ, František - FERDINANDY, Milan - CEMPURA, Gregorz - DUSZA, Ján. Nanoindentation, AFM and tribological properties of thin nc-WC/a-C coatings. In *Journal of the European Ceramic Society*, 2012, vol. 32, p. 2043-2051. (2.353 - IF2011). (2012 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA110 MEDVECKÝ, Ľubomír - SOPČÁK, Tibor - GIRMAN, Vladimír - BRIANČIN, Jaroslav. Amorphous calcium phosphates synthesized by precipitation from calcium D-gluconate solutions. In *Colloids and Surfaces A : Physicochemical and Engineering Aspects*, 2013, vol. 417, p. 191-200. (2.108 - IF2012). (2013 - Current Contents). ISSN 0927-7757.
- ADCA111 MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária - SOPČÁK, Tibor. Preparation and properties of tetracalcium phosphate-monetite biocement. In *Materials Letters*, 2013, vol. 100, p. 137-140. (2.224 - IF2012). (2013 - Current Contents). ISSN 0167-577X.
- ADCA112 MEDVECKÝ, Ľubomír - SOPČÁK, Tibor. Preparation and properties of octacalcium phosphate-polyhydroxybutyrate thin film composites. In *Materials Letters*, 2012, vol. 68, p. 157-160. (2.307 - IF2011). (2012 - Current Contents). ISSN 0167-577X.
- ADCA113 MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária - ŠTULAJTEROVÁ, Radoslava. Properties and in vitro characterization of polyhydroxybutyrate-chitosan scaffolds prepared by modified precipitation method. In *Journal of Materials Science: Materials in Medicine*, 2014, vol. 25, p. 777-789. (2.379 - IF2013). (2014 - Current Contents). ISSN 0957-4530.

ADCA114 MICHÁLEK, Martin - KAŠIAROVÁ, Monika - MICHÁLKOVÁ, Monika - GALUŠEK, Dušan. Mechanical and functional properties of Al₂O₃-ZrO₂-MWCNTs nanocomposites. In *Journal of the European Ceramic Society*, 2014, vol. 34, p. 3329-3337. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.

ADCA115 MICHÁLKOVÁ, Monika - KAŠIAROVÁ, Monika - TATARKO, Peter - DUSZA, Ján - ŠAJGALÍK, Pavol. Effect of homogenization treatment on the fracture behaviour of silicon nitride/graphene nanoplatelets composites. In *Journal of the European Ceramic Society*, 2014, vol. 34, no. 14, p. 3291-3299. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.

ADCA116 MINO, Jakub - KOMANICKÝ, Vladimír - ĎURIŠIN, Martin - SAKSL, Karel - KOVÁČ, Jozef - VARGA, R. Structural and magnetic characterization of Fe-Mn-Al-Ni pseudo-Heusler alloy. In *IEEE Transactions on Magnetics*, 2015, vol. 51, no. 1, p. 4000903. (1.386 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 0018-9464.

ADCA117 MOLNÁROVÁ, Mária - GAVENDOVÁ, Petra - KVAČKAJ, Tibor - KOVÁČ, František. Nanohardness testing of multiphase C-Mn-Si steel. In *Chemické listy*, 2012, vol. 106, p. s495-s496. (0.529 - IF2011). (2012 - Current Contents, WOS, CCC, SCOPUS). ISSN 0009-2770.

ADCA118 NOVÁK, Pavel - MICHALCOVÁ, Alena - MAREK, Ivo, prof. - MUDROVÁ, Martina - SAKSL, Karel - BEDNARČÍK, J. - ZIKMUND, Petr - VOJTĚCH, Dalibor. On the formation of intermetallics in Fe-Al system - an in situ XRD study. In *Intermetallics*, 2013, vol. 32, p. 127-136. (1.857 - IF2012). (2013 - Current Contents). ISSN 0966-9795.

ADCA119 NOVÁKOVÁ, Z., PF UK Bratislava - ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - ŠKANTÁROVÁ, Lenka - HUBÁLEK, Jaromír - LOFAJ, František. Electrochemical synthesis and functionality evaluation of silver nanostructured layers. In *Surface and Interface Analysis*, 2014, vol. 46, p. 333-339. (1.393 - IF2013). (2014 - Current Contents). ISSN 0142-2421.

ADCA120 ORIŇÁK, Andrej - ORIŇÁKOVÁ, Renáta - ORSÁGOVÁ KRÁLOVÁ, Zuzana - MOROVSKÁ TUROŇOVÁ, Andrea - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - RADOŇÁK, J. - DŽUNDA, Róbert. Sintered metallic foams for biodegradable bone replacement materials. In *Journal of Porous Materials*, 2014, vol. 21, p. 131-140. (1.316 - IF2013). (2014 - Current Contents). ISSN 1380-2224.

ADCA121 ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - KUPKOVÁ, Miriam - SABALOVÁ, Mária - FEDORKOVÁ, Andrea - KABÁTOVÁ, Margita - KALAVSKÝ, František - SEDLAŘÍKOVÁ, Marie. Effect of heat treatment on the corrosion and mechanical properties of electrolytical composite Ni-B coatings. In *International Journal of Electrochemical Science*, 2014, vol. 9, p. 4268-4286. (1.956 - IF2013). (2014 - Current Contents). ISSN 1452-3981.

- ADCA122 ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - MARKUŠOVÁ BUČKOVÁ, Lucia - GIRETOVÁ, Mária - MEDVECKÝ, Ľubomír - DOBROČKA, Edmund - PETRUŠ, Ondrej - KALAVSKÝ, František. In vitro degradation and cytotoxicity evaluation of iron biomaterials with hydroxyapatite film. In *International Journal of Electrochemical Science*, 2015, vol. 10, p. 8158-8174. (1.500 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 1452-3981.
- ADCA123 ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - ŠKANTÁROVÁ, Lenka - MOROVSKÁ TUROŇOVÁ, Andrea - MARKUŠOVÁ BUČKOVÁ, Lucia - MUHMANN, Christian - ARLINGHAUS, Heinrich F. Study of electrochemical deposition and degradation of hydroxyapatite coated iron biomaterials. In *International Journal of Electrochemical Science*, 2015, vol. 10, p. 659-670. (1.500 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 1452-3981.
- ADCA124 PARCIANELLO, G. - BERNARDO, E. - COLOMBO, P. - LENČÉŠ, Zoltán - VETRECIN, Michal - ŠAJGALÍK, Pavol - KAŠIAROVÁ, Monika. Preceramic polymer-derived SiAlON as sintering aid for silicon nitride. In *Journal of the American Ceramic Society*, 2014, vol. 97, no. 11, p. 3407-3412. (2.428 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0002-7820.
- ADCA125 PARCHOVIAŃSKÝ, Milan - GALUSEK, D. - MICHÁLEK, M. - ŠVANČÁREK, P. - KAŠIAROVÁ, Monika - DUSZA, Ján - HNATKO, Miroslav. Effect of the volume fraction of SiC on the microstructure and creep behavior of hot pressed Al₂O₃/SiC composites. In *Ceramics International*, 2014, vol. 40, p. 1807-1814. (2.086 - IF2013). (2014 - Current Contents). ISSN 0272-8842.
- ADCA126 PARCHOVIAŃSKÝ, Milan - GALUSEK, Dušan - SEDLÁČEK, Jaroslav - ŠVANČÁREK, Peter - KAŠIAROVÁ, Monika - DUSZA, Ján - ŠAJGALÍK, Pavol. Microstructure and mechanical properties of hot pressed Al₂O₃/SiC nanocomposites. In *Journal of the European Ceramic Society*, 2013, vol. 33, no. 12, p. 2291-2298. (2.360 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA127 PETRYSHYNETS, Ivan - KOVÁČ, František - MARCIN, Jozef - ŠKORVÁNEK, Ivan. Improved Processing Technique for Preparation of Non-Oriented Electrical Steels with Low Coercivity. In *Acta Physica Polonica A*, 2014, vol. 126, no. 1, p. 182-183. (0.604 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1898-794X.
- ADCA128 PETRYSHYNETS, Ivan - KOVÁČ, František - MARCIN, Jozef - ŠKORVÁNEK, Ivan. Magnetic properties of temper rolled NO FeSi steels with enhanced rotation texture. In *IEEE Transactions on Magnetics*, 2013, vol. 49, no. 7, p. 4303-4306. (1.422 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0018-9464.
- ADCA129 PETRYSHYNETS, Ivan - KOVÁČ, František - SOPKO, Martin - MARCIN, Jozef - PETROV, Branislav. Study of Microstructure and Texture Evolution in Grain-Oriented Steels Via Coercivity Measurements. In *IEEE Transactions on*

Magnetics, 2014, vol. 50, no. 4, art. no. 2002004. (1.213 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0018-9464.

ADCA130 PIKNA, Ľubomír - MILKOVIČ, Ondrej - SAKSL, Karel - HEŽELOVÁ, Mária - SMRČOVÁ, Miroslava - PULIŠ, Pavel - MICHALIK, Štefan - GAMCOVÁ, Jana. The structure of nano-palladium deposited on carbon-based supports. In *Journal of Solid State Chemistry*, 2014, vol. 212, p. 197-204. (2.200 - IF2013). (2014 - Current Contents). ISSN 0022-4596.

ADCA131 PODOBA, Rudolf - ŠTUBŇA, I. - TRNOVCOVÁ, Viera - TRNÍK, A. Temperature dependence of DC electrical conductivity of kaolin. In *Journal of Thermal Analysis and Calorimetry*, 2014, vol. 118, p. 597-601. (2.206 - IF2013). (2014 - Current Contents). ISSN 1388-6150.

ADCA132 PORWAL, Harshit - KAŠIAROVÁ, Monika - TATARKO, Peter - GRASSO, Salvatore - DUSZA, Ján - REECE, Michael J. Scratch behaviour of graphene alumina nanocomposites. In *Advances in Applied Ceramics*, 2015, vol. 114, p. S34-S41. (1.163 - IF2014). (2015 - Current Contents). ISSN 1743-6753.

ADCA133 PORWAL, Harshit - TATARKO, Peter - GRASSO, Salvatore - HU, Chunfeng - BOCCACCINI, Aldo - REECE, Michael J. Toughened and machinable glass matrix composites reinforced with graphene and graphene-oxide nano platelets. In *Science and technology of advanced materials*, 2013, vol. 14, 055007. (3.752 - IF2012). (2013 - Current Contents). ISSN 1468-6996.

ADCA134 PORWAL, Harshit - TATARKO, Peter - SAGGAR, Richa - GRASSO, Salvatore - KUMAR MANI, Mahesh - DUSZA, Ján - REECE, Michael J. Tribological properties of silica-graphene nano-platelet composites. In *Ceramics International*, 2014, vol. 40, p. 12067-12074. (2.086 - IF2013). (2014 - Current Contents). ISSN 0272-8842.

ADCA135 PUCHÝ, Viktor - HVIZDOŠ, Pavol - DUSZA, Ján - KOVÁČ, František - INAM, Fawad - REECE, Michael J. Wear resistance of Al₂O₃-CNT ceramic nanocomposites at room and high temperatures. In *Ceramics International*, 2013, vol. 39, p. 5821-5826. (1.789 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0272-8842.

ADCA136 QIAN, B. - SAEIDI, Kamran - KVETKOVÁ, Lenka - LOFAJ, František - XIAO, C. - SHEN, Zhijian. Defects-tolerant Co-Cr-Mo dental alloys prepared by selective laser melting. In *Dental Materials*, 2015, vol. 31, p. 1435-1444. (3.769 - IF2014). (2015 - Current Contents). ISSN 0109-5641.

ADCA137 QUADE, Hendrik - STEFFEN, A. - GAVENDOVÁ, Petra - PRAHL, Ulrich - TOLAN, Metin - BLECK, Wolfgang. Experimental techniques for the microstructural characterization of retained austenite stability and single phase properties in low-alloyed trip steels. In *Chemické listy*, 2012, vol. 106, p. s515-s518. (0.529 - IF2011). (2012 - Current Contents, WOS, CCC, SCOPUS). ISSN 0009-2770.

- ADCA138 ROSENBERG, Gejza - SINAIOVÁ, Iveta - HVIZDOŠ, Pavol - JUHÁR, Ľuboš. Development of cold-rolled dual-phase steels with tensile strength above 1000 MPa and good bendability. In *Metallurgical and materials transactions A : physical metallurgy and materials science*, 2015, vol. 46, no. 8, p. 4755-4771. (1.730 - IF2014). (2015 - Current Contents). ISSN 1073-5623.
- ADCA139 ROSENBERG, Gejza - SINAIOVÁ, Iveta - JUHÁR, Ľuboš. Effect of microstructure on mechanical properties of dual phase steels in the presence of stress concentrators. In *Materials Science and Engineering A - Structural Materials Properties Microstructure and Processing*, 2013, vol. 582, p. 347-358. (2.108 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0921-5093.
- ADCA140 SAEIDI, Kamran - KVETKOVÁ, Lenka - LOFAJ, František - SHEN, Zhijian. Austenitic stainless steel strengthened by the in situ formation of oxide nanoinclusions. In *RSC Advances*, 2015, vol. 5, p. 20747-20750. (3.840 - IF2014). (2015 - Current Contents). ISSN 2046-2069.
- ADCA141 SAEIDI, Kamran - GAO, X. - LOFAJ, František - KVETKOVÁ, Lenka - SHEN, Zhijian. Transformation of austenite to duplex austenite-ferrite assembly in annealed stainless steel 316L consolidated by laser melting. In *Journal of Alloys and Compounds*, 2015, vol. 633, p. 463-469. (2.999 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 0925-8388.
- ADCA142 SAKSL, Karel - OSTROUSHKO, Dmytro - MAZANCOVÁ, Eva - SZULC, Zygmunt - MILKOVIČ, Ondrej - ĎURIŠIN, Martin - BALGA, Dušan - ĎURIŠIN, Juraj - RÜTT, Uta - GUTOWSKI, Olof. Local structure of explosively welded titanium-stainless steel bimetal. In *International Journal of Materials Research*, 2015, vol. 106, no. 6, p. 621-627. (0.639 - IF2014). (2015 - Current Contents). ISSN 1862-5282.
- ADCA143 SAKSL, Karel - ROKICKI, Paweł - SIEMERS, Carsten - OSTROUSHKO, Dmytro - BEDNARČÍK, J. - RÜTT, Uta. Local structure of metallic chips examined by X-ray microdiffraction. In *Journal of Alloys and Compounds*, 2013, vol. 581, p. 579-584. (2.390 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0925-8388.
- ADCA144 SHUSTA, O. - SLIVKA, A. - SHUSTA, V. - PETRYSHYNETS, Ivan. Dielectric properties of Cu(In_{0.7}Cr_{0.3})P₂S₆ crystals under high hydrostatic pressure. In *Ferroelectrics*, 2015, vol. 485, p. 124-128. (0.469 - IF2014). (2015 - Current Contents). ISSN 0015-0193.
- ADCA145 SOPČÁK, Tibor - MEDVECKÝ, Ľubomír - GIRMAN, Vladimír - ĎURIŠIN, Juraj. Mechanism of precipitation and phase composition of CaO-SiO₂-P₂O₅ systems synthesized by sol-gel method. In *Journal of Non-Crystalline Solids*, 2015, vol. 415, p. 16-23. (1.766 - IF2014). (2015 - Current Contents). ISSN 0022-3093.
- ADCA146 STREČKOVÁ, Magdaléna - BUREŠ, Radovan - FÁBEROVÁ, Mária - MEDVECKÝ, Ľubomír - FÜZER, J. - KOLLÁR, P. A comparison of soft magnetic composites designed from different ferromagnetic powders and phenolic resins. In

Chinese Journal of Chemical Engineering, 2015, vol. 23, p. 736-743. (1.098 - IF2014). (2015 - Current Contents). ISSN 1004-9541.

- ADCA147 STREČKOVÁ, Magdaléna - FÜZER, J. - KOBERA, Libor - BRUS, Jiří - FÁBEROVÁ, Mária - BUREŠ, Radovan - KOLLÁR, P. - LAUDA, M. - MEDVECKÝ, Ľubomír - GIRMAN, Vladimír - HADRABA, Hynek - BAŤKOVÁ, Marianna - BAŤKO, Ivan. A comprehensive study of soft magnetic materials based on FeSi spheres and polymeric resin modified by silica nanorods. In *Materials Chemistry and Physics*, 2014, vol. 147, p. 649-660. (2.129 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0254-0584.
- ADCA148 STREČKOVÁ, Magdaléna - BUREŠ, Radovan - FÁBEROVÁ, Mária - KUREK, Pavel - ROUPCOVÁ, Pavla - HADRABA, Hynek - GIRMAN, Vladimír - STREČKA, Jozef. A novel composite material designed from FeSi powder and Mn0.8Zn0.2Fe2O4 ferrite. In *Advances in Materials Science and Engineering*, 2015, article ID 924859. ISSN 1687-6822.
- ADCA149 STREČKOVÁ, Magdaléna - MEDVECKÝ, Ľubomír - FÜZER, J. - KOLLÁR, P. - BUREŠ, Radovan - FÁBEROVÁ, Mária. Design of novel soft magnetic composites based on Fe/resin modified with silica. In *Materials Letters*, 2013, vol. 101, p. 37-40. (2.224 - IF2012). (2013 - Current Contents). ISSN 0167-577X.
- ADCA150 STREČKOVÁ, Magdaléna - FÜZER, J. - MEDVECKÝ, Ľubomír - BUREŠ, Radovan - KOLLÁR, P. - FÁBEROVÁ, Mária - GIRMAN, Vladimír. Characterization of composite materials based on Fe powder (core) and phenol-formaldehyde resin (shell) modified with nanometer-sized SiO₂. In *Bulletin of Materials Science*, 2014, vol. 37, no. 2, p. 167-177. (0.870 - IF2013). (2014 - Current Contents). ISSN 0250-4707.
- ADCA151 STREČKOVÁ, Magdaléna - HADRABA, Hynek - BUREŠ, Radovan - FÁBEROVÁ, Mária - ROUPCOVÁ, Pavla - KUBĚNA, Ivo - MEDVECKÝ, Ľubomír - GIRMAN, Vladimír - KOLLÁR, P. - FÜZER, J. - ČIŽMÁR, E. Chemical synthesis of nickel ferrite spinel designed as an insulating bilayer coating on ferromagnetic particles. In *Surface and coatings technology*, 2015, vol. 270, p. 66-76. (1.998 - IF2014). (2015 - Current Contents). ISSN 0257-8972.
- ADCA152 STREČKOVÁ, Magdaléna - BAŤKOVÁ, Marianna - BAŤKO, Ivan - HADRABA, Hynek - BUREŠ, Radovan. Imaging of magnetic domains and domain walls in spherical Fe-Si powder using magnetic force microscopy. In *Acta Physica Polonica A*, 2014, vol. 126, no. 1, p. 92-93. (0.604 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1898-794X.
- ADCA153 STREČKOVÁ, Magdaléna - SOPČÁK, Tibor - MEDVECKÝ, Ľubomír - BUREŠ, Radovan - FÁBEROVÁ, Mária - BAŤKO, Ivan - BRIANČIN, Jaroslav. Preparation, chemical and mechanical properties of microcomposite materials based on Fe powder and phenol-formaldehyde resin. In *Chemical Engineering Journal*, 2012, vol. 180, p. 343-353. (3.461 - IF2011). (2012 - Current Contents, WOS, SCOPUS). ISSN 1385-8947.

- ADCA154 ŠKANTÁROVÁ, Lenka - ORIŇÁK, Andrej - ORIŇÁKOVÁ, Renáta - LOFAJ, František. 4-aminothiophenol strong SERS signal enhancement at electrodeposited silver surface. In *Nano-Micro Letters*, 2012, vol. 4, no. 3, p. 184-188. (2012 - WOS). ISSN 2150-5551. Internet. Internet.
- ADCA155 ŠPÍRKOVÁ, Milena - DUSZOVÁ, Annamária - POREBA, Rafal - KREDATUSOVÁ, Jana - BUREŠ, Radovan - FÁBEROVÁ, Mária - ŠLOUF, Miroslav. Thermoplastic polybutadiene-based polyurethane/carbon nanofiber composites. In *Composites Part B: Engineering*, 2014, vol. 67, p. 434-440. (2.602 - IF2013). (2014 - Current Contents). ISSN 1359-8368.
- ADCA156 ŠTUBŇA, I. - ŠÍN, P. - TRNÍK, A. - PODOBA, Rudolf - VOZÁR, Libor. Development of Young's modulus of the green alumina porcelain raw mixture. In *Journal of the Australian Ceramic Society*, 2014, vol. 50, no. 2, p. 36-42. (0.338 - IF2013). (2014 - Current Contents). ISSN 0004-881X.
- ADCA157 ŠTULAJTEROVÁ, Radoslava - MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária - SOPČÁK, Tibor. Structural and phase characterization of bioceramics prepared from tetracalcium phosphate-monetite cement and in vitro osteoblast response. In *Journal of Materials Science: Materials in Medicine*, 2015, vol. 26, p. 183-191. (2.587 - IF2014). (2015 - Current Contents). ISSN 0957-4530.
- ADCA158 TAN, Yongqiang - ZHANG, Jialiang - WU, Yanqing - WANG, Chunlei - KOVAL, Vladimír - SHI, Baogui - YE, Haitao - MCKINNON, Ruth - VIOLA, Giusuppe - YAN, Haixue. Unfolding grain size effects in barium titanate ferroelectric ceramics. In *Scientific Reports*, 2015, vol. 5, 9953. (5.578 - IF2014). (2015 - Current Contents, Scopus, WOS). ISSN 2045-2322.
- ADCA159 TATARKO, Peter - GRASSO, Salvatore - PORWAL, Harshit - CHLUP, Zdeněk - SAGGAR, Richa - DLOUHÝ, Ivo - REECE, Michael J. Boron nitride nanotubes as a reinforcement for brittle matrices. In *Journal of the European Ceramic Society*, 2014, vol. 34, p. 3339-3349. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA160 TATARKO, Peter - KAŠIAROVÁ, Monika - DUSZA, Ján - ŠAJGALÍK, Pavol. Influence of rare-earth oxide additives on the oxidation resistance of Si₃N₄-SiC nanocomposites. In *Journal of the European Ceramic Society*, 2013, vol. 33, p. 2259-2268. (2.360 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.
- ADCA161 TATARKO, Peter - KAŠIAROVÁ, Monika - CHLUP, Zdeněk - DUSZA, Ján - ŠAJGALÍK, Pavol - VÁVRA, Ivo. Influence of rare-earth oxide additives and SiC nanoparticles on the wear behaviour of Si₃N₄-based composites at temperatures up to 900 C. In *Wear : an international journal on the science and technology of friction, lubrication and wear*, 2013, vol. 300, p. 155-162. (1.262 - IF2012). (2013 - Current Contents). ISSN 0043-1648.
- ADCA162 TATARKO, Peter - GRASSO, Salvatore - CHLUP, Zdeněk - PORWAL, Harshit - KAŠIAROVÁ, Monika - DLOUHÝ, Ivo - REECE, Michael J. Toughening effect of multi-walled boron nitride nanotubes and their influence on the sintering

behaviour of 3Y-TZP zirconia ceramics. In *Journal of the European Ceramic Society*, 2014, vol. 34, p. 1829-1843. (2.307 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0955-2219.

ADCA163 TEGNER, B.E. - ZHU, L. - SIEMERS, Carsten - SAKSL, Karel - ACKLAND, G.J. High temperature oxidation resistance in titanium-niobium alloys. In *Journal of Alloys and Compounds*, 2015, vol. 643, p. 100-105. (2.999 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 0925-8388.

ADCA164 VARGA, R. - RYBA, T. - SAKSL, Karel - ZHUKOVA, V. - GONZALEZ, J. - ZHUKOV, A. Studies of magnetic and structural properties of Ni-Mn-Ga Heusler-type microwires. In *Journal of Optoelectronics and Advanced Materials*, 2012, vol. 14, no. 3-4, p. 257-261. (0.457 - IF2011). (2012 - Current Contents). ISSN 1454-4164.

ADCA165 VARCHULOVÁ NOVÁKOVÁ, Zuzana - ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - HVIZDOŠ, Pavol - FEDORKOVÁ, Andrea. Elimination voltammetry as a new method for studying the SAM formation. In *International Journal of Electrochemical Science*, 2014, vol. 9, p. 3846-3863. (1.956 - IF2013). (2014 - Current Contents). ISSN 1452-3981.

ADCA166 VIOLA, Giusuppe - MCKINNON, Ruth - KOVAL, Vladimír - ADOMKEVICIUS, Arturas - DUNN, Steve - YAN, Haixue. Lithium-induced phase transitions in lead-free Bi0.5Na0.5TiO₃ based ceramics. In *Journal of Physical Chemistry C*, 2014, vol. 118, p. 8564-8570. (4.835 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 1932-7447.

ADCA167 VÝROSTKOVÁ, Anna - KEPIČ, Ján - HOMOLOVÁ, Viera - FALAT, Ladislav. Precipitation of niobium boride phases at the base metal/weld metal interface in dissimilar weld joints. In *Journal of Materials Engineering and Performance*, 2015, vol. 24, no. 7, p. 2699-2708. (0.998 - IF2014). (2015 - Current Contents). ISSN 1059-9495.

ADCA168 YANG, L. - GUO, G.Q. - CHEN, L.Y. - HUANG, C.L. - GE, T. - CHEN, D.-X. - LIAW, P.K. - SAKSL, Karel - REN, Y. - ZENG, Q.S. - LAQUA, B. - CHEN, F.G. - JIANG, J.Z. Atomic-scale mechanisms of the glass-forming ability in metallic glasses. In *Physical Review Letters*, 2012, vol. 109, 105502. (7.370 - IF2011). (2012 - Current Contents, WOS, SCOPUS). ISSN 0031-9007.

ADCA169 ZELEŇÁKOVÁ, Adriana - ZELEŇÁK, Vladimír - MAŤKO, Igor - STREČKOVÁ, Magdaléna - HRUBOVČÁK, Pavol - KOVÁČ, Jozef. Superferromagnetism in chain-like Fe@SiO₂ nanoparticle ensembles. In *Journal of Applied Physics*, 2014, vol. 116, 033907. (2.185 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0021-8979.

ADCB Scientific papers in foreign journals registered in Current Contents Connect without IF (non-impacted)

ADCB01 LOFAJ, František - FERDINANDY, Milan - CEMPURA, Gregorz - HORŇÁK, Peter - VNOUČEK, Milan. Transfer film in a friction contact in the nanocomposite WC-C coatings. In *Journal of the Australian Ceramic Society*, 2013,

vol. 49, no. 1, p. 37-46. (0.164 - IF2012). (2013 - Current Contents). ISSN 0004-881X.

ADCB02 ORIŇÁKOVÁ, Renáta - ŠKANTÁROVÁ, Lenka - ORIŇÁK, Andrej - DEMKO, J. - KUPKOVÁ, Miriam - ANDERSSON, Jan T. Electrochemical deposition of SERS active nanostructured silver films. In *International Journal of Electrochemical Science*, 2013, vol. 8, p. 80-99. (2013 - Current Contents). ISSN 1452-3981.

ADCB03 ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - MARKUŠOVÁ BUČKOVÁ, Lucia - GIRETOVÁ, Mária - MEDVECKÝ, Ľubomír - LABBANCZOVÁ, Evelina - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - KOVAL, Karol. Iron based degradable foam structures for potential orthopedic applications. In *International Journal of Electrochemical Science*, 2013, vol. 8, p. 12451-12465. (2013 - Current Contents). ISSN 1452-3981.

ADDA Scientific papers in domestic journals registered in Current Contents Connect with IF (impacted)

ADDA01 BESTERCI, Michal - VELGOSOVÁ, Oksana - IVAN, Jozef - HÁJOVSKÁ, Zuzana - SÜLLEIOVÁ, Katarína. Fracture mechanisms of Glidcop Cu-Al₂O₃ composite before and after ECAP observed by "in-situ tensile test in SEM". In *Kovové materiály*, 2013, vol. 51, no. 6, p. 383-387. (0.687 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0023-432X.

ADDA02 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - HVIZDOŠ, Pavol. Effect of substrate on phase formation and surface morphology of sol-gel lead-free KNbO₃, NaNbO₃, and K0.5Na0.5NbO₃ thin films. In *Chemical papers*, 2012, vol. 66, no. 8, p. 748-756. (1.096 - IF2011). (2012 - Current Contents). ISSN 0366-6352.

ADDA03 HOMOLOVÁ, Viera - VÝROSTKOVÁ, Anna - ČIRIPOVÁ, Lucia - KROUPA, Aleš. Phase analysis of Fe-B-V system. In *Kovové materiály*, 2013, roč. 51, s. 135-139. (0.687 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0023-432X.

ADDA04 HUANG, Song-Jeng - LIN, Po-Chou - BALLÓKOVÁ, Beáta - HVIZDOŠ, Pavol - BESTERCI, Michal. Tribological behaviour and local mechanical properties of magnesium-alumina composites. In *Kovové materiály*, 2014, vol. 52, p. 313-319. (0.546 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0023-432X.

ADDA05 KOVÁČ, Ivan - MIKUŠ, R. - ŽARNOVSKÝ, J. - DRLIČKA, R. - ŽITŇANSKÝ, J. - VÝROSTKOVÁ, Anna. Creation wear resistant boride layers on selected steel grades in electric arc remelting process. In *Kovové materiály*, 2014, vol. 52, p. 387-394. (0.546 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0023-432X.

ADDA06 OROLÍNOVÁ, Mária - ĎURIŠIN, Juraj - BESTERCI, Michal - ĎURIŠINOVÁ, Katarína - KOČIŠKO, Róbert - KVAČKAJ, Tibor - SAKSL, Karel - DANKOVÁ, Zuzana. Microstructure and texture evolution during ECAP of pure aluminium and Al-4 vol% Al₄C₃ powder alloy. In *Kovové materiály*, 2012, vol. 50,

no. 6, p. 433-440. (0.451 - IF2011). (2012 - Current Contents, SCOPUS, WOS).
ISSN 0023-432X.

ADDA07 OROLÍNOVÁ, Mária - ĎURIŠIN, Juraj - ĎURIŠINOVÁ, Katarína -
DANKOVÁ, Zuzana - BESTERCI, Michal - ĎURIŠIN, Martin - SZABÓ, Juraj.
Strengthening mechanisms in the nanocrystalline Cu with Al₂O₃. In *Kovové materiály*, 2014, vol. 52, p. 395-402. (0.546 - IF2013). (2014 - Current Contents, WOS, SCOPUS). ISSN 0023-432X.

ADDA08 OROLÍNOVÁ, Mária - ĎURIŠIN, Juraj - ĎURIŠINOVÁ, Katarína -
DANKOVÁ, Zuzana - BESTERCI, Michal. The electrical properties of
nanocrystalline Cu-Al₂O₃. In *Kovové materiály*, 2015, vol. 53, p. 409-414. (0.406 - IF2014). (2015 - Current Contents, MSCI). ISSN 0023-432X.

ADDA09 RODZIŇÁK, Dušan - HVIZDOŠ, Pavol - ČERŇAN, Jozef - SEMRÁD, Karol.
Plasma nitriding and its influence on contact fatigue of sintered steel. In *Kovové materiály*, 2012, vol. 50, no. 5, p. 365-371. (0.451 - IF2011). (2012 - Current Contents, SCOPUS, WOS). ISSN 0023-432X.

ADDA10 ŠEBEK, Martin - HORŇAK, Peter - LONGAUER, Svätoš - ZIMOVČÁK, Peter - ZÁHUMENSKÝ, Pavol. Influence of annealing process on microstructure and mechanical properties of C-Mn dual phase steel. In *Kovové materiály*, 2015, vol. 53, p. 341-348. (0.406 - IF2014). (2015 - Current Contents, MSCI). ISSN 0023-432X.

ADEA Scientific papers in other foreign journals not registered in Current Contents Connect with IF (impacted)

ADEA01 MEDVECKÝ, Ľubomír. Microstructure and properties of polyhydroxybutyrate-chitosan-nanohydroxyapatite composite scaffolds. In *The Scientific World Journal*, 2012, online, 8 p. ISSN 1537-744X.

ADEB Scientific papers in other foreign journals not registered in Current Contents Connect without IF (non-impacted)

ADEB01 ANESTIEV, Lubomir Andreev - GEORGIEV, Jordan Stefanov - SELECKÁ, Marcela. A comparative study of the sintering processes of iron-based powders coated with hydrocarbons and iron powders premixed with graphite. A comparative study using DTA, TGA and mass spectrometer techniques. In *Naučni izvestija*, 2014, vol. 22, no. 1, p. 239-243. ISSN 1310-3946.

ADEB02 ANESTIEV, Lubomir Andreev - GEORGIEV, Jordan Stefanov - SELECKÁ, Marcela. Maspektralno izsledvane na otdelenite gazove pri spičane na železni prachove pokriti s vglevodorodi = Massspectrometer study of the gases released during sintering of coated with hydrocarbons iron powders. In *Naučni izvestija*, 2014, vol. 22, no. 1, p. 234-238. ISSN 1310-3946.

ADEB03 AZHNIUK, Y.M. - GOMONNAI, A.V. - GOMONNAI, O.O. - HASYNETS, S.M. - KOVÁČ, František - LOPUSHANSKY, V.V. - PETRYSHYNETS, Ivan - RUBISH, V.M. - ZAHN, D.R.T. Annealing-induced formation of Sn₂P₂S₆ crystallites in As₂S₃-based glass matrix. In *Semiconductor Physics Quantum Electronics and Optoelectronics*, 2015, vol. 18, no. 3, p. 248-254. ISSN 1560-8034.

- ADEB04 BESTERCI, Michal - DOBEŠ, Ferdinand - SÜLLEIOVÁ, Katarína - VELGOSOVÁ, Oksana. Mechanical properties of Al-Al4C3 composite produced by mechanical alloying. In *Universal Journal of Materials Science*, 2013, vol. 1, no. 2, p. 31-38. ISSN www.hrpub.org.
- ADEB05 DANKOVÁ, Zuzana - ŠTYRIAKOVÁ, Iveta - MOCKOVČIAKOVÁ, Annamária - ŠTYRIAK, Igor - OROLÍNOVÁ, Mária. Bioleaching as possible method of sorbent regeneration. In *Bioengineering and Bioscience : Agriculture & Life Sciences*, 2013, vol. 1, no. 3, p. 31-36. ISSN 2332-001X.
- ADEB06 DANKOVÁ, Zuzana - MOCKOVČIAKOVÁ, Annamária - OROLÍNOVÁ, Mária. Cd(II) Adsorption by Magnetic Clay Composite under the Ultrasound Irradiation. In *Energy and Environmental Engineering*, 2013, vol. 1, no. 2, p. 74-80.
- ADEB07 FADEEVA, Inna V. - TROFIMCHUK, Elena S. - GIRETOVÁ, Mária - MALTSEV, Danila K. - NIKONOROVA, Nina I. - FOMIN, Alexander S. - RAU, Julietta V. - MEDVECKÝ, Ľubomír - BARINOV, S.M. Novel approach to obtain composite poly-L-lactide based films blended with starch and calcium phosphates and their bioactive properties. In *Biomedical Physics and Engineering Express*, 2015, vol. 1, 045011. ISSN 2057-1976.
- ADEB08 FERDINANDY, Milan - LOFAJ, František - DUSZA, Ján - KOTTFER, Daniel. Príprava povlakov WC rozkladom W(CO)6 metódou PE CVD = Preparation of WC coatings by W(CO)6 decomposition using PE CVD method. In *Hutnické listy : Odborný časopis pro hutnictví a materiálové inženýrství České republiky a Slovenské republiky*, 2012, roč. 55, č. 2, s. 30-33. ISSN 0018-8069.
- ADEB09 HALAMA, M. - JEROLITSCH, D. - KOVAL, Karol. Korózny monitoring aktívneho/pasívneho stavu Zn povlakov = Corrosion monitoring of an active/passive state of Zn coatings. In *Koroze a ochrana materiálu. On-line : Časopis Asociace korozních inženýrů pro otázky koroze a protikorozní ochrany*, 2012, roč. 56, č. 2, s. 43-46. ISSN 1804-1213.
- ADEB10 JAKUBÉCZYOVÁ, Dagmar - HANES, Tomáš - KALINCOVÁ, Daniela. Zvyšovanie životnosti razidiel mincí. In *MM Průmyslové spektrum*, 2014, č. 11, s. 76-83. ISSN 1212-2572.
- ADEB11 KALINCOVÁ, Daniela - ŤAVODOVÁ, Miroslava - HANES, Tomáš - JAKUBÉCZYOVÁ, Dagmar - KAŠTAN, Rudolf. Využitie elektrónovej mikroskopie pri hodnotení kvality povlakov na razidlách mincí. In *Strojírenská technologie*, 2014, roč. 19, č. 3/4, s. 167-174. ISSN 1211-4162.
- ADEB12 KOVAL, Vladimír. High aspect ratio lead zirconate titanate tube structures: II. Directed assembly via dielectrophoresis. In *Processing and Application of Ceramics*, 2012, vol. 6, no. 1, p. 43-51.
- ADEB13 KOVAL, Vladimír. High aspect ratio lead zirconate titanate tube structures: I. Template assisted fabrication - vacuum infiltration method. In *Processing and Application of Ceramics*, 2012, vol. 6, no. 1, p. 37-42.

- ADEB14 OROLÍNOVÁ, Mária - ĎURIŠIN, Juraj - ĎURIŠINOVÁ, Katarína - DANKOVÁ, Zuzana - ĎURIŠIN, Martin. Effect of microstructure on properties of Cu-Al₂O₃ nanocomposite. In *Chemical and Materials Engineering*, 2013, vol. 1, no. 2, p. 60-67.
- ADEB15 OSTROUSHKO, Dmytro - SAKSL, Karel - SIEMERS, Carsten - ŘÍHOVÁ, Zuzana. Chips of Ti-6Al-2Sn-4Zr-6Mo alloy - a detailed geometry study. In *World Academy of Science, Engineering and Technology*, 2012, issue 68, p. 2029-2032. ISSN 2010-376X.
- ADEB16 PETRÍK, Jozef - BELLA, Peter - GUZANOVÁ, A. - SINAIOVÁ, Iveta. The automatic testers in microhardness measurement and ISE effect. In *Annals of Faculty Engineering Hunedoara - International Journal of Engineering*, 2014, vol. 12, no. 3, p. 239-242. ISSN 1584-2665.
- ADEB17 ROSENBERG, Gejza - SINAIOVÁ, Iveta - KOČÍK, Marek. Analýza náchylnosti dvojfázových ocelí ku lokalizácii plastickej deformácie. In *Strojírenská technologie*, 2014, roč. 19, č. 3/4, s. 220-227. ISSN 1211-4162.
- ADEB18 ŘÍHOVÁ, Zuzana - SAKSL, Karel - SIEMERS, Carsten - OSTROUSHKO, Dmytro. Analyses of wear mechanisms occurring during machining of the titanium alloy Ti-6Al-2Sn-4Zr-6Mo. In *World Academy of Science, Engineering and Technology*, 2012, issue 68, p. 2017-2020. ISSN 2010-376X.
- ADFB Scientific papers in other domestic journals not registered in Current Contents Connect without IF (non-impacted)**
- ADFB01 BALKO, Ján - KOVALČÍKOVÁ, Alexandra - HVIZDOŠ, Pavol. Effect of static partner material on wear characteristics of yttria stabilized zirconia. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 3-4, p. 109-115. ISSN 1335-8978.
- ADFB02 BALKO, Ján - HVIZDOŠ, Pavol. Tribologické skúšanie keramiky 3Y-TZP merané metódou ball-on-disc. In *Silikátnik*, 2012, s. 63-69.
- ADFB03 BALKO, Ján - BALLÓKOVÁ, Beáta - JAKUBÉCZYOVÁ, Dagmar - HVIZDOŠ, Pavol - HLOCH, S. - KILOC, Ján - MONKA, Peter. Wear and mechanical behaviour of various polymethylmethacrylate bone cements. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 1, p. 34-43. ISSN 1335-8978.
- ADFB04 BALKO, Ján - HVIZDOŠ, Pavol - BALÁZSI, Csaba. Wear damage in silicon nitride composites with graphene and carbon nanotubes. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 276-281. ISSN 1338-1660.
- ADFB05 BALLÓKOVÁ, Beáta - KVAČKAJ, Tibor - HVIZDOŠ, Pavol - BESTERCI, Michal. Fracture analysis and local mechanical properties of copper processed by ECAR. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 259-263. ISSN 1338-1660.

- ADFB06 BALLÓKOVÁ, Beáta - HVIZDOŠ, Pavol - BESTERCI, Michal. Indentation testing of MoSi₂ based composites. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 1, p. 29-33. ISSN 1335-8978.
- ADFB07 BESTERCI, Michal - SÜLLEIOVÁ, Katarína - BALLÓKOVÁ, Beáta - VELGOSOVÁ, Oksana - IVAN, Jozef. Failure mechanism of Cu-Al₂O₃ micro and nanomaterials observed by "in-situ tensile test in SEM". In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 4, p. 228-232. ISSN 1335-8978.
- ADFB08 BL'ANDA, Marek - BALKO, Ján - DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - DUSZA, Ján - REVERON, Helen. Hardness and indentation fracture toughness of alumina-silicon carbide nanocomposites. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 270-275. ISSN 1338-1660.
- ADFB09 BL'ANDA, Marek - HVIZDOŠ, Pavol - KVETKOVÁ, Lenka - DUSZA, Ján. Nanoindentation study of coarse grain alumina. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 3-4, p. 116-120. ISSN 1335-8978.
- ADFB10 BL'ANDA, Marek - HVIZDOŠ, Pavol - DUSZA, Ján. Nanoindentation methods for mechanical properties of refractory materials. In *Silikátnik*, 2012, s. 56-62.
- ADFB11 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - HVIZDOŠ, Pavol - ĎURIŠIN, Juraj. Microstructure of NaNbO₃ thin films prepared by sol-gel method on alumina and silicon substrates. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 114-119. ISSN 1338-1660.
- ADFB12 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - ĎURIŠIN, Juraj - MÚDRA, Erika - SOPČÁK, Tibor - KOVALČÍKOVÁ, Alexandra - PODOBA, Rudolf. Microstructure of perovskite lanthanum niobate and tantalate thin films prepared by sol-gel method. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2015, vol. 15, spec. iss., p. 117-123. ISSN 1335-8978.
- ADFB13 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - ĎURIŠIN, Juraj - HVIZDOŠ, Pavol. Particle morphology of perovskite lanthanum tantalate prepared polymeric complex sol-gel method. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 4, p. 215-221. ISSN 1335-8978.
- ADFB14 BUREŠ, Radovan - FÁBEROVÁ, Mária - KOLLÁR, P. - FÜZER, J. - STREČKOVÁ, Magdaléna. Microstructure and fracture of magnetic composites with vitroperm addition. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 3, p. 181-186. ISSN 1335-8978.
- ADFB15 ČERNÁN, Jozef - RODZIŇÁK, Dušan - KOMOLÍK, Miroslav - HVIZDOŠ, Pavol - SEMRÁD, Karol. Tribological properties of sintered steel following plasma

nitriding. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 1, p. 34-42. ISSN 1335-8978.

ADFB16 ČIRIPOVÁ, Lucia - VÝROSTKOVÁ, Anna - FALAT, Ladislav. Fractures in the BM and WM of 9Cr-Mo-W modified steel weld joint in presence of hydrogen. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2015, vol. 15, spec. iss., p. 162-166. ISSN 1335-8978.

ADFB17 ĎURIŠINOVÁ, Katarína - ĎURIŠIN, Juraj - OROLÍNOVÁ, Mária - ĎURIŠIN, Martin - SZABÓ, Juraj. Microstructure and mechanical properties of nanocrystalline dispersion strengthened copper. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 1, p. 58-63. ISSN 1335-8978.

ADFB18 ĎURIŠINOVÁ, Katarína - OROLÍNOVÁ, Mária - ĎURIŠIN, Martin. Príprava a vlastnosti nanokryštalickej práškovej medi pre vysokoteplotné elektrotechnické aplikácie. In *Časopis EE - časopis pre elektrotechniku a energetiku*, 2012, roč. 18, č. 3, s. 10-13. ISSN 1335-2547.

ADFB19 FALAT, Ladislav - ŠEVC, Peter - ČIRIPOVÁ, Lucia. Creep cracking of similar and dissimilar T92 steel weldments. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2015, vol. 15, spec. iss., p. 130-137. ISSN 1335-8978.

ADFB20 FALAT, Ladislav - ČIRIPOVÁ, Lucia - ŠEVC, Peter. Fracture behaviour of advanced high chromium creep-resistant steels weldments in various loading conditions. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2015, vol. 15, spec. iss., p. 81-85. ISSN 1335-8978.

ADFB21 FERDINANDY, Milan - LOFAJ, František - DUSZA, Ján - KOTTFER, Daniel. Povlaky karbidu volfrámu pripravované rozkladom W(CO)6 metódou PE CVD. In *Silikátnik*, 2012, s. 70-75.

ADFB22 FIAL, C. - DUDROVÁ, Eva - KABÁTOVÁ, Margita - KUPKOVÁ, Miriam - SELECKÁ, Marcela - SULOWSKI, Maciej - CIAS, A. Comparison of fracture of Fe-0.2%Mo-0.8%Mn-1.5%Cr-1.5Ni powder metallurgy steel processed in a semiclosed container in flowing nitrogen: sintered, sinterhardened and sinteraustempered. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2015, vol. 15, spec. iss., p. 124-129. ISSN 1335-8978.

ADFB23 FIAL, C. - DUDROVÁ, Eva - KABÁTOVÁ, Margita - KUPKOVÁ, Miriam - SELECKÁ, Marcela - SULOWSKI, Maciej - CIAS, A. The effects of heat treatment on the microstructure and mechanical properties of sintered Fe-2Cu-1.5Mo-0.5C and Fe-0.2Mo-1.5Cr-1.5Ni-0.8Mn-0.4C steels. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 3, p. 137-147. ISSN 1335-8978.

- ADFB24 FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. - FÁBEROVÁ, Mária - BUREŠ, Radovan. Iron based soft magnetic compacted materials. In *Acta electrotechnica et informatica*, 2013, vol. 13, no. 1, p. 82-85. ISSN 1335-8243.
- ADFB25 GIERL, C. - JALILIZIYAEIAN, Maryam - DANNINGER, Herbert - DUDROVÁ, Eva. Impact behaviour of sintered steels prepared from manganese prealloyed powders. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 2, p. 73-84. ISSN 1335-8978.
- ADFB26 HADRABA, Hynek - STREČKOVÁ, Magdaléna - HUSÁK, Roman - ROUPCOVÁ, Pavla. Mechanical alloying of 80Ni-14.7Fe-4.4Mo-0.5Mn-0.3Si soft magnetic permalloy type material. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 4, p. 208-214. ISSN 1335-8978.
- ADFB27 HADRABA, Hynek - HUSÁK, Roman - KUBĚNA, Ivo - BUREŠ, Radovan - FÁBEROVÁ, Mária - STREČKOVÁ, Magdaléna. Preparation of ferritic 17%Cr ODS steel by mechanical alloying from prealloyed steel powder. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 4, p. 222-227. ISSN 1335-8978.
- ADFB28 HAGAROVÁ, Mária - JAKUBÉCZYOVÁ, Dagmar. Metodiky určovania vlastností PVD povlakov aplikovaných PVD technológiami. In *Tribotechnika*, 2014, roč. 7, č. 2, s. 56-59. ISSN 1338-0524.
- ADFB29 HNATKO, Miroslav - KAŠIAROVÁ, Monika - GALUSKOVÁ, Dagmar - LENČÉŠ, Zoltán - ŠAJGALÍK, Pavol. Korózia konštrukčných keramických materiálov v tavenine železa = Corrosion of engineering ceramic materials by molten iron. In *Silikátnik*, 2012, p. 23-44.
- ADFB30 HRUBOVČÁKOVÁ, Monika - KUPKOVÁ, Miriam - ZELEŇÁK, Adam - ORIŇÁKOVÁ, Renáta - MOROVSKÁ TUROŇOVÁ, Andrea. Corrosion properties of iron based biodegradable foams. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 3, p. 168-173. ISSN 1335-8978.
- ADFB31 HRUBOVČÁKOVÁ, Monika - DUDROVÁ, Eva - HRYHA, Eduard - KABÁTOVÁ, Margita. Processing conditions and reduction of oxides during sintering of chromium pre-alloyed steel. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 3, p. 144-158. ISSN 1335-8978.
- ADFB32 HVIŠČOVÁ, Petra - LOFAJ, František - NOVÁK, Michal. The influence of deposition conditions on the nanohardness and scratch behavior of thin DC magnetron sputtered CrN coatings. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 3-4, p. 121-131. ISSN 1335-8978.
- ADFB33 JAKUBÉCZYOVÁ, Dagmar - BALLÓKOVÁ, Beáta. Analysis of tribological properties of multi- and nanocomposite coatings deposited on a PM substrate. In

Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials, 2014, vol. 14, no. 1, p. 46-51. ISSN 1335-8978.

- ADFB34 JAKUBÉCZYOVÁ, Dagmar - KOČÍK, Marek - HVIZDOŠ, Pavol. Application of fractography in assessment of composite layers. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 219-225. ISSN 1338-1660.
- ADFB35 JAKUBÉCZYOVÁ, Dagmar - ŠTĚPÁNEK, Ivo. Indentáčné porušovanie tenkých viaczložkových PVD povlakov. In *Transfer inovácií*, 2013, no. 27, s. 62-67. ISSN 1337-7094.
- ADFB36 KABÁTOVÁ, Margita - FÜZER, J. - FÜZEROVÁ, Jana - DUDROVÁ, Eva - KOLLÁR, P. - SELECKÁ, Marcela. Fe/SiO₂/shellac composites prepared by mixing and vacuum/pressure impregnation. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 2, p. 99-109. ISSN 1335-8978.
- ADFB37 KABÁTOVÁ, Margita - DUDROVÁ, Eva - FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. Preparation, microstructure and properties of the SMCs Fe/polymer + (0.4-2.6)% SiO₂. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2015, vol. 15, no. 1, p. 23-35. ISSN 1335-8978.
- ADFB38 KABÁTOVÁ, Margita - DUDROVÁ, Eva - WRONSKI, Andrew S. Static and dynamic fracture micromechanics of sintered steels: A review. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2015, vol. 15, no. 2, p. 185-201. ISSN 1335-8978.
- ADFB39 KOTTFER, Daniel - FERDINANDY, Milan - HVIZDOŠ, Pavol - KACZMAREK, Lukasz. Comparative study of properties of Ti based coatings deposited by selected PVD techniques. In *Materials Science and Technology : Internetový časopis*, 2012, č. 2, s. 17-24. ISSN 1335-9053.
- ADFB40 KOTTFER, Daniel - FERDINANDY, Milan - KACZMAREK, Lukasz. The evaluation of selected properties of Ti and Cr based coatings deposited onto HSS CO5. In *Acta Avionica*, 2013, vol. 15, no. 26, p. 17-22. ISSN 1335-9479.
- ADFB41 KOVALČÍKOVÁ, Alexandra - DUSZA, Ján. Characteristics of fracture origins in SiC based ceramics. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 264-269. ISSN 1338-1660.
- ADFB42 KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - ORIŇÁKOVÁ, Renáta - MOROVSKÁ TUROŇOVÁ, Andrea - ZELEŇÁK, Adam. Corrosion properties of iron and iron-manganese sintered materials. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 1, p. 22-28. ISSN 1335-8978.
- ADFB43 KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - ZELEŇÁK, Adam. Structure and compressive properties of iron and iron-phosphorus PM foams. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 3, p. 174-178. ISSN 1335-8978.

- ADFB44 KVETKOVÁ, Lenka - DUSZOVÁ, Annamária - KAŠIAROVÁ, Monika - DORČÁKOVÁ, Františka - DUSZA, Ján - BALÁZSI, Csaba. Fracture mechanism in Si₃N₄-graphene platelets composites. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 213-218. ISSN 1338-1660.
- ADFB45 MARCIN, Jozef - CAPIK, Marek - KOVÁČ, Jozef - ŠVEC, Peter Jr. - PETRYSHYNETS, Ivan - KOVÁČ, František - ŠKORVÁNEK, Ivan. Tuning of magnetic properties and domain structure in FeCo- and FeSi-based soft magnetic alloys by thermal processing under magnetic field. In *Acta electrotechnica et informatica*, 2013, vol. 13, no. 1, p. 91-94. ISSN 1335-8243.
- ADFB46 MARUŠ, Jozef - ŠEBEK, Martin - KOVÁČ, František - PETRYSHYNETS, Ivan. Modifikácia povrchovej štruktúry nástrojovej ocele K360 vláknovým laserom. In *Technológ : časopis pre teóriu a prax mechanických technológií*, 2015, roč. 7, č. 3, s. 181-184. ISSN 1337-8996.
- ADFB47 MEDVECKÝ, Ľubomír - HUDÁK, Radovan - GIRETOVÁ, Mária - ŠTULAJTEROVÁ, Radoslava. Corrosion resistance and in-vitro osteoblast response of calcium-phosphate coated titanium substrates prepared by laser sintering. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 2, p. 71-78. ISSN 1335-8978.
- ADFB48 MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária - ŠTULAJTEROVÁ, Radoslava - DANKOVÁ, Zuzana. Effect of surfactant addition on properties and in-vitro behaviour of tetracalcium phosphate-nanomonetite cements. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 2, p. 79-89. ISSN 1335-8978.
- ADFB49 MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária - ŠTULAJTEROVÁ, Radoslava. Chemical modification of hydroxyapatite ceramic surface by calcium phosphate coatings and in-vitro osteoblast response. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 4, p. 224-233. ISSN 1335-8978.
- ADFB50 MEDVECKÝ, Ľubomír - KAŠIAROVÁ, Monika - MIHALIK, Ján - SOPČÁK, Tibor - BRUNCKOVÁ, Helena - BRIANČIN, Jaroslav. Statistical evaluation of mechanical properties of tetracalcium phosphate based cements. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 1, p. 43-50. ISSN 1335-8978.
- ADFB51 NOVÁK, Michal - LOFAJ, František - HVIŠČOVÁ, Petra. The effect of residual stresses on nanoindentation behavior of thin W-C based coatings. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 3-4, p. 132-138. ISSN 1335-8978.
- ADFB52 ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - MARKUŠOVÁ BUČKOVÁ, Lucia - LABBANCZOVÁ, Evelina - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - FEDORKOVÁ, Andrea. Biodegradable open cell iron foams for potential

skeletal application. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 4, p. 219-223. ISSN 1335-8978.

ADFB53 OROLÍNOVÁ, Mária - ĎURIŠIN, Juraj - ĎURIŠINOVÁ, Katarína - DANKOVÁ, Zuzana. Teplotná stabilita progresívneho Cu-Al₂O₃ materiálu. In *EE - časopis pre elektrotechniku a energetiku*, 2013, roč. 19, č. 3, s. 32-33. ISSN 1335-2547.

ADFB54 OROLÍNOVÁ, Mária - ĎURIŠIN, Juraj - ĎURIŠINOVÁ, Katarína - DANKOVÁ, Zuzana - ĎURIŠIN, Martin - SZABÓ, Juraj. Thermal stability of Cu-Al₂O₃ and CuCr materials. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 2, p. 108-112. ISSN 1335-8978.

ADFB55 PAĽO, Miroslav - MRÁZ, Ľuboš - BAKAJOVÁ, Jana - BRZIAK, Peter - HOMOLOVÁ, Viera. Vlastnosti austenitickej ocele BGA4 a jej zvarových spojov. In *Zváranie : odborný časopis so zameraním na zváranie a príbuzné technológie*, 2014, č. 3/4, s. 51-59. ISSN 0044-5525.

ADFB56 PETRYSHYNETS, Ivan - KOVÁČ, František - SOPKO, Martin. The investigation of grain growth mechanisms in silicon steels. In *Acta electrotechnica et informatica*, 2013, vol. 13, no. 1, p. 74-77. ISSN 1335-8243.

ADFB57 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Influence of the preparation of Si₃N₄ based foams on the compressive strength and processing flaws. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 3-4, p. 139-146. ISSN 1335-8978.

ADFB58 RODZIŇÁK, Dušan - ČERŇAN, Jozef - HVIZDOŠ, Pavol. Effect of TiCN coating on tribological properties of astaloy CrL sintered steel. In *Journal of Manufacturing and Industrial Engineering*, 2013, vol. 12, no. 3-4, p. 20-24. ISSN 1339-2972 (on-line).

ADFB59 ROSENBERG, Gejza - SINAIOVÁ, Iveta - JUHÁR, Ľuboš. Deformation zone size around drilled hole in DP steels. In *Materials Engineering - Materiálové inžinierstvo*, 2014, vol. 21, p. 46-52. ISSN 1335-0803.

ADFB60 SEDLÁK, Richard - KOVALČÍKOVÁ, Alexandra - RUTKOWSKI, Paweł - GIRMAN, Vladimír - DUSZA, Ján. Influence of the graphene platelets addition on microstructure and fracture properties of hot-pressed Al₂O₃ and Si₃N₄ based composites. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2015, vol. 15, spec. iss., p. 150-155. ISSN 1335-8978.

ADFB61 SELECKÁ, Marcela - ŠALAK, Andrej. Characteristics of sintered steels borided without halides - overview. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 4, p. 189-204. ISSN 1335-8978.

- ADFB62 SHVAB, Ruslan - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. Effect of sintering atmosphere on the microstructure of high Cr-alloyed sintered stainless steel. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 3-4, p. 103-108. ISSN 1335-8978.
- ADFB63 SHVAB, Ruslan - DUDROVÁ, Eva - HVIZDOŠ, Pavol - BERGMAN, Ola - BENGTSSON, Sven. Fracture of high chromium alloyed PM steel at room and high temperature tensile test. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 209-212. ISSN 1338-1660.
- ADFB64 SHVAB, Ruslan - HRYHA, Eduard - SHYKULA, Petro - BERGMAN, Ola - BENGTSSON, Sven - DUDROVÁ, Eva. Prediction, formation and analysis of microstructure of high chromium-alloyed PM stainless steel sintered in different atmospheres. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 2, p. 99-107. ISSN 1335-8978.
- ADFB65 SHVAB, Ruslan - HRYHA, Eduard - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. Surface analysis of water atomised high chromium alloyed steel powder by x-ray photoelectron spectroscopy. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 2, p. 57-62. ISSN 1335-8978.
- ADFB66 SHVAB, Ruslan - HVIZDOŠ, Pavol - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. Tribological behaviour of chromium alloyed sintered steel at room and elevated temperatures. In *Transfer inovácií*, 2012, no. 22, p. 34-37. ISSN 1337-7094.
- ADFB67 SHYKULA, Petro - DUDROVÁ, Eva - FRYKHLOM, R. - BENGTSSON, Sven. Application of computational software for design and study new types of alloys. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 1, p. 3-10. ISSN 1335-8978.
- ADFB68 SMIRNOV, Valeryi V. - SMIRNOV, Sergey V. - KRYLOV, A.I. - ANTONOVA, Olga S. - GOLDBERG, Margarita A. - SHVORNEVA, L.I. - TITOV, D.D. - MEDVECKÝ, Ľubomír - BAIKIN, Alexander - BARINOV, S.M. Ceramics based on zirconia with a low sintering temperature. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2014, vol. 14, no. 3, p. 148-155. ISSN 1335-8978.
- ADFB69 SOPČÁK, Tibor - MEDVECKÝ, Ľubomír - ĎURIŠIN, Juraj. Characterization of nanohydroxyapatite prepared by precipitation from calcium alpha-D-heptagluconate precursor solutions. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 2, p. 118-123. ISSN 1335-8978.
- ADFB70 STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária - BUREŠ, Radovan - KOBERA, Libor - BRUS, Jiří. Design of SMC base on FeSi and modified resin. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2013, vol. 13, no. 3-4, p. 147-151. ISSN 1335-8978.

- ADFB71 STREČKOVÁ, Magdaléna - KABÁTOVÁ, Margita - DUDROVÁ, Eva - MEDVECKÝ, Ľubomír - BUREŠ, Radovan. Fe(core)/SiO₂(shell) composite powder prepared by the sol-gel method. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 2, p. 110-117. ISSN 1335-8978.
- ADFB72 STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária - BUREŠ, Radovan - DUDROVÁ, Eva. Improvement of mechanical properties of SMC through different hybrid inorganic-organic insulating coatings. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 120-127. ISSN 1338-1660.
- ADFB73 STREČKOVÁ, Magdaléna - BUREŠ, Radovan - FÁBEROVÁ, Mária - KUREK, Pavel - PUCHÝ, Viktor - HADRABA, Hynek. Soft magnetic composites designed from FeSi powder and Mn0.8Zn0.2Fe₂O₄ sintered by spark plasma and microwave sintering processes. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2015, vol. 15, spec. iss., p. 110-116. ISSN 1335-8978.
- ADFB74 SUŁOWSKI, Maciej - KABÁTOVÁ, Margita - DUDROVÁ, Eva. Effect of sintering, atmosphere on microstructure, properties and fracture of Cr-Mn sintering steels. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 237-246. ISSN 1338-1660.
- ADFB75 SUŁOWSKI, Maciej - KABÁTOVÁ, Margita - DUDROVÁ, Eva. Microstructure and properties of Cr-Mn alloyed sintered steels. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2012, vol. 12, no. 2, p. 71-83. ISSN 1335-8978.
- ADFB76 VÝROSTKOVÁ, Anna - FALAT, Ladislav - ŠEVC, Peter. Hydrogen sing in the fracture of T/P92 martensitic steel after the tensile and notch toughness tests. In *Powder Metallurgy Progress : Journal of Science and Technology of Particle Materials*, 2015, vol. 15, spec. iss., p. 73-80. ISSN 1335-8978.
- ADFB77 ZELEŇÁK, Adam - KUPKOVÁ, Miriam - GEORGIEV, Jordan Stefanov - ORIŇÁKOVÁ, Renáta. Hardness of sintered PM materials with microgradients in composition. In *Acta Metallurgica Slovaca Conference*, 2013, vol. 3, p. 171-174. ISSN 1338-1660.
- ADMA Scientific papers in foreign impacted journals registered in Web of Sciences or Scopus**
- ADMA01 ČIRIPOVÁ, Lucia - HRYHA, Eduard - DUDROVÁ, Eva - VÝROSTKOVÁ, Anna. Prediction of mechanical properties of Fe-Cr-Mo sintered steel in relationship with microstructure. In *Materials and Design*, 2012, vol. 35, p. 619-625. (2.200 - IF2011). ISSN 0261-3069.
- ADMA02 FALAT, Ladislav - HOMOLOVÁ, Viera - KEPIČ, Ján - SVOBODA, Milan - VÝROSTKOVÁ, Anna. Microstructure and properties degradation of P/T 91, 92 steels weldments in creep conditions. In *Journal of Mining and Metallurgy : Section B: Metallurgy*, 2012, vol. 48, no. 3, p. 461-469. (2012 - WOS). ISSN 1450-5339.

- ADMA03 HLOCH, S. - FOLDYNA, Josef - SITEK, Libor - ZELEŇÁK, Michal - HLAVÁČEK, P. - HVIZDOŠ, Pavol - KĽOC, Ján - MONKA, Peter - MONKOVÁ, Katarína - KOZAK, Dražan - MAGUROVÁ, Dagmara. Disintegration of bone cement by continuous and pulsating water jet. In *Tehnički vjesnik - Technical Gazette : Scientific-professional journal of technical faculties of the University of Osijek*, 2013, vol. 20, no. 4, p. 593-598. (0.601 - IF2012). ISSN 1330-3651.
- ADMA04 HLOCH, S. - FOLDYNA, Josef - PUDE, Frank - KĽOC, Ján - ZELEŇÁK, Michal - HVIZDOŠ, Pavol - MONKA, Peter - SMOLKO, I. - ŠČUČKA, Jiří - KOZAK, Dražan - SEDMAK, A. - MIHALČINOVÁ, E. Experimental in-vitro bone cements disintegration with ultrasonic pulsating water jet for revision arthroplasty. In *Tehnički vjesnik*, 2015, vol. 22, no. 6, p. 1609-1615. (0.579 - IF2014). ISSN 1330-3651.
- ADMA05 HLOCH, S. - MONKA, Peter - HVIZDOŠ, Pavol - JAKUBÉCZYOVÁ, Dagmar - KOZAK, Dražan - ČOLIČ, Krešimir - KĽOC, Ján - MAGUROVÁ, Dagmara. Thermal manifestation and nanoindentation of bone cements for orthopaedic surgery. In *Thermal Science*, 2013, vol. 17, supp. 1, p. S251-S258. (0.838 - IF2012). ISSN 0354-9836.
- ADMA06 HVIZDOŠ, Pavol - BESTERCI, Michal - BALLÓKOVÁ, Beáta - HUANG, Song-Jeng - LIN, Po-Chou. Tribological behaviour and mechanical properties of copper and magnesium based composites treated by severe plastic deformation. In *International Journal of Materials and Product Technology*, 2015, vol. 50, no. 1, p. 80-100. (0.261 - IF2014). ISSN 0268-1900.
- ADMA07 JAKUBÉCZYOVÁ, Dagmar - KOČÍK, Marek - HVIZDOŠ, Pavol. Multicomponent thin films deposited by PVD ARC and LARC technology. In *Materials Science (Medžiagotyra)*, 2014, vol. 20, no. 1, p. 36-41. (0.336 - IF2013). (2014 - WOS, SCOPUS). ISSN 1392-1320.
- ADMA08 LUPTÁKOVÁ, Natália - BALLÓKOVÁ, Beáta - DYMÁČEK, Petr. Compressive creep testing of composites on the based of MoSi₂-SiC nanoparticles. In *Manufacturing Technology*, 2015, vol. 15, no. 3, p. 377-380. (0.372 - IF2014). ISSN 1213-2489.
- ADMA09 MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária - ŠTULAJTEROVÁ, Radoslava - KAŠIAROVÁ, Monika. Effect of microstructure characteristics on tetracalcium phosphate-nanomonetite cement in vitro cytotoxicity. In *Biomedical Materials*, 2015, vol. 10, 025006. (3.697 - IF2014). ISSN 1748-6041.
- ADMA10 ŠKORVÁNEK, Ivan - MARCIN, Jozef - CAPIK, Marek - VARGA, Marek - TURČANOVÁ, Jana - KOVÁČ, Jozef - ŠVEC, Peter - JANÍČKOVIČ, Dušan - KOVÁČ, František - STOYKA, Volodymyr. Tailoring of functional properties in Fe-based soft magnetic alloys by thermal processing under magnetic field. In *Magnetohydrodynamics*, 2012, vol. 48, no. 2, p. 371-377. (0.413 - IF2011). (2012 - WOS, SCOPUS). ISSN 0024-998X.
- ADMA11 VELGOSOVÁ, Oksana - BESTERCI, Michal - IVAN, Jozef - SÜLLEIOVÁ, Katarína. Influence of technological factors on dispersion strengthened materials

deformation mechanism studied by "in situ tensile test in SEM". In *International Journal of Materials and Product Technology*, 2014, vol. 49, no. 2/3, p. 129-159. (0.282 - IF2013). (2014 - WOS, SCOPUS). ISSN 0268-1900.

ADMB Scientific papers in foreign non-impacted journals registered in Web of Sciences or Scopus

- ADMB01 ADOBERG, Eron - PODGURSKI, Vitali - PEETSALU, Priidu - LIND, Liina - MIKLI, Valdek - HVIZDOŠ, Pavol - KULU, Priit. The effect of surface pre-treatment and coating post-treatment to the properties of TiN coatings. In *Estonian Journal of Engineering*, 2012, vol. 18, no. 3, p. 185-192. ISSN 1736-6038.
- ADMB02 BALKO, Ján - HVIZDOŠ, Pavol - CÓRDOBA, J.M. - CHICARDI, E. Instrumented indentation of composite materials prepared by methods of mechanochemistry. In *Key Engineering Materials*, 2014, vol. 606, p. 241-244. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB03 BALKO, Ján - FIDES, Martin - SEDLÁK, Richard - HVIZDOŠ, Pavol - HLOCH, S. - KĽOC, Ján - MONKA, Peter. Wear and mechanical properties of various bone cements - influence of saline environment. In *Key Engineering Materials*, 2015, vol. 662, p. 147-150. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB04 BREZINOVÁ, Janette - JAKUBÉCZYOVÁ, Dagmar - LANDOVÁ, Mariana. Evaluation of AlTiCrN coatings surface after tribological tests. In *Materials Science Forum*, 2015, vol. 818, p. 49-52. (2015 - SCOPUS, WOS). ISSN 0255-5476.
- ADMB05 BUREŠ, Radovan - FÁBEROVÁ, Mária - STREČKOVÁ, Magdaléna - KOLLÁR, P. - FÜZER, J. Contribution to characterization of vitroperm based composites. In *AASRI Procedia*, 2012, vol. 3, p. 667-673. ISSN 2212-6716.
- ADMB06 CSANÁDI, Tamás - BL'ANDA, Marek - DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - DUSZA, Ján. Nanoindentation and AFM studies on tungsten carbide crystals in WC-Co hardmetal. In *Key Engineering Materials*, 2014, vol. 606, p. 107-110. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB07 DUSZOVÁ, Annamária - HALGAŠ, Radoslav - PRIPUTEN, Pavol - BL'ANDA, Marek - HVIZDOŠ, Pavol - LOFAJ, František - DUSZA, Ján. Nanohardness of individual phases in WC-Co cemented carbides. In *Key Engineering Materials*, 2014, vol. 586, p. 23-26. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB08 DŽUPON, Miroslav - BALKO, Ján - BREZINOVÁ, Janette. Non-destructive surface diagnostics of tools. In *Materials Science Forum*, 2015, vol. 818, p. 41-44. (2015 - SCOPUS, WOS). ISSN 0255-5476.
- ADMB09 GAVENDOVÁ, Petra - KOVÁČ, František - PETRYSHYNETS, Ivan - SOPKO, Martin - MOLNÁROVÁ, Mária. Nanoindentation measurements in non-oriented silicon steel at elevated temperatures. In *Materials Science Forum*, 2014, vol. 782, p. 205-208. (2014 - WOS, SCOPUS). ISSN 0255-5476.

- ADMB10 HAGAROVÁ, Mária - DZEDZINA, Rastislav - GAVENDOVÁ, Petra. Properties of Ni-Co alloy coating prepared from sulphate bath. In *Materials Science Forum*, 2014, vol. 782, p. 598-602. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB11 HAGAROVÁ, Mária - JAKUBÉCZYOVÁ, Dagmar - HVIZDOŠ, Pavol - FEČKOVÁ, Zuzana - VOJTKO, Marek - DÚL, Gabriel. The influence of current density on tribological behavior Ni-Co electroplated coatings. In *Key Engineering Materials*, 2015, vol. 635, p. 127-130. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB12 HALGAŠ, Radoslav - DUSZA, Ján - KAIFEROVÁ, Jana - KOVÁCSOVÁ, Lucia - MARKOVSKÁ, Neda. Influence of loading conditions on the deformation behaviour of human enamel studied by instrumented indentation. In *Key Engineering Materials*, 2014, vol. 586, p. 27-30. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB13 HANES, Tomáš - HVIZDOŠ, Pavol - ŢAVODOVÁ, Miroslava - KALINCOVÁ, Daniela - HRICOVÁ, Júlia - BEŇO, Pavel. Coating surface roughness measurement made on coining dies. In *Manufacturing Technology*, 2014, vol. 14, no. 3, p. 309-317. (2014 - SCOPUS). ISSN 1213-2489.
- ADMB14 HOMOLOVÁ, Viera. Prediction of ternary Fe-B-Cr phase diagram. In *Materials Science Forum*, 2014, vol. 782, p. 45-50. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB15 HRUBOVČÁKOVÁ, Monika - KUPKOVÁ, Miriam - FEDORKOVÁ, Andrea - ORIŇÁKOVÁ, Renáta - ZELENÁK, Adam. Effect of silver content on microstructure and corrosion behavior of material prepared from silver coated iron powder. In *Materials Science Forum*, 2014, vol. 782, p. 499-502. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB16 HRUBOVČÁKOVÁ, Monika - DUDROVÁ, Eva - KABÁTOVÁ, Margita. Oxide reduction processes, microstructure and properties of sintered chromium pre-alloyed steel. In *Materials Science Forum*, 2014, vol. 782, p. 487-490. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB17 HVIŠČOVÁ, Petra - KVETKOVÁ, Lenka - LOFAJ, František - NOVÁK, Michal - FERDINANDY, Milan - PODOBA, Rudolf. Mechanical and tribological properties of HIPIMS and HITUS W-C based coatings. In *Key Engineering Materials*, 2015, vol. 662, p. 99-102. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB18 HVIŠČOVÁ, Petra - LOFAJ, František - NOVÁK, Michal. Nanohardness of CrN coatings versus deposition parameters. In *Key Engineering Materials*, 2014, vol. 606, p. 191-194. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB19 HVIZDOŠ, Pavol - JAKUBÉCZYOVÁ, Dagmar - HLOCH, S. - KĽOC, Ján - BALKO, Ján - MONKA, Peter. Local mechanical properties of various bone cements. In *Key Engineering Materials*, 2014, vol. 592-593, p. 382-385. (2014 - SCOPUS). ISSN 1013-9826.

- ADMB20 HVIZDOŠ, Pavol - PUCHÝ, Viktor - DRDLÍK, Daniel - CIHLÁŘ, Jaroslav. Mechanical and tribological properties of Al₂O₃-ZrO₂ based composites prepared by EPD. In *Key Engineering Materials*, 2012, vol. 507, p. 191-195. (2012 - SCOPUS). ISSN 1013-9826.
- ADMB21 HVIZDOŠ, Pavol - KULU, Priit - BESTERCI, Michal. Tribological parameters of copper-alumina composite. In *Key Engineering Materials*, 2013, vol. 527, p. 191-196. (2013 - SCOPUS). ISSN 1013-9826.
- ADMB22 JAKUBÉCZYOVÁ, Dagmar - ZUBKO, Pavol - HAGAROVÁ, Mária - ZUBKO, Juraj. Evaluation of local mechanical properties of thin coatings prepared by PVD evaporation. In *Key Engineering Materials*, 2014, vol. 586, p. 150-153. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB23 JAKUBÉCZYOVÁ, Dagmar - KALINCOVÁ, Daniela - KAŠTAN, Rudolf. Testing of PVD hard coatings applied to coining dies. In *Materials Science Forum*, 2015, vol. 818, p. 27-31. (2015 - SCOPUS, WOS). ISSN 0255-5476.
- ADMB24 JURKO, Jozef - DŽUPON, Miroslav - PANDA, Anton - ZAJAC, Jozef. Study influence of plastic deformation a new extra low carbon stainless steels XCr17Ni7MoTiN under the surface finish when drilling. In *Advanced Materials Research*, 2012, vol. 538-541, p. 1312-1315. ISSN 1022-6680.
- ADMB25 KABÁTOVÁ, Margita - DUDROVÁ, Eva - BRUNCKOVÁ, Helena. Microstructure of composites based on phosphated iron powder. In *Materials Science Forum*, 2014, vol. 782, p. 495-498. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB26 KABÁTOVÁ, Margita - FÜZER, J. - FÜZEROVÁ, Jana - DUDROVÁ, Eva - KOLLÁR, P. Mixed and vacuum/pressure impregnated Fe/SiO₂/shellac composites. In *Materials Science Forum*, 2014, vol. 782, p. 533-536. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB27 KAŠIAROVÁ, Monika - GALUSKOVÁ, Dagmar - PRAMUKOVÁ, Zuzana - TATARKO, Peter - GAALOVÁ, Petra - GALUSEK, Dušan. Corrosion behavior of human teeth measured by nanoindentation method. In *Key Engineering Materials*, 2014, vol. 606, p. 145-148. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB28 KAŠIAROVÁ, Monika - PRAMUKOVÁ, Zuzana - BODIŠOVÁ, Katarína - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - DUSZA, Ján - ŠAJGALÍK, Pavol - GROMOŠOVÁ, Silvia. Mechanical properties of porous Si₃N₄ ceramics. In *Key Engineering Materials*, 2014, vol. 586, p. 166-169. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB29 KAŠIAROVÁ, Monika - MICHÁLKOVÁ, Monika - DUSZA, Ján - ŠAJGALÍK, Pavol. Scratch resistance of Si₃N₄-graphene nanoplatelets composites. In *Key Engineering Materials*, 2015, vol. 662, p. 165-168. (2015 - SCOPUS). ISSN 1013-9826.

- ADMB30 KOTTFER, Daniel - FERDINANDY, Milan - KACZMAREK, Lukasz - HVIZDOŠ, Pavol - KUFFOVÁ, Mariana. Effect of impact angle of evaporated particles on behavior of Ti EB PVD coating. In *Advances in Military Technology*, 2014, vol. 9, no. 1. ISSN 1802-2308.
- ADMB31 KOTTFER, Daniel - FERDINANDY, Milan - TREBUŇA, Peter - KIANICOVÁ, Marta. The characterisation of the device for EB PVD deposition of thin coatings. In *Procedia Engineering*, 2014, vol. 96, p. 242-251. (2014 - SCOPUS, WOS). ISSN 1877-7058.
- ADMB32 KOVÁČ, František - PETRYSHYNETS, Ivan - BURŠÍK, Jiří - SOPKO, Martin. Influence of new system nano-inhibitors on the abnormal grain growth with goss crystallographic orientation of silicon steels. In *Materials Science Forum*, 2014, vol. 783-786, p. 2579-2584. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB33 KOVALČÍKOVÁ, Alexandra - BALKO, Ján - DUSZA, Ján. Influence of microstructure on tribological properties and nanohardness of silicon carbide ceramics. In *Key Engineering Materials*, 2015, vol. 662, p. 55-58. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB34 KOVALČÍKOVÁ, Alexandra - DUSZA, Ján - ŠAJGALÍK, Pavol. Influence of the microstructure on macro/micro versus nanohardness of SiC ceramics. In *Key Engineering Materials*, 2014, vol. 606, p. 197-200. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB35 KUPKOVÁ, Miriam - KUPKA, Martin. On the indentation modulus of sintered materials. In *Key Engineering Materials*, 2014, vol. 586, p. 190-193. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB36 KUPKOVÁ, Miriam - ORIŇÁKOVÁ, Renáta - FEDORKOVÁ, Andrea - HRUBOVČÁKOVÁ, Monika. PM materials prepared from powders consisting of polymer coated iron microparticles. In *Materials Science Forum*, 2014, vol. 782, p. 491-494. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB37 KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - KUPKA, Martin - ZELEŇÁK, Adam. The effect of graded structure of sintered iron-manganese biomaterials on the range and distribution of local hardness values. In *Key Engineering Materials*, 2015, vol. 662, p. 155-158. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB38 LOFAJ, František - NÉMETH, Dušan - PODOBA, Rudolf - NOVÁK, Michal. Cracking in brittle coatings during nanoindentation. In *Key Engineering Materials*, 2015, vol. 662, p. 103-106. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB39 LOFAJ, František - FERDINANDY, Milan - HORŇÁK, Peter. Nanohardness vs. friction behavior in magnetron sputtered and PECVD W-C coatings. In *Key Engineering Materials*, 2014, vol. 586, p. 35-38. (2014 - SCOPUS). ISSN 1013-9826.

- ADMB40 MICHALIKOVÁ, Jana - MICHALIK, Štefan - BEDNARČÍK, J. - HVIZDOŠ, Pavol - ALFELD, Matthias - FRANZ, Hermann. Strain mapping of indented Zr-based bulk metallic glass using nano-diffraction. In *Key Engineering Materials*, 2015, vol. 662, p. 51-54. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB41 MILKOVIČ, Ondrej - SAKSL, Karel - HAGAROVÁ, Mária - MICHALIK, Štefan - GAMCOVÁ, Jana. Structure characterisation of electrodeposited Ni-Co alloy. In *Materials Science Forum*, 2014, vol. 782, p. 603-606. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB42 MONKOVÁ, Katarína - MONKA, Peter - JAKUBÉCZYOVÁ, Dagmar. The research of the high speed steels produced by powder and casting metallurgy from the view of tool cutting life. In *Applied mechanics and materials*, 2013, vol. 302, p. 269-274. ISSN 1660-9336.
- ADMB43 NÉMET, Miroslav - MIHALIKOVÁ, Mária, Ing., PhD. - KOVALČÍKOVÁ, Alexandra - LIŠKOVÁ, Anna. Changing the hardness automotive steels at different strain rate. In *Key Engineering Materials*, 2015, vol. 635, p. 41-44. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB44 NÉMETH, Dušan - KUČERA, Ján - LOFAJ, František - IVANČO, Vladimír. Modeling of stress distribution in dental implant in frontal part of mandible. In *Key Engineering Materials*, 2014, vol. 606, p. 137-140. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB45 NÉMETH, Dušan - LOFAJ, František - KUČERA, Ján. The effect of the cortical bone thickness on the stress distribution in dental implants by FEM. In *Key Engineering Materials*, 2015, vol. 662, p. 151-154. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB46 NOVÁK, Michal - LOFAJ, František - HVIŠČOVÁ, Petra - PODOBA, Rudolf - HARŠÁNI, Marián - SAHUL, Martin - ČAPLOVIČ, Ľubomír. Nanohardness of DC magnetron sputtered W-C coatings as a function of composition and residual stresses. In *Key Engineering Materials*, 2015, vol. 662, p. 107-110. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB47 NOVÁK, Michal - LOFAJ, František - HVIŠČOVÁ, Petra. The influence of indentation conditions on nanohardness depth profiles of W-C based coatings. In *Key Engineering Materials*, 2014, vol. 606, p. 175-178. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB48 OSTROUSHKO, Dmytro - MAZANCOVÁ, Eva - SAKSL, Karel - HALGAŠ, Radoslav. Mechanical and phase analysis of bonding area explosively welded Ti-Cr/Ni steel in as-received state and after heat treatment using synchrotron (BW-5). In *Materials Science Forum*, 2014, vol. 782, p. 155-160. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB49 PETRYSHYNETS, Ivan - KOVÁČ, František - MOLNÁROVÁ, Mária - GAVENDOVÁ, Petra - SOPKO, Martin - PETROV, Branislav. Columnar grain growth with enhanced rotation texture in temper rolled NO silicon steels. In

Materials Science Forum, 2014, vol. 782, p. 201-204. (2014 - WOS, SCOPUS).
ISSN 0255-5476.

- ADMB50 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Determination of local mechanical properties of Si₃N₄ based foams. In *Key Engineering Materials*, 2014, vol. 606, p. 213-216. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB51 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Local mechanical properties of highly porous Si₃N₄ for trabecular bone replacement. In *Key Engineering Materials*, 2015, vol. 662, p. 142-146. (2015 - SCOPUS). ISSN 1013-9826.
- ADMB52 ROSENBERG, Gejza - JUHÁR, Ľuboš. Fatigue resistance of dual phase steels in presence of microstructural inhomogeneities. In *Manufacturing Technology*, 2012, vol. 12, no. 13, p. 217-221. (2012 - SCOPUS). ISSN 1213-2489.
- ADMB53 ROSENBERG, Gejza - SINAIOVÁ, Iveta - JUHÁR, Ľuboš. Influence of microstructural heterogeneities on capacity to absorb energy of dual-phase steels. In *Manufacturing Technology*, 2012, vol. 12, no. 13, p. 222-227. (2012 - SCOPUS). ISSN 1213-2489.
- ADMB54 SHVAB, Ruslan - HVIZDOŠ, Pavol - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. Local mechanical properties of cast and sintered high Cr-alloyed steel. In *Key Engineering Materials*, 2014, vol. 586, p. 241-244. (2014 - SCOPUS). ISSN 1013-9826.
- ADMB55 SHVAB, Ruslan - HRYHA, Eduard - SHYKULA, Petro - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. Microstructure of high Cr-alloyed sintered steel - prediction and analysis. In *Materials Science Forum*, 2014, vol. 782, p. 473-479. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB56 SOPKO, Martin - KOVÁČ, František - PETRYSHYNETS, Ivan - MOLNÁROVÁ, Mária - GAVENDOVÁ, Petra. Differential scanning calorimetry and metallographic analysis of Fe-Si electrical steel. In *Materials Science Forum*, 2014, vol. 782, p. 129-132. (2014 - WOS, SCOPUS). ISSN 0255-5476.
- ADMB57 VARGA, R. - RYBA, T. - SAKSL, Karel - ZHUKOVA, V. - ZHUKOV, A. Fabrication and first characterization of Ni₂MnGa glass-coated microwires. In *Key Engineering Materials*, 2012, vol. 495, p. 236-238. (2012 - SCOPUS). ISSN 1013-9826.
- ADMB58 VOJTKO, Marek - ZUBKO, Pavol - ĎURIŠIN, Martin. Use of decomposition of non-thermoelastic martensite for structural changes of CuZnAl shape memory alloys. In *Materials Science Forum*, 2014, vol. 782, p. 427-430. (2014 - WOS, SCOPUS). ISSN 0255-5476.

ADNA Scientific papers in domestic impacted journals registered in Web of Sciences or Scopus

ADNA01 KOVÁČ, František - PETRYSHYNETS, Ivan - PUCHÝ, Viktor - ŠEBEK, Martin - MARUŠ, Jozef. Preparation of NO silicon steels with columnar microstructure and low watt losses. In *Journal of Electrical Engineering*, 2015, vol. 66, no. 7/s, p. 86-89. (0.378 - IF2014). (2015 - INSPEC, SCOPUS, WOS). ISSN 1335-3632.

ADNA02 PETRYSHYNETS, Ivan - KOVÁČ, František - PUCHÝ, Viktor - ŠEBEK, Martin - MARUŠ, Jozef. Effect of VC precipitates on the formation of microstructures and magnetic properties of GO electrical steels. In *Journal of Electrical Engineering*, 2015, vol. 66, no. 7/s, p. 90-93. (0.378 - IF2014). (2015 - INSPEC, SCOPUS, WOS). ISSN 1335-3632.

ADNB Scientific papers in domestic non-impacted journals registered in Web of Sciences or Scopus

ADNB01 AZHNIUK, Y.M. - STOYKA, Volodymyr - LOPUSHANSKY, V.V. - PETRYSHYNETS, Ivan - KOVÁČ, František - GOMONNAI, A.V. - ZAHN, D.R.T. Thermal diffusion of zinc from zinc-containing boronsilicate glass into cadmium chalcogenide nanocrystals. In *Acta Metallurgica Slovaca*, 2012, vol. 18, no. 2-3, p. 100-108. (2012 - SCOPUS). ISSN 1338-1156.

ADNB02 BESTERCI, Michal - VELGOSOVÁ, Oksana - IVAN, Jozef - KVAČKAI, Tibor - KULU, Priit. Fracture mechanism of dispersion-strengthened Cu-Al₂O₃ nanosystem. In *Acta Metallurgica Slovaca*, 2012, vol. 18, no. 2-3, p. 76-81. (2012 - SCOPUS). ISSN 1338-1156.

ADNB03 BESTERCI, Michal - DOBEŠ, Ferdinand - KVAČKAI, Tibor - SÜLLEIOVÁ, Katarína - BALLÓKOVÁ, Beáta - VELGOSOVÁ, Oksana. High temperature mechanical properties of Al-Al₄C₃ composite produced by mechanical alloying. In *Acta Metallurgica Slovaca*, 2014, vol. 20, no. 3, p. 271-285. (2014 - SCOPUS). ISSN 1338-1156.

ADNB04 GAVENDOVÁ, Petra - KOVÁČ, František - PETRYSHYNETS, Ivan - SOPKO, Martin - MOLNÁROVÁ, Mária. Nanohardness of grains of electrotechnical steel at elevated temperature. In *Acta Metallurgica Slovaca*, 2012, roč. 18, č. 4, s. 156-161. (2012 - SCOPUS). ISSN 1338-1156.

ADNB05 JAKUBÉCZYOVÁ, Dagmar - HAGAROVÁ, Mária - SAVKOVÁ, Jarmila. Evaluation of properties of multilayer and multicomponent PVD coatings deposited on the cutting tools produced by powder metallurgy. In *Acta Metallurgica Slovaca*, 2012, roč. 18, č. 1, s. 13-19. (2012 - SCOPUS). ISSN 1338-1156.

ADNB06 JAKUBÉCZYOVÁ, Dagmar - HAGAROVÁ, Mária. The study of two types of PVD coatings on the substrate made by powder metallurgy. In *Acta Metallurgica Slovaca*, 2012, vol. 18, no. 4, p. 191-199. (2012 - SCOPUS). ISSN 1338-1156.

ADNB07 SPIŠÁK, Emil - DŽUPON, Miroslav - MAJERNÍKOVÁ, Janka - SPIŠÁKOVÁ DUL'OVÁ, Emília. Failure of coatings of tinplates. In *Acta Metallurgica Slovaca*, 2015, vol. 21, no. 3, p. 213-219. ISSN 1338-1156.

AEC Scientific papers in foreign peer-reviewed proceedings, monographs

- AEC01 BALKO, Ján - BL'ANDA, Marek - HVIZDOŠ, Pavol - PUCHÝ, Viktor - DRDLÍK, Daniel - CIHLÁŘ, Jaroslav. Mechanical and tribological properties of zirconia and alumina based composites prepared by EPD. In *CIEC13 : Proceedings of the 13th European inter-regional conference on ceramics. Barcelona, 12.-14.9.2012.* Ed. M. Anglada. - Barcelona : Universitat Politecnica de Catalunya, 2012, p. 153-156. ISBN 978-84-615-9681-2.
- AEC02 BALLÓKOVÁ, Beáta - BALOG, Martin - BESTERCI, Michal - SÜLLEIOVÁ, Katarína - HUANG, Song-Jeng. Microstructure, mechanical properties and fracture of Mg-Al₂O₃ nano composites. In *ICCE-22 : 22nd annual international conference on composites/nano engineering. Saint Julian's, Malta, 13.-19.7.2014.* Ed. David Hui. - B.V., 2014.
- AEC03 BESTERCI, Michal - VELGOSOVÁ, Oksana - IVAN, Jozef - SÜLLEIOVÁ, Katarína. Failure mechanism of Cu-Al₂O₃ micro and nanomaterials observed by "in situ tensile test in SEM". In *ICCE-22 : 22nd annual international conference on composites/nano engineering. Saint Julian's, Malta, 13.-19.7.2014.* Ed. David Hui. - B.V., 2014.
- AEC04 BESTERCI, Michal - SÜLLEIOVÁ, Katarína - VELGOSOVÁ, Oksana - DOBEŠ, Ferdinand. Influence of heat treatment on mechanical properties of micro and nanostructural Al-C systems. In *20th IFHTSE : International federation for heat treatment and surface engineering congress 2012. Beijing, 23.-25.10.2012.* Eds. Z. Gao, H. Chong. - Chinese Heat Treatment Society, 2012, p. 166-170.
- AEC05 BLACH, Juraj - FALAT, Ladislav. Vplyv vodíka na porušovanie a vzhľad lomu zvarových spojov žiaruvevných ocelí pre energetické zariadenia po ťahovom namáhaní pri teplote okolia. In *Přínos metalografie pro řešení výrobních problémů : 13. česko-slovenská konference. Sborník přednášek. Lázně Libverda, 17.-19.6.2014.* Eds. J. Kasl, P. Zuna. - Praha : Fakulta strojní ČVUT, 2014, s. 235-241. ISBN 978-80-01-05474-1.
- AEC06 BUREŠ, Radovan - STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária - KABÁTOVÁ, Margita. Preparation and properties of Fe/MgO composites. In *Euro PM 2013 : International powder metallurgy congress and exhibition. Gothenburg, 15.-18.9.2013* [elektronický zdroj]. - Shrewsbury : EPMA, 2013. ISBN 978-1-899072-40-8. CD. CD ROM.
- AEC07 BUREŠ, Radovan - FÁBEROVÁ, Mária - BIRČÁKOVÁ, Zuzana - FÜZER, J. - KOLLÁR, P. The influence of particles size on properties of Fe/resin soft magnetic composite. In *Euro PM 2013 : International powder metallurgy congress and exhibition. Gothenburg, 15.-18.9.2013* [elektronický zdroj]. - Shrewsbury : EPMA, 2013. ISBN 978-1-899072-40-8. CD. CD ROM.
- AEC08 DUDROVÁ, Eva - HRUBOVČÁKOVÁ, Monika - HRYHA, Eduard - KABÁTOVÁ, Margita. Parameters controlling the reduction of oxides during sintering of Cr-prealloyed steel. In *Euro PM 2012 : International Powder Metallurgy Congress and Exhibition. CD Proceedings. Basel, Switzerland, 16.-19.9.2012* [elektronický zdroj]. - European Powder Metallurgy Association, 2012. ISBN 978-1-899072-36-1. CD. CD ROM.

- AEC09 DUDROVÁ, Eva - KABÁTOVÁ, Margita - ORIŇÁKOVÁ, Renáta. Sintered composite materials on the basis of Fe/FePO₄ coated powders. In *Euro PM 2014 : International powder metallurgy congress and exhibition. Salzburg, 21.-24.9.2014.* - Shrewsbury : EPMA, 2014. ISBN 978-1-899072-44-6.
- AEC10 FIAL, C. - CIAS, A. - SUŁOWSKI, Maciej - DUDROVÁ, Eva - KABÁTOVÁ, Margita - KUPKOVÁ, Miriam - SELECKÁ, Marcela. Wpływ obróbki cieplnej na własności i mikrostrukturę stali DH-1 i 34HNM wytworzonych techniką metalurgii proszków. In *Prace szkoly inżynierii materiałowej : Monografia pod redakcją prof. Jerzego Pacyny.* - Rytro, 2014, p. 1-7.
- AEC11 HLOCH, S. - FOLDYNA, J. - MAGUROVÁ, D. - KŁOC, J. - KOZAK, D. - RUGGIERO, A. - TOZAN, H. - MONKA, P. - MONKOVÁ, Katarína - HVIZDOŠ, Pavol - CHATTOPADHYAYA, S. - ZELEŇÁK, M. - NEMCOVÁ, J. Using water jet in orthopaedic surgery. In *TEAM 2012 : Proceedings of the 4th international scientific and expert conference. Slavonski Brod, 17.-19.10.2012.* Eds. M. Živič, T. Galeta. - Osijek : International TEAM society, 2012, p. 153-156. ISSN 1847-9065.
- AEC12 KABÁTOVÁ, Margita - DUDROVÁ, Eva - FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. Iron/SiO₂/shellac composites prepared by vacuum/pressure impregnation. In *Euro PM 2013 : International powder metallurgy congress and exhibition. Gothenburg, 15.-18.9.2013* [elektronický zdroj]. - Shrewsbury : EPMA, 2013. ISBN 978-1-899072-40-8. CD. CD ROM.
- AEC13 KABÁTOVÁ, Margita - DUDROVÁ, Eva - FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. SMCs Fe/(0.4-2.0 wt.%)SiO₂/polymer prepared by vacuum/pressure impregnation. In *Euro PM 2014 : International powder metallurgy congress and exhibition. Salzburg, 21.-24.9.2014.* - Shrewsbury : EPMA, 2014. ISBN 978-1-899072-44-6.
- AEC14 KALINCOVÁ, Daniela - ČAVODOVÁ, Miroslava - HANES, Tomáš - JAKUBÉCZYOVÁ, Dagmar - KAŠTAN, Rudolf. Využitie elektrónovej mikroskopie pri hodnotení kvality povlakov na razidlách mincí. In *3. mezinárodní konference NDT 2014 : Mikroskopie a nedestruktivní zkoušení materiálů 2014. Sborník příspěvků. Ústí nad Labem, 22.-24.10.2014.* Ed. Martin Novák. - Ústí nad Labem : Univerzita J.E. Purkyně, 2014, s. 254-261. ISBN 978-80-7414-755-5.
- AEC15 KOTTFER, Daniel - MARTON, Marián - KUFFOVÁ, Mariana - FERDINANDY, Milan - KACZMAREK, Lukasz. Selected properties of carbon layers deposited onto Al alloy. In *International conference on military technologies : ICMT 2013. Brno, 22.-23.5.2013.* Eds. V. Krivanek, A. Stefek. - Brno : University of defence, 2013, p. 1571-1578. ISBN 978-80-7231-917.
- AEC16 KOVÁČ, František - PETRYSHYNETS, Ivan. Preparation of NO silicon steels with columnar microstructure using temper rolling process at elevated temperature. In *MST14 : Proceedings of Materials science and technology 2014. Pittsburgh, 12.-16.10.2014.* - B.V., 2014, p. 517-524. ISBN 978-0-87339-763-6.

- AEC17 MEDVECKÝ, Ľubomír - SOPČÁK, Tibor - STREČKOVÁ, Magdaléna. Phase composition of nanohydroxyapatite synthesized by precipitation from calcium D-gluconate solutions. In *Euro PM 2012 : International Powder Metallurgy Congress and Exhibition. CD Proceedings. Basel, Switzerland, 16.-19.9.2012* [elektronický zdroj]. - European Powder Metallurgy Association, 2012. ISBN 978-1-899072-36-1. CD. CD ROM.
- AEC18 PETRYSHYNETS, Ivan - KOVÁČ, František - SOPKO, Martin. Evolution of microstructure and texture in NO silicon steels under gradient deformation. In *Fortschritte in der Metallographie 46 : Berichte der 14. Internationalen Metallographie-Tagung. Leoben, 17.-19.9.2014*. Eds. Svea Mayer, Michael Panzenböck, Helmut Clemens. - Bonn : Inventum GmbH, 2014, p. 89-94. ISBN 978-3-88355-403-7.
- AEC19 ROSENBERG, Gejza - SINAIOVÁ, Iveta - KOČÍK, Marek. Analýza náhylnosti dvojfázových ocelí ku lokalizácii plastickej deformácie. In *3. mezinárodní konference NDT 2014 : Mikroskopie a nedestruktívni zkoušení materiálů 2014. Sborník příspěvků. Ústí nad Labem, 22.-24.10.2014*. Ed. Martin Novák. - Ústí nad Labem : Univerzita J.E. Purkyně, 2014, s. 205-211. ISBN 978-80-7414-755-5.
- AEC20 ROSENBERG, Gejza - SINAIOVÁ, Iveta - GAŠKO, Martin - JUHÁR, Ľuboš. Mechanické vlastnosti povrchových a podpovrchových vrstiev oceľových plechov = Mechanical properties of surface and subsurface layers of steel sheets. In *24. dny tepelného zpracováni s mezinárodní účastí : 24. DTZ 2012. Jihlava, 27.-29.11.2012* [elektronický zdroj]. - Čerčany : Ecosond, s.r.o., 2012. ISBN 978-80-904462-5-0. CD. CD ROM.
- AEC21 ROSENBERG, Gejza - SINAIOVÁ, Iveta. Size of the deformation zones formed by drilling a hole and plastic zones around a crack tip formed during cycling and impact loading of the steels = Rozmer deformačnej zóny vytvorennej pri vŕtaní otvoru a rozmer plastickej zóny v okolí čela trhliny pri cyklickom a rázovom zaťažovaní ocelí. In *Strojírenská technologie : 5. ročník mezinárodní konference. Plzeň, 22.-23.1.2013*. Ed. Vladimíra Kopečná. - Plzeň : Západočeská univerzita, 2013, cD. ISBN 978-80-261-0136-9.
- AEC22 ROSENBERG, Gejza - SINAIOVÁ, Iveta - JUHÁR, Ľuboš. Účinok interkritického kalenia na vlastnosti ocelí valcovaných za tepla a za studena. In *Přínos metalografie pro řešení výrobních problémů : 13. česko-slovenská konference. Sborník přednášek. Lázně Libverda, 17.-19.6.2014*. Eds. J. Kasl, P. Zuna. - Praha : Fakulta strojní ČVUT, 2014, s. 9-13. ISBN 978-80-01-05474-1.
- AEC23 ROSENBERG, Gejza - SINAIOVÁ, Iveta - GAŠKO, Martin - JUHÁR, Ľuboš. Únavová odolnosť dvojfázových ocelí v prítomnosti mikroštruktúrnych nehomogenít. In *2. mezinárodní konference NDT 2012 : Sborník příspěvků. Ústí nad Labem, 17.-18.10.2012* [elektronický zdroj]. Ed. M. Novák. - Ústí nad Labem : Univerzita J.E. Purkyně, 2012, s. 157-162. ISBN 978-80-7414-509-4. Názov z CD. CD ROM.

- AEC24 ROSENBERG, Gejza - SINAIOVÁ, Iveta - GAŠKO, Martin - JUHÁR, Ľuboš. Vplyv mikroštruktúrnych heterogenít na schopnosť dvojfázových ocelí absorbovať energiu. In *2. mezinárodní konference NDT 2012 : Sborník příspěvků. Ústí nad Labem, 17.-18.10.2012* [elektronický zdroj]. Ed. M. Novák. - Ústí nad Labem : Univerzita J.E. Purkyně, 2012, s. 162-167. ISBN 978-80-7414-509-4. Názov z CD. CD ROM.
- AEC25 ROSENBERG, Gejza - SINAIOVÁ, Iveta. Vplyv mikroštruktúrnych heterogenít na vývoj lokálnych deformácií a rozmer plastickej zóny pred čelom rastúcich trhlín. In *Přínos metalografie pro řešení výrobních problémů : 13. česko-slovenská konference. Sborník přednášek. Lázně Libverda, 17.-19.6.2014*. Eds. J. Kasl, P. Zuna. - Praha : Fakulta strojní ČVUT, 2014, s. 177-183. ISBN 978-80-01-05474-1.
- AEC26 ROSENBERG, Gejza - SINAIOVÁ, Iveta - GAŠKO, Martin - JUHÁR, Ľuboš. Vplyv podmienok interkritického žihania na možnosť predikcie ľahových vlastností ocelí z nameraných hodnôt tvrdosti = The influence of conditions of intercritical annealing on ability to predict tensile properties of steels from measured values of hardness. In *24. dny tepelného zpracování s mezinárodní účasti : 24. DTZ 2012. Jihlava, 27.-29.11.2012* [elektronický zdroj]. - Čerčany : Ecosond, s.r.o., 2012. ISBN 978-80-904462-5-0. CD. CD ROM.
- AEC27 SHVAB, Ruslan - DUDROVÁ, Eva - HVIZDOŠ, Pavol - BERGMAN, Ola - BENGTSSON, Sven. Comparison of high temperature properties of sintered and cast austenitic stainless steels with the same chemical composition. In *Euro PM 2013 : International powder metallurgy congress and exhibition. Gothenburg, 15.-18.9.2013* [elektronický zdroj]. - Shrewsbury : EPMA, 2013. ISBN 978-1-899072-40-8. CD. CD ROM.
- AEC28 SHVAB, Ruslan - SHYKULA, Petro - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. Prediction of microstructure of high Cr-alloyed sintered steel by thermo-calc and JMatPro calculations. In *Euro PM 2013 : International powder metallurgy congress and exhibition. Gothenburg, 15.-18.9.2013* [elektronický zdroj]. - Shrewsbury : EPMA, 2013. ISBN 978-1-899072-40-8. CD. CD ROM.
- AEC29 SHVAB, Ruslan - HVIZDOŠ, Pavol - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. Wear characteristics of high chromium alloyed steel. In *Euro PM 2012 : International Powder Metallurgy Congress and Exhibition. CD Proceedings. Basel, Switzerland, 16.-19.9.2012* [elektronický zdroj]. - European Powder Metallurgy Association, 2012. ISBN 978-1-899072-36-1. CD. CD ROM.
- AEC30 STREČKOVÁ, Magdaléna - KABÁTOVÁ, Margita - DUDROVÁ, Eva - MEDVECKÝ, Ľubomír - BUREŠ, Radovan. Design of Fe/SiO₂ composites with the compact SiO₂ coating prepared by sol-gel method. In *Euro PM 2012 : International Powder Metallurgy Congress and Exhibition. CD Proceedings. Basel, Switzerland, 16.-19.9.2012* [elektronický zdroj]. - European Powder Metallurgy Association, 2012. ISBN 978-1-899072-36-1. CD. CD ROM.
- AEC31 STREČKOVÁ, Magdaléna - BUREŠ, Radovan - FÁBEROVÁ, Mária - MEDVECKÝ, Ľubomír. Preparation and characterization of core-shell composite

based on Fe powder and phenol-formaldehyde resin modified with nanometer-sized SiO₂. In *Euro PM 2012 : International Powder Metallurgy Congress and Exhibition. CD Proceedings. Basel, Switzerland, 16.-19.9.2012* [elektronický zdroj]. - European Powder Metallurgy Association, 2012. ISBN 978-1-899072-36-1. CD. CD ROM.

AEC32 VÝROSTKOVÁ, Anna - PECHA, Jozef - FALAT, Ladislav - ČIRIPOVÁ, Lucia - SVOBODA, Milan - HOMOLOVÁ, Viera. Investigation of the T24 weld cracking in water walls. In *IOC 2013 : 45th International october conference on mining and metallurgy. Bor Lake, Serbia, 16.-19.10.2013*. Ed. N. Šrbac et al. - Belgrade : University of Belgrade, 2013, p. 463-466. ISBN 978-86-6305-012-9.

AED Scientific papers in domestic peer-reviewed proceedings, monographs

AED01 BALKO, Ján - HVIZDOŠ, Pavol - DUSZOVÁ, Annamária. Wear properties of alumina - silicon carbide composites. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013*. Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 108-109. ISBN 978-80-553-1424-2.

AED02 BALKO, Ján - HVIZDOŠ, Pavol. Základné tribologické vlastnosti 3Y-TZP merané metódou ball-on-disc. In *SEMDOK 2012 : 17th international of PhD. student's seminar. Žilina-Terchová, 25.-27.1.2012*. - Žilina : University of Žilina, 2012, p. 100-103. ISBN 978-80-554-0477-6.

AED03 BIRČÁKOVÁ, Zuzana - KOLLÁR, P. - FÜZER, J. - FÁBEROVÁ, Mária - BUREŠ, Radovan. Magnetic properties of iron-based composite materials: power losses as a function of maximum induction. In *PHYSICS OF MATERIALS 2012- Proceedings of the scientific conference, October 17-19, 2012, Košice*. Eds. J. Tóthová, V. Lisý. - Košice : Technical University of Košice, 2012, p. 83-88. ISBN 978-80-553-1175-3.

AED04 BLĀNDA, Marek - HVIZDOŠ, Pavol - DUSZA, Ján. Measurement of mechanical properties by instrumented indentation. In *International Doctoral Seminar : Proceedings. Smolenice, 20.-22.5.2012*. Ed. M. Daubnerová. - Trnava : AlumniPress, 2012, p. 31-37. ISBN 978-80-8096-164-0. CD. CD ROM.

AED05 BLĀNDA, Marek - HVIZDOŠ, Pavol - DUSZA, Ján. Nanoindentation study of aluminium oxide. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013*. Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 26-27. ISBN 978-80-553-1424-2.

AED06 BLĀNDA, Marek - HVIZDOŠ, Pavol - DUSZA, Ján. Skúšanie vlastností krehkých materiálov metódami inštrumentálnej indentácie. In *SEMDOK 2012 : 17th international of PhD. student's seminar. Žilina-Terchová, 25.-27.1.2012*. - Žilina : University of Žilina, 2012, p. 108-111. ISBN 978-80-554-0477-6.

AED07 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - ĎURIŠIN, Juraj. Effect of chelating agent on the phase transformation of La_{1/3}NbO₃ sol-gel precursors. In *Preparation of ceramic materials : 10th international conference. Herľany,*

18.-20.6.2013. Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 48-49. ISBN 978-80-553-1424-2.

- AED08 CSANÁDI, Tamás - BŁANDA, Marek - DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - DUSZA, Ján. Nanohardness determination of WC single crystals in WC-Co hardmetal. In *SEMDOK 2014 : 19th international seminar of Ph.D. students. Terchová, 29.-31.1.2014.* - Žilina : University of Žilina, 2014, p. 18-21 ISBN 978-80-554-0832-3.
- AED09 DOMANICKÁ, Magdaléna - PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Porous silicon nitride based ceramics for bioapplication. In *Študentská vedecká konferencia PriF UK 2014 : zborník recenzovaných príspevkov.* Editori Michal Galamboš, Vladimíra Džugasová, Andrea Ševčovičová. - Bratislava : Univerzita Komenského v Bratislavě vo Vydavateľstve UK, 2014, s. 927-930. ISBN 978-80-223-3592-8.
- AED10 DOMANICKÁ, Magdaléna - BODIŠOVÁ, Katarína - LENČÉŠ, Zoltán - PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Preparation and characterization of porous silicon nitride for bioapplication. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013.* Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 60-61. ISBN 978-80-553-1424-2.
- AED11 ĎURIŠIN, Juraj Jr. - BEDNARČÍK, J. - SAKSL, Karel - PIETRIKOVÁ, A. Atomic structure of molten solders. In *PHYSICS OF MATERIALS 2012- Proceedings of the scientific conference, October 17-19, 2012, Košice.* Eds. J. Tóthová, V. Lisý. - Košice : Technical University of Košice, 2012, p. 185-187. ISBN 978-80-553-1175-3.
- AED12 ĎURIŠIN, Martin. Štúdium kovových skiel na báze Zr65Al7.5Ni10Cu7.5. In *SEMDOK 2012 : 17th international of PhD. student's seminar. Žilina-Terchová, 25.-27.1.2012.* - Žilina : University of Žilina, 2012, p. 124-127. ISBN 978-80-554-0477-6.
- AED13 FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. - FÁBEROVÁ, Mária - BUREŠ, Radovan. Soft magnetic compacted materials. In *PHYSICS OF MATERIALS 2012- Proceedings of the scientific conference, October 17-19, 2012, Košice.* Eds. J. Tóthová, V. Lisý. - Košice : Technical University of Košice, 2012, p. 39-40. ISBN 978-80-553-1175-3.
- AED14 HAGAROVÁ, Mária - JAKUBÉCZYOVÁ, Dagmar - FEČKOVÁ, Zuzana - DÚL, Gabriel. Tribological properties of Ni-Co electroplated coatings. In *Materiál v inžinierskej praxi 2014 : Zborník 9. medzinárodnej vedecko-technickej konferencie. Herľany, 12.-13.6.2014.* Ed. M. Buršák a kol. - Košice : Huteňská fakulta TU, 2014, p. 29. ISBN 978-80-553-1719-9.
- AED15 HALAMA, M. - JEROLITSCH, D. - KOVAL, Karol. Korózny monitoring HDG plechov = Corrosion monitoring of HDG steel sheets. In *54. medzinárodná galvanická konferencia : Zborník prednášok. Kočovce, 12.-13.6.2012.* Eds. V.

Danielik, M. Chovancová. - Bratislava : STU, 2012, s. 32-38. ISBN 978-80-227-3719-7.

- AED16 HALGAŠ, Radoslav - DUSZA, Ján - MARKOVSKÁ, Neda. Nanoindentation and human teeth. In *International Doctoral Seminar : Proceedings. Smolenice, 20.-22.5.2012*. Ed. M. Daubnerová. - Trnava : AlumniPress, 2012, p. 107-112. ISBN 978-80-8096-164-0. CD. CD ROM.
- AED17 HVIŠČOVÁ, Petra - LOFAJ, František - NOVÁK, Michal. Influence of pressure and bias on nanohardness of CrN coating. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20. 6. 2013*. Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 24-25. ISBN 978-80-553-1424-2.
- AED18 HVIŠČOVÁ, Petra - LOFAJ, František - NOVÁK, Michal - LATTOVÁ, Anna. Vplyv tlaku a dodatočných plynov na tvrdosť W-C povlakov pripravovaných DC magnetrónovým naprašovaním. In *SEMDOK 2013 : 18th international of PhD. students' seminar. Terchová, 30.1.-1.2.2013*. - Žilina : University of Žilina, 2013, p. 162-166. ISBN 978-80-554-0629-9.
- AED19 CHOBAL, O. - RIZAK, I. - CHOBAL, I. - KOVÁČ, František - GAVENDOVÁ, Petra - PETRYSHYNETS, Ivan - HOLOVEY, V. - RIZAK, V. Elastic and plastic properties of Li₂B₄O₇ determined by nanoindentation. In *Materiály a technológie pre energetiku : Zborník z vedeckej konferencie. Košice, 25.3.2013*. Eds. Ivan Škorvánek, Pavel Diko, Jozef Marcin. - Košice : ÚEF SAV, 2013, s. 90-93. ISBN 978-80-89656-00-4.
- AED20 JAKUBÉCZYOVÁ, Dagmar. Nano-multicomponent coatings deposited by modern PVD technologies. In *Nanotechnológie a tribológia : Odborný seminár. Košice, 11.12.2013* [elektronický zdroj]. Eds. Eva Zdravecká, Jana Tkáčová. - Košice : Strojnícka fakulta TU, 2014, p. 29-35. ISBN 978-80-553-1635-2. CD. CD ROM.
- AED21 KAŠIAROVÁ, Monika - MICHÁLKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - KVETKOVÁ, Lenka - ŠAJGALÍK, Pavol - DUSZA, Ján. Si₃N₄/graphene composites II: mechanical properties. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013*. Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 33. ISBN 978-80-553-1424-2.
- AED22 KAŠIAROVÁ, Monika - TATARKO, Peter - CEMPURA, Gregorz - CZYRSKA-FILEMONOWICZ, Aleksandra - DUSZA, Ján - ŠAJGALÍK, Pavol. TEM investigation of the influence of sintering additives on the location of SiC nanoparticles in the Si₃N₄-SiC composites. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013*. Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 106-107. ISBN 978-80-553-1424-2.
- AED23 KOVÁČ, František - PETRYSHYNETS, Ivan - MOLNÁROVÁ, Mária - PETROV, Branislav. Dizajn mikroštruktúry vysokopevných elektrotechnických

ocelí. In *Materiály a technológie pre energetiku : Zborník z vedeckej konferencie. Košice, 25.3.2013.* Eds. Ivan Škorvánek, Pavel Diko, Jozef Marcin. - Košice : ÚEF SAV, 2013, s. 86-89. ISBN 978-80-89656-00-4.

- AED24 KOVÁČ, František - PETRYSHYNETS, Ivan - PETROV, Branislav. Influence of second phase particles on grain boundary motion in electrical steels. In *PHYSICS OF MATERIALS 2012- Proceedings of the scientific conference, October 17-19, 2012, Košice.* Eds. J. Tóthová, V. Lisý. - Košice : Technical University of Košice, 2012, p. 230-232. ISBN 978-80-553-1175-3.
- AED25 KOVÁČ, František - PETRYSHYNETS, Ivan - PETROV, Branislav - GAVENDOVÁ, Petra - SOPKO, Martin. The use of deformation-induced grain boundary motion to improve the efficiency of electrical motors. In *Materiály a technológie pre energetiku : Zborník z vedeckej konferencie. Košice, 25.3.2013.* Eds. Ivan Škorvánek, Pavel Diko, Jozef Marcin. - Košice : ÚEF SAV, 2013, s. 80-85. ISBN 978-80-89656-00-4.
- AED26 KOVÁČ, František - PETRYSHYNETS, Ivan - ŠKORVÁNEK, Ivan - MARCIN, Jozef - SOPKO, Martin. Unconventional method of grain - oriented preparation in combination with nano particles VC and strain induced grain boundary motion. In *Materiály a technológie pre energetiku : Zborník z vedeckej konferencie. Košice, 25.3.2013.* Eds. Ivan Škorvánek, Pavel Diko, Jozef Marcin. - Košice : ÚEF SAV, 2013, s. 55-61. ISBN 978-80-89656-00-4.
- AED27 KOVAL, Vladimír - ŠKORVÁNEK, Ivan - ĎURIŠIN, Juraj - CSACH, Kornel. Synthesis and multiferroic properties of rare-earth substituted BiFeO₃ ceramics. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013.* Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 112-113. ISBN 978-80-553-1424-2.
- AED28 KOVALČÍKOVÁ, Alexandra - KUREK, Pavel - DUSZA, Ján - ŠAJGALÍK, Pavol - MIHALIKOVÁ, Mária, Ing., PhD. Effect of the counterpart material on wear characteristics of silicon carbide ceramics. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013.* Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 36-37. ISBN 978-80-553-1424-2.
- AED29 LOFAJ, František. Optimization of mechanical properties of WC-C based coatings deposited by DC and high power impulse magnetron sputtering. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013.* Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 28-29. ISBN 978-80-553-1424-2.
- AED30 MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária - ŠTULAJTEROVÁ, Radoslava. In-vitro characterization of surface treated hydroxyapatite ceramic substrates. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013.* Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 120-121. ISBN 978-80-553-1424-2.

- AED31 MICHÁLKOVÁ, Monika - KAŠIAROVÁ, Monika - ŠAJGALÍK, Pavol. Si₃N₄/graphene composites I: different methods of preparation. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013.* Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 32. ISBN 978-80-553-1424-2.
- AED32 NÉMETH, Dušan - LOFAJ, František - KUČERA, Ján. Distribúcia napäti v sánkovej kosti a dentálnom implantáte pomocou metódy konečných prvkov. In *SEMDOK 2014 : 19th International seminar of Ph.D. students. Terchová, 29.-31.1.2014.* - Žilina : University of Žilina, 2014, s. 170-175 ISBN 978-80-554-0832-3.
- AED33 NOVÁK, Michal - LOFAJ, František - HVIŠČOVÁ, Petra. Inštrumentovaná indentácia tvrdých tenkých povlakov na báze W-C. In *SEMDOK 2013 : 18th international of PhD. students' seminar. Terchová, 30.1.-1.2.2013.* - Žilina : University of Žilina, 2013, p. 140-145. ISBN 978-80-554-0629-9.
- AED34 NOVÁK, Michal - LOFAJ, František - HVIŠČOVÁ, Petra. The influence of amplitude and loading rate during dynamic mechanical analysis on nanohardness of thin W-C coatings. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013.* Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 30-31. ISBN 978-80-553-1424-2.
- AED35 PARCHOVIANSKÝ, Milan - GALUSEK, Dušan - SEDLÁČEK, Jaroslav - ŠVANČÁREK, Peter - KAŠIAROVÁ, Monika - DUSZA, Ján - ŠAJGALÍK, Pavol. Microstructure, mechanical and functional properties and creep behavior of hot pressed Al₂O₃/SiC micro/nano composites. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013.* Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 38-39. ISBN 978-80-553-1424-2.
- AED36 PETRYSHYNETS, Ivan - KOVÁČ, František - PETROV, Branislav. Development of grain growth mechanism in grain oriented steels. In *PHYSICS OF MATERIALS 2012- Proceedings of the scientific conference, October 17-19, 2012, Košice.* Eds. J. Tóthová, V. Lisý. - Košice : Technical University of Košice, 2012, p. 225-229. ISBN 978-80-553-1175-3.
- AED37 PETRYSHYNETS, Ivan - KOVÁČ, František - SOPKO, Martin. The microstructure and texture design of Fe-Si steels and their influence on the final magnetic properties. In *Senzorika a magnetometria 2013 : Zborník prezentácií a príspevkov z vedeckej konferencie s medzinárodnou účasťou. Košice, 5.12.2013.* Ed. J. Blažek. - Košice : Letecká fakulta TU, 2013, p. 61-65. ISBN 978-80-553-1540-9. CD. CD ROM.
- AED38 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - BODIŠOVÁ, Katarína - DOMANICKÁ, Magdaléna - ŠAJGALÍK, Pavol. Study of the preparation methods and their influence on the mechanical properties of porous Si₃N₄ biomaterials. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013.* Eds. Beatrice Plešingerová et al. - Košice : Technical University of Košice, 2013, p. 114-115. ISBN 978-80-553-1424-2.

- AED39 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DUSZA, Ján -
BODIŠOVÁ, Katarína - ŠAJGALÍK, Pavol. Štúdium mechanických vlastností
Si3N4 biomateriálov porovnávané s ľudskou trabekulárnou kostou. In *SEMDOK 2013 : 18th international of PhD. students' seminar. Terchová, 30.1.-1.2.2013.* -
Žilina : University of Žilina, 2013, p. 156-161. ISBN 978-80-554-0629-9.
- AED40 REPOVSKÝ, Peter - HOMOLOVÁ, Viera. Modelovanie fázového diagramu
systému V-Mn-B. In *SEMDOK 2014 : 19th International seminar of Ph.D. students. Terchová, 29.-31.1.2014.* - Žilina : University of Žilina, 2014, s. 186-189 ISBN
978-80-554-0832-3.
- AED41 ROSENBERG, Gejza - SINAIOVÁ, Iveta - JUHÁR, Ľuboš. Deformation zone
size around drilled hole in DP steels. In *Degradácia konštrukčných materiálov 2013 : 13. vedecká konferencia so zahraničnou účasťou. Zuberec-Roháče, 4.-6.9.2013.* -
Žilina : Strojnícka fakulta ŽU, 2013, s. 96-101. ISBN 978-80-554-0741-8.
- AED42 ROSENBERG, Gejza - SINAIOVÁ, Iveta - KOČÍK, Marek - JUHÁR, Ľuboš -
KUNDRACIK, Vladimír. Lokálne únavové vlastnosti ocelí určených pre výrobu
autokolies. In *Degradácia konštrukčných materiálov 2013 : 13. vedecká konferencia so zahraničnou účasťou. Zuberec-Roháče, 4.-6.9.2013.* - Žilina : Strojnícka fakulta
ŽU, 2013, s. 244-249. ISBN 978-80-554-0741-8.
- AED43 SHVAB, Ruslan - HRYHA, Eduard - DUDROVÁ, Eva - BERGMAN, Ola -
BENGTSSON, Sven. X-ray photoelectron spectroscopy surface analysis of high
chromium alloyed steel powder. In *SEMDOK 2013 : 18th International of PhD. students' seminar. Terchová, 30.1.-1.2.2013.* - Žilina : University of Žilina, 2013, p.
66-69. ISBN 978-80-554-0629-9.
- AED44 SOPČÁK, Tibor - MEDVECKÝ, Ľubomír. Characterization and synthesis of
nanocrystalline CaSiO₃ by precipitation from calcium lactate and sodium
metasilicate precursors. In *Preparation of ceramic materials : 10th international conference. Herľany, 18.-20.6.2013.* Eds. Beatrice Plešingerová et al. - Košice :
Technical University of Košice, 2013, p. 110-111. ISBN 978-80-553-1424-2.
- AED45 ZELEŇÁK, Adam - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika.
Mikrotvrdosť spekaných biologicky odbúrateľných materiálov pripravených PM
technológiami. In *SEMDOK 2014 : 19th International seminar of Ph.D. students. Terchová, 29.-31.1.2014.* - Žilina : University of Žilina, 2014, s. 194-197 ISBN
978-80-554-0832-3.

**AEMA Abstracts of scientific papers published in foreign impacted journals registered
in Web of Science Core Collection or Scopus**

- AEMA01 ORIŇÁK, Andrej - ORIŇÁKOVÁ, Renáta - KUPKOVÁ, Miriam -
HRUBOVČÁKOVÁ, Monika - GIRETOVÁ, Mária - MEDVECKÝ, Ľubomír. In
vitro cytotoxicity studies of powder metallurgy biodegradable materials from
phosphated carbonyl iron powder. In *European cells and materials*, 2015, vol. 30,
suppl. 3, p. 36. (4.886 - IF2014). ISSN 1473-2262.

AEMA02 ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika. Corrosion behaviour of sintered biodegradable iron materials with hydroxyapatite film. In *European cells and materials*, 2015, vol. 30, suppl. 3, p. 35. (4.886 - IF2014). ISSN 1473-2262.

AFA Published invited papers from foreign scientific conferences

AFA01 DUSZA, Ján. Failure and damage mechanisms in ceramic nanocomposites. In *Ceramic Transactions*, 2012, vol. 230, p. 133-148.

AFA02 LUPTÁKOVÁ, Natália - BALLÓKOVÁ, Beáta - DYMÁČEK, Petr. Compressive creep testing of MoSi₂-SiC nanocomposites. In *Materiály a technologie ve výrobě speciální techniky : Sborník 13. odborného semináře. Brno, 20.5.2015 [elektronický zdroj]*. - B.V., 2015, p. 89-92. ISBN 978-80-7231-999-2. CD. CD.

AFA03 SAKSL, Karel - OSTROUSHKO, Dmytro - MAZANCOVÁ, Eva - SZULC, Zygmut - MILKOVIČ, Ondrej - ĎURIŠIN, Martin - BALGA, Dušan - ĎURIŠIN, Juraj. Structure of bimetals investigated by synchrotron radiation. In *Metal 2015 : 24th international conference on metallurgy and materials. Proceedings of abstracts. Brno, 3.-5.6.2015.* - Ostrava : Tanger Ltd., 2015. ISBN 978-80-87294-58-1.

AFB Published invited papers from domestic scientific conferences

AFB01 DUDROVÁ, Eva - KABÁTOVÁ, Margita. Fractography of sintered steels. In *Proceedings of the workshop Fractography of sintered materials : Principles and application. Košice, 23.-25.3.2015.* Ed. M. Hrubovčáková, E. Dudrová, M. Kabátová. - Košice : IMR SAS, 2015, p. 227-276. ISBN 978-80-89782-00-0.

AFB02 DUSZA, Ján. Fractography of advanced ceramics. In *Proceedings of the workshop Fractography of sintered materials : Principles and application. Košice, 23.-25.3.2015.* Ed. M. Hrubovčáková, E. Dudrová, M. Kabátová. - Košice : IMR SAS, 2015, p. 159-186. ISBN 978-80-89782-00-0.

AFB03 FALAT, Ladislav. Fractography of steels loaded at elevated temperature. In *Proceedings of the workshop Fractography of sintered materials : Principles and application. Košice, 23.-25.3.2015.* Ed. M. Hrubovčáková, E. Dudrová, M. Kabátová. - Košice : IMR SAS, 2015, p. 215-226. ISBN 978-80-89782-00-0.

AFB04 WRONSKI, Andrew S. - KABÁTOVÁ, Margita - DUDROVÁ, Eva. Fracture micromechanics of some sintered steels. In *Proceedings of the workshop Fractography of sintered materials : Principles and application. Košice, 23.-25.3.2015.* Ed. M. Hrubovčáková, E. Dudrová, M. Kabátová. - Košice : IMR SAS, 2015, p. 53-70. ISBN 978-80-89782-00-0.

AFC Published papers from foreign scientific conferences

AFC01 ANESTIEV, Lubomir Andreev - GEORGIEV, Jordan Stefanov - SELECKÁ, Marcela. A comparative study of the processes at sintering of coated Fe-powders. In *7th International powder metallurgy conference. Ankara, 24.-28.6.2014.* - B.V., 2014.

- AFC02 BALGA, Dušan - SAKSL, Karel - ĎURIŠIN, Martin - SZABÓ, Juraj - OSTROUSHKO, Dmytro - MILKOVIČ, Ondrej - ZUBKO, Pavol. Thermal stability of Cu₆₀Zr₃₀Ti₁₀ at.% bulk metallic glass. In *Metal 2015 : 24th international conference on metallurgy and materials. Proceedings of abstracts. Brno, 3.-5.6.2015.* - Ostrava : Tanger Ltd., 2015. ISBN 978-80-87294-58-1.
- AFC03 BALKO, Ján - DŽUPON, Miroslav - HVIZDOŠ, Pavol. Replikačné techniky tvarovo zložitých povrchov s PVD povlakmi = Replication techniques of difficult shape surfaces with PVD coatings. In *Vrstvy a povlaky 2014 : Zborník prednášok. Rožnov pod Radhoštěm, 20.-21.10.2014.* - Trenčín : Kníhviazačstvo, s.r.o., 2014, s. 13-16. ISBN 978-80-970824-3-7.
- AFC04 BUREŠ, Radovan - PODOBA, Rudolf - STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária - KUREK, Pavel. FIB analysis of interphases in FeSi/ferrite soft magnetic composite. In *Euro PM 2015 : International powder metallurgy congress and exhibition. Reims, France, 4.-7.10.2015* [elektronický zdroj]. - EPMA, 2015. ISBN 978-1-899072-47-7. Názov z USB. USB.
- AFC05 BUREŠ, Radovan - FÁBEROVÁ, Mária - KUREK, Pavel - STREČKOVÁ, Magdaléna - DOBÁK, Samuel - ONDERKO, František. Microwave sintering of Fe-MgO composite. In *Euro PM 2015 : International powder metallurgy congress and exhibition. Reims, France, 4.-7.10.2015* [elektronický zdroj]. - EPMA, 2015. ISBN 978-1-899072-47-7. Názov z USB. USB.
- AFC06 BUREŠ, Radovan - STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária - KUREK, Pavel. Preparation of Fe₃Si/ferrite micro- and nano-powder composite. In *International Science Index : International Journal of Chemical, Nuclear, Materials and Metallurgical Engineering*, 2015, vol. 9, no. 3, p. 386-390. ISSN 1307-6892.
- AFC07 ĎURIŠIN, Juraj - ĎURIŠINOVÁ, Katarína - OROLÍNOVÁ, Mária. Thermal stability of nanostructure of dispersion strengthened copper alloys. In *Metal 2015 : 24th international conference on metallurgy and materials. Proceedings of abstracts. Brno, 3.-5.6.2015.* - Ostrava : Tanger Ltd., 2015. ISBN 978-80-87294-58-1.
- AFC08 DZEDZINA, Rastislav - HAGAROVÁ, Mária - JAKUBÉCZYOVÁ, Dagmar. Experimentálne metódy stanovenia vlastností galvanických povlakov = Experimental methods of assesment of galvanic coatings properties. In *Vrstvy a povlaky 2012 : Zborník prednášok. Rožnov pod Radhoštěm, 8.-9.9.2012.* - Trenčín : Miloš Vavrík, 2012, s. 13-16. ISBN 978-80-970824-1-3.
- AFC09 DŽUPON, Miroslav. Galvannealing žiarovo pozinkovanej trip ocele = Galvannealing of trip steel. In *Vrstvy a povlaky 2012 : Zborník prednášok. Rožnov pod Radhoštěm, 8.-9.9.2012.* - Trenčín : Miloš Vavrík, 2012, s. 17-22. ISBN 978-80-970824-1-3.
- AFC10 DŽUPON, Miroslav - BALKO, Ján. Hodnotenie zmien mikrogeometrie ZrN povlaku pomocou konfokálnej mikroskópie = Evaluation of changes microgeometry ZrN coating with confocal microscopy. In *Vrstvy a povlaky 2015 : Zborník*

prednášok. Rožnov pod Radhoštěm, 19.-20.10.2015. - Trenčianska Teplá : M-Press, s.r.o., 2015, s. 83-86. ISBN 978-80-972133-0-5.

- AFC11 DŽUPON, Miroslav - HUDÁK, Juraj - TOMÁŠ, Miroslav. Opotrebenie povlakových priet'ažníkov = Wear of PVD coated punches. In *Vrstvy a povlaky 2015 : Zborník prednášok. Rožnov pod Radhoštěm, 19.-20.10.2015.* - Trenčianska Teplá : M-Press, s.r.o., 2015, s. 79-82. ISBN 978-80-972133-0-5.
- AFC12 DŽUPON, Miroslav - SPIŠÁK, Emil - JAKUBÉCZYOVÁ, Dagmar. Porušenie povlakov tenkých pocínovaných oceľových plechov = Failure of coatings of thin plates. In *Vrstvy a povlaky 2013 : Zborník prednášok. Rožnov pod Radhoštěm, 30.9.-1.10.2013.* - Plzeň : Západočeská univerzita, 2013, p. 23-26. ISBN 978-80-970824-2-0.
- AFC13 DŽUPON, Miroslav. Porušenie žíhaných pozinkovaných povlakov trip ocele = Failure of galvannealed coatings on trip steel. In *Vrstvy a povlaky 2012 : Zborník prednášok. Rožnov pod Radhoštěm, 8.-9.9.2012.* - Trenčín : Miloš Vavrík, 2012, s. 23-27. ISBN 978-80-970824-1-3.
- AFC14 DŽUPON, Miroslav - BALKO, Ján. Replikačné techniky a topografia povrchu PVD povlakov = Replication techniques and topography of PVD coating surfaces. In *Vrstvy a povlaky 2014 : Zborník prednášok. Rožnov pod Radhoštěm, 20.-21.10.2014.* - Trenčín : Kníhviazačstvo, s.r.o., 2014, s. 45-48. ISBN 978-80-970824-3-7.
- AFC15 FALAT, Ladislav - ČIRIPOVÁ, Lucia - ŠEVC, Peter - KEPIČ, Ján. Prejavy krehnutia zvarového spoja martenitickej žiarupevnej ocele. In *Kotle a energetická zařízení 2015 : Sborník příspěvků konference. Brno, 16.-18.3.2015* [elektronický zdroj]. - B.V., 2015. ISSN 1804-6673. Názov z CD. CD ROM.
- AFC16 FALAT, Ladislav - VÝROSTKOVÁ, Anna - SVOBODA, Milan - BURŠÍK, Jiří. Vplyv podmienok tepelného spracovania po zváraní na štruktúru a creepovú životnosť heterogénnych zvarových spojov ocele T92. In *Kotle a energetická zařízení : Sborník příspěvků. Brno, 18.-20.3.2013* [elektronický zdroj]. - B.V., 2013. ISSN 1804-6673. CD. CD ROM.
- AFC17 FERDINANDY, Milan - KOTTFER, Daniel - HVIŠČOVÁ, Petra - BALKO, Ján. Príprava povlakov W-Cr-C rozkladom W(CO)6 a Cr(CO)6 metódou PE CVD = Preparation of W-Cr-C coatings by W(CO)6 and Cr(CO)6 decomposition using PE CVD method. In *Vrstvy a povlaky 2015 : Zborník prednášok. Rožnov pod Radhoštěm, 19.-20.10.2015.* - Trenčianska Teplá : M-Press, s.r.o., 2015, s. 87-89. ISBN 978-80-972133-0-5.
- AFC18 FERDINANDY, Milan - KOTTFER, Daniel - HORŇÁK, Peter - DŽUPON, Miroslav. Príprava vrstvy TiAl3 na titánových zliatinách = Preparation of TiAl3 layer on titanium alloys. In *Vrstvy a povlaky 2012 : Zborník prednášok. Rožnov pod Radhoštěm, 8.-9.9.2012.* - Trenčín : Miloš Vavrík, 2012, s. 29-30. ISBN 978-80-970824-1-3.

- AFC19 GAVENDOVÁ, Petra - PETRYSHYNETS, Ivan - SOPKO, Martin - KOVÁČ, František. Dependence of grains hardness on their orientation in electrical steels. In *Metal 2014 : 23rd international conference on metallurgy and materials. Brno, 21.-23.5.2014* [elektronický zdroj]. - Ostrava : Tanger, 2014, p. 540-545. ISBN 978-80-87294-54-3. Názov z CD. CD ROM.
- AFC20 GEORGIEV, Jordan Stefanov - ANESTIEV, Lubomir Andreev - SELECKÁ, Marcela. Investigation of the carbon alloying methods influence on the sintering process and the mechanical properties of iron based sintered alloys. In *Metal science, novel materials, hydro- and aeodynamics 2012 : 2nd national conference with international participation. Sofia, 31.5.-1.6.2012* [elektronický zdroj]. - B.V., 2012. ISSN 1313-8308. Názov z CD. CD ROM.
- AFC21 HLOCH, S. - KL'OC, Ján - FOLDYNA, Josef - PUDE, Frank - SMOLKO, I. - ZELEŇÁK, Michal - SITEK, Libor - HVIZDOŠ, Pavol - MONKA, Peter - MONKOVÁ, Katarína - KOZAK, Dražan - STOIČ, A. - SEDMAK, A. - MILOSEVIC, M.V. - LEHOCKÁ, D. - MIHALČINOVÁ, E. Preliminary study using pulsating water jet for bone cement demolition. In *Vodní paprsek 2015 - výzkum, vývoj, aplikace : Sborník přednášek konference o technologii vodního paprsku. Velké Losiny, 6.-8.10.2015*. Ed. Dagmar Klichová, Libor Sitek. - Ostrava : Ústav geoniky AV ČR, 2015, p. 37-54. ISBN 978-80-86407-56-2.
- AFC22 HORŇÁK, Peter - FERDINANDY, Milan - LOFAJ, František. Vplyv prídavných plynov na mechanické vlastnosti PECVD WC/C povlakov = Influence of additional gasses on mechanical properties of WC/C coatings deposited by PECVD. In *Vrstvy a povlaky 2013 : Zborník prednášok. Rožnov pod Radhoštěm, 30.9.-1.10.2013*. - Plzeň : Západočeská univerzita, 2013, p. 33-37. ISBN 978-80-970824-2-0.
- AFC23 HRUBOVČÁKOVÁ, Monika - KUPKOVÁ, Miriam - KOVAL', Karol - ORIŇÁKOVÁ, Renáta - FEDORKOVÁ, Andrea. Biologicky odbúrateľné celulárne materiály pripravené z fosfátovaného železného prášku = Biodegradable cellular materials prepared from iron phosphated powder. In *Vrstvy a povlaky 2013 : Zborník prednášok. Rožnov pod Radhoštěm, 30.9.-1.10.2013*. - Plzeň : Západočeská univerzita, 2013, p. 45-48. ISBN 978-80-970824-2-0.
- AFC24 HRUBOVČÁKOVÁ, Monika - KUPKOVÁ, Miriam - ORIŇÁKOVÁ, Renáta - MOROVSKÁ TUROŇOVÁ, Andrea. Biologicky odbúrateľné peny z fosfatovaného železného prášku pre ortopedické aplikácie = Biodegradable foams from iron phosphated powders for orthopedic applications. In *Vrstvy a povlaky 2014 : Zborník prednášok. Rožnov pod Radhoštěm, 20.-21.10.2014*. - Trenčín : Kníhviazačstvo, s.r.o., 2014, s. 69-73. ISBN 978-80-970824-3-7.
- AFC25 HRUBOVČÁKOVÁ, Monika - KUPKOVÁ, Miriam - FEDORKOVÁ, Andrea - ORIŇÁKOVÁ, Renáta. Vplyv obsahu striebra na mikroštruktúru a korózne vlastnosti materiálov pripravených zo striebrom povlakovaného železného prášku = Effect of silver on microstructure and corrosion behavior of materials prepared from silver coated iron powder. In *Vrstvy a povlaky 2012 : Zborník prednášok. Rožnov pod Radhoštěm, 8.-9.9.2012*. - Trenčín : Miloš Vavrík, 2012, s. 43-48. ISBN 978-80-970824-1-3.

- AFC26 HÚLAN, Tomáš - MEDVEĎ, Igor - TRNÍK, A. - PODOBA, Rudolf. Kinetics of high- temperature sintering in an illite-based ceramic body studied by thermodilatometry. In *Thermophysics 2014 : 19th international meeting of Thermophysical society. Podkylava, 8.-10.10.2014.* - Brno : Brno University of Technology, 2014, p. 53-60. ISBN 978-80-214-5034-9.
- AFC27 HVIZDOŠ, Pavol - ZELEŇÁK, Michal - HLOCH, S. Hardness and elasticity of abrasive particles measured by instrumented indentation. In *Vodní paprsek 2015 - výzkum, vývoj, aplikace : Sborník přednášek konference o technologii vodního paprsku. Velké Losiny, 6.-8.10.2015.* Ed. Dagmar Klichová, Libor Sitek. - Ostrava : Ústav geoniky AV ČR, 2015, p. 73-81. ISBN 978-80-86407-56-2.
- AFC28 JAKUBÉCZYOVÁ, Dagmar - KOČÍK, Marek - HVIZDOŠ, Pavol. A study of PVD mono- and multicomponent thin coatings for tools applications. In *METAL 2013 : 22. ročník mezinárodní konference metalurgie a materiálů. Brno, 15.-17.5.2013.* - Brno : TANGER, spol. s r.o., 2013. ISBN 978-80-87294-39-0. Názov z CD. CD ROM.
- AFC29 JAKUBÉCZYOVÁ, Dagmar - KOČÍK, Marek - VNOUČEK, Milan - HAGAROVÁ, Mária. Analýza tenkých viaczložkových povlakov aplikovaných arc a larc PVD technológiou = Analyse of multicomponent thin coatings applied by arc and larc PVD technology. In *Vrstvy a povlaky 2012 : Zborník prednášok. Rožnov pod Radhoštěm, 8.-9.9.2012.* - Trenčín : Miloš Vavrík, 2012, s. 49-54. ISBN 978-80-970824-1-3.
- AFC30 JAKUBÉCZYOVÁ, Dagmar - PODOBA, Rudolf - KEPIČ, Ján. Elektrónová mikroskópia nanokompozitných tenkých povlakov na vzorkách pripravených metódou FIB = Scanning electron microscopy of nanocomposite thin coats using specimens prepared by focused ion beam milling. In *Vrstvy a povlaky 2015 : Zborník prednášok. Rožnov pod Radhoštěm, 19.-20.10.2015.* - Trenčianska Teplá : M-Press, s.r.o., 2015, s. 101-105. ISBN 978-80-972133-0-5.
- AFC31 JAKUBÉCZYOVÁ, Dagmar - SELECKÁ, Marcela - KOČÍK, Marek - KUPKOVÁ, Miriam. Multicomponent thin films applied by PVD arc and larc technology. In *Naučni izvestija*, 2012, vol. 20, no. 1, p. 146-149. ISSN 1310-3946.
- AFC32 JAKUBÉCZYOVÁ, Dagmar - ŠTĚPÁNEK, Ivo - DŽUPON, Miroslav. Štúdium porušovania tenkých viaczložkových PVD vrstiev = Study of the failure of thin multicomponent PVD layers. In *Vrstvy a povlaky 2013 : Zborník prednášok. Rožnov pod Radhoštěm, 30.9.-1.10.2013.* - Plzeň : Západočeská univerzita, 2013, p. 55-60. ISBN 978-80-970824-2-0.
- AFC33 JAKUBÉCZYOVÁ, Dagmar - HANES, Tomáš - KALINCOVÁ, Daniela. Zvyšovanie životnosti razidiel mincí aplikáciou tvrdých PVD povlakov = Increasing of lifetime coining dies by the application of hard PVD coatings. In *Vrstvy a povlaky 2014 : Zborník prednášok. Rožnov pod Radhoštěm, 20.-21.10.2014.* - Trenčín : Kníhviacačstvo, s.r.o., 2014, s. 75-78. ISBN 978-80-970824-3-7.

- AFC34 KEPIČ, Ján - FALAT, Ladislav. Použitie rôznych prídavných materiálov na báze niklu v heterogénnom zvarovom spoji ocele T92+TP316H a ich vplyv na výslednú štruktúru a mechanické vlastnosti. In *Kotle a energetická zařízení 2015 : Sborník příspěvků konference. Brno, 16.-18.3.2015* [elektronický zdroj]. - B.V., 2015. ISSN 1804-6673. Názov z CD. CD ROM.
- AFC35 KEPIČ, Ján - FALAT, Ladislav - VÝROSTKOVÁ, Anna. Vplyv počiatočného tepelného spracovania a následnej izotermálnej expozície heterogénneho zvarového spoja ocele T92 na jeho tvrdosť a krehko-lomové vlastnosti. In *Kotle a energetická zařízení : Sborník příspěvků. Brno, 17.-19.3.2014.* - B.V., 2014. ISSN 1804-6673.
- AFC36 KOTTFER, Daniel - MARTON, Marián - HORŇÁK, Peter - BALKO, Ján - FERDINANDY, Milan - KACZMAREK, Lukasz. Vybrané vlastnosti uhlíkovej vrstvy deponovanej na Al zliatinu metódou DC CVD = Selected properties of the carbon layer deposited on Al alloy by DC CVD technique. In *Vrstvy a povlaky 2013 : Zborník prednášok. Rožnov pod Radhoštěm, 30.9.-1.10.2013.* - Plzeň : Západočeská univerzita, 2013, p. 71-75. ISBN 978-80-970824-2-0.
- AFC37 KOVÁČ, František - PETRYSHYNETS, Ivan - ŠKORVÁNEK, Ivan - FALAT, Ladislav - MARCIN, Jozef. Effect of VC inhibitors in combination with unconventional dynamical heat treatment on the magnetic properties of GO steels. In *EPJ Web of Conferences*, 2013, vol. 40, art. no. 17006. (2013 - SCOPUS). ISSN 2100-014X.
- AFC38 KUPKOVÁ, Miriam - KUPKA, Martin - KABÁTOVÁ, Margita. Efektívny Youngov modul pružnosti celulárneho materiálu určený z ohybovej tuhosti vrstevnatnej vzorky = The effective Young's modulus of cellular material determined from the bending stiffness of a layered sample. In *Vrstvy a povlaky 2012 : Zborník prednášok. Rožnov pod Radhoštěm, 8.-9.9.2012.* - Trenčín : Miloš Vavrik, 2012, s. 65-67. ISBN 978-80-970824-1-3.
- AFC39 KUPKOVÁ, Miriam - KUPKA, Martin - GEORGIEV, Jordan Stefanov - ZELEŇÁK, Adam - ORIŇÁKOVÁ, Renáta - JAKUBÉCZYOVÁ, Dagmar - SELECKÁ, Marcela. Hardness of PM materials prepared from Cu/hydrocarbon coated iron powders. In *Naučni izvestija*, 2012, vol. 20, no. 1, p. 143-145. ISSN 1310-3946.
- AFC40 KUPKOVÁ, Miriam - ORIŇÁKOVÁ, Renáta - KLADEKOVÁ, Daniela - FEDORKOVÁ, Andrea - HRUBOVČÁKOVÁ, Monika. Korózne vlastnosti kompaktov pripravených zo železných častíc povlečených vrstvou PMMA = Corrosion properties of compacts prepared from PMMA-coated iron powder particles. In *Vrstvy a povlaky 2013 : Zborník prednášok. Rožnov pod Radhoštěm, 30.9.-1.10.2013.* - Plzeň : Západočeská univerzita, 2013, p. 85-88. ISBN 978-80-970824-2-0.
- AFC41 KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - ZELEŇÁK, Adam. Štruktúra a vlastnosti v tlaku Fe a Fe-P kovových pien = Structure and compressive properties of Fe and Fe-P metallic foams. In *Vrstvy a povlaky 2014 : Zborník prednášok. Rožnov pod Radhoštěm, 20.-21.10.2014.* - Trenčín : Kníhviacačstvo, s.r.o., 2014, s. 119-122. ISBN 978-80-970824-3-7.

- AFC42 KVETKOVÁ, Lenka - HVIŠČOVÁ, Petra - NOVÁK, Michal - LOFAJ, František - FERDINANDY, Milan - DORČÁKOVÁ, Františka. Vplyv biasu a acetylénu na nanotvrdošť W-C povlakov pripravených metódou HiTUS = Effect of bias and acetylene on nanohardness of high target utilization sputtered (HITUS) W-C coatings. In *Vrstvy a povlaky 2014 : Zborník prednášok. Rožnov pod Radhoštěm, 20.-21.10.2014.* - Trenčín : Kníhviazačstvo, s.r.o., 2014, s. 123-126. ISBN 978-80-970824-3-7.
- AFC43 LOFAJ, František - HVIŠČOVÁ, Petra - KVETKOVÁ, Lenka. Hard W-C based coatings by highly ionized sputtering techniques. In *Vrstvy a povlaky 2014 : Zborník prednášok. Rožnov pod Radhoštěm, 20.-21.10.2014.* - Trenčín : Kníhviazačstvo, s.r.o., 2014, p. 127-132. ISBN 978-80-970824-3-7.
- AFC44 MICHALCOVÁ, Alena - NOVÁK, Pavel - MAREK, Ivo, prof. - MUDROVÁ, Martina - SAKSL, Karel - BEDNARČÍK, J. Description of reaction mechanism during reactive sintering of Al-Fe-Si-Ni alloy. In *METAL 2012 : 21st international conference on metallurgy and materials. Brno, 23.-25.5.2012.* - Brno, 2012. (2012 - WOS). ISBN 978-80-87294-29-1. CD. CD ROM.
- AFC45 MOLNÁROVÁ, Mária - SOPKO, Martin - PETRYSHYNETS, Ivan - KOVÁČ, František - KOČIŠKO, Róbert. DSC Fe-Si neorientovanej elektrotechnickej ocele. In *34. mezinárodní český a slovenský kalorimetrický seminář : Sborník příspěvků. Harrachov, 28.5.-1.6.2012.* - Pardubice : Univerzita Pardubice, 2012, p. 37-40. ISBN 978-80-7395-491-8.
- AFC46 NOVÁK, Pavel - MICHALCOVÁ, Alena - MAREK, Ivo, prof. - MUDROVÁ, Martina - BEDNARČÍK, J. - SAKSL, Karel. Formation of intermetallics during reactive sintering production of Fe-Al alloys. In *METAL 2012 : 21st international conference on metallurgy and materials. Brno, 23.-25.5.2012.* - Brno, 2012. (2012 - WOS). ISBN 978-80-87294-29-1. CD. CD ROM.
- AFC47 ORIŇÁK, Andrej - ORIŇÁKOVÁ, Renáta - KUPKOVÁ, Miriam. A study of the nickel coating deposition onto the iron particles = Štúdium nanášania niklového povlaku na železné častice. In *Vrstvy a povlaky 2012 : Zborník prednášok. Rožnov pod Radhoštěm, 8.-9.9.2012.* - Trenčín : Miloš Vavrík, 2012, p. 75-80. ISBN 978-80-970824-1-3.
- AFC48 ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - MACKO, Ján. Biodegradable materials for orthopedic applications. In *14. pracovní setkání fyzikálních chemiků a elektrochemiků : Sborník příspěvků. Brno, 3.-4.6.2014.* - Brno : Masarykova univerzita, 2014, p. 118-120. ISBN 978-80-210-6842-1.
- AFC49 OSTROUSHKO, Dmytro - SAKSL, Karel - BALGA, Dušan - SZABÓ, Juraj - ĎURIŠIN, Martin - MILKOVIČ, Ondrej - ZUBKO, Pavol. Microstructures and base mechanical properties of Cr_{1-x}Cu_xMnFeNi high entropy alloys. In *Metal 2015 : 24th international conference on metallurgy and materials. Proceedings of abstracts. Brno, 3.-5.6.2015.* - Ostrava : Tanger Ltd., 2015. ISBN 978-80-87294-58-1.

- AFC50 OSTROUSHKO, Dmytro - MAZANCOVÁ, Eva - SAKSL, Karel. Phase analysis explosive welded Ti-Cr/Ni steel in as-received state and after heat treatment using synchrotron (BW-5). In *METAL 2013 : 22. ročník mezinárodní konference metalurgie a materiálů. Brno, 15.-17.5.2013.* - Brno : TANGER, spol. s r.o., 2013. ISBN 978-80-87294-39-0. Názov z CD. CD ROM.
- AFC51 PETRYSHYNETS, Ivan - KOVÁČ, František - SOPKO, Martin. An improved processing technique for preparation of non-oriented electrical steels with enhanced rotation texture. In *HighMatTech 2013 : 4th international conference. Proceedings of the conference. Kiev, 7.-11.10.2013.* - Kiev : National Academy of Science of Ukraine, 2013, p. 120.
- AFC52 PUCHÝ, Viktor - KOVÁČ, František - PETRYSHYNETS, Ivan - SOPKO, Martin. Modifikácia doménových štruktúr v elektrooceli pomocou vláknového laseru. In *Využití laseru v průmyslu. Plzeň. 16.-18.3.2015.* Ed. Stanislav Němeček. - Plzeň : MATEX PM, 2015, s. 56-60.
- AFC53 SOPKO, Martin - KOVÁČ, František - MOLNÁROVÁ, Mária - PETRYSHYNETS, Ivan - KOČIŠKO, Róbert. Štúdium vplyvu obsahu Si na teplotu fázovej premeny v elektrotechnických oceliach pomocou DSC. In *34. mezinárodní český a slovenský kalorimetrický seminář : Sborník příspěvků. Harrachov, 28.5.-1.6.2012.* - Pardubice : Univerzita Pardubice, 2012, p. 53-56. ISBN 978-80-7395-491-8.
- AFC54 STREČKOVÁ, Magdaléna - BUREŠ, Radovan - FÁBEROVÁ, Mária - PUCHÝ, Viktor - DÁKOVÁ, Luboslava. A preparation of soft magnetic composite FeSi/Mn0.8Zn0.2Fe2O4, using different sintering processes. In *Euro PM 2015 : International powder metallurgy congress and exhibition. Reims, France, 4.-7.10.2015* [elektronický zdroj]. - EPMA, 2015. ISBN 978-1-899072-47-7. Názov z USB. USB.
- AFC55 SZABÓ, Juraj - ĎURIŠIN, Juraj - SAKSL, Karel - BALGA, Dušan - OSTROUSHKO, Dmytro. Thermal structure stability of Cu-MgO nanocomposites. In *Metal 2015 : 24th international conference on metallurgy and materials. Proceedings of abstracts. Brno, 3.-5.6.2015.* - Ostrava : Tanger Ltd., 2015. ISBN 978-80-87294-58-1.
- AFC56 ŠEBEK, Martin - KOVÁČ, František - SOPKO, Martin - BALKO, Ján. Modifikácia mikroštruktúry nástrojovej ocele AISI H11 vláknovým laserom. In *Využití laseru v průmyslu. Plzeň. 16.-18.3.2015.* Ed. Stanislav Němeček. - Plzeň : MATEX PM, 2015, s. 118-124.
- AFC57 ŠÍN, P. - TRNÍK, A. - PODOBA, Rudolf - ŠTUBŇA, I. Mechanical properties of alumina porcelain after firing. In *Thermophysics 2014 : 19th international meeting of Thermophysical society. Podkylava, 8.-10.10.2014.* - Brno : Brno University of Technology, 2014, p. 112-119. ISBN 978-80-214-5034-9.
- AFC58 ŠKORVÁNEK, Ivan - MARCIK, Jozef - VARGA, Marek - KOVÁČ, Jozef - KOVÁČ, František - ŠVEC, Peter. Tuning of magnetic anisotropy and domain

structure of soft magnetic Fe-based alloys by thermal processing under magnetic field. In *EPM 2012 : 7th International Conference on Electromagnetic Processing of Materials, 22-26 October 2012, Beijing, China.* - 2012.

AFC59 VÝROSTKOVÁ, Anna - MACKO, Roman - BLACH, Juraj - ČIRIPOVÁ, Lucia. Comparison of the heat affected zones and base metals of 0.5-9 %Cr steels to hydrogen embrittlement sensitivity. In *METAL 2013 : 22. ročník mezinárodní konference metalurgie a materiálů. Brno, 15.-17.5.2013.* - Brno : TANGER, spol. s r.o., 2013. ISBN 978-80-87294-39-0. Názov z CD. CD ROM.

AFC60 ZELEŇÁK, Adam - KUPKOVÁ, Miriam - GEORGIEV, Jordan Stefanov - ORIŇÁKOVÁ, Renáta. Mikrotvrdosť spekaných PM materiálov pripravených z povlakovaných práškov = Microhardness of sintered PM materials prepared from coated powders. In *Vrstvy a povlaky 2012 : Zborník prednášok. Rožnov pod Radhoštěm, 8.-9.9.2012.* - Trenčín : Miloš Vavrík, 2012, s. 141-144. ISBN 978-80-970824-1-3.

AFD Published papers from domestic scientific conferences

AFD01 BALGA, Dušan - SAKSL, Karel - ĎURIŠIN, Juraj - ĎURIŠINOVÁ, Katarína - OROLÍNOVÁ, Mária - ĎURIŠIN, Martin - SZABÓ, Juraj. Laboratórium progresívnych zliatin. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH". Košice, 26.2.2015.* - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.

AFD02 BALGA, Dušan - SAKSL, Karel - ĎURIŠIN, Juraj - ĎURIŠINOVÁ, Katarína - OROLÍNOVÁ, Mária - ĎURIŠIN, Martin - SZABÓ, Juraj. Laboratórium termických analýz materiálov. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH". Košice, 26.2.2015.* - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.

AFD03 BALKO, Ján - KOVALČÍKOVÁ, Alexandra - HVIZDOŠ, Pavol - DUSZA, Ján - BALÁZSI, Csaba. Effect of carbon and hexagonal-BN based nanophases on tribological properties of Si₃N₄ based composites = Vplyv nanofáz na báze uhlíka a hexagonálneho-BN na tribologické vlastnosti kompozitov s Si₃N₄ matricou. In *Priprava a vlastnosti progresívnych keramických materiálov : Odborný seminár. Zborník rozšírených abstraktov. Terchová-Biely Potok, 26.-28.11.2014.* Ed. D. Galusková. - Trenčín : Trenčianska univerzita A. Dubčeka, 2014, s. 4-5. ISBN 978-80-8075-667-3.

AFD04 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - HVIZDOŠ, Pavol - ĎURIŠIN, Juraj - GIRMAN, Vladimír. Pyrochlore lanthanum niobate prepared by sol-gel method in different solvents. In *Preparation of ceramic materials : Proceedings of the 11th international conference. Herľany, 9.-11.6.2015.* Ed. František Lofaj, Miroslav Hnatko a kol. - Košice : Technical University, 2015, p. 44-47. ISBN 978-80-553-2122-6.

AFD05 BUREŠ, Radovan - FÁBEROVÁ, Mária. Výskum a vývoj technológie výroby elektro-kontaktných materiálov. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH". Košice, 26.2.2015.* - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.

- AFD06 DÁKOVÁ, Luboslava - FÜZER, J. - STREČKOVÁ, Magdaléna -
HADRABA, Hynek. Influence of milling time on the magnetic properties of
permalloy type material. In *21st conference of Slovak physicists. Nitra, 7.-10.9.2015.*
Ed. A. Džubinská, M. Reiffers. - Košice : Slovak Physical Society, 2015, p. 51-52.
ISBN 978-80-971450-7-1.
- AFD07 DOMANICKÁ, Magdaléna - HNATKO, Miroslav - LENČÉŠ, Zoltán -
PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - ŠAJGALÍK, Pavol. Preparation
and characterization of Si₃N₄ - HA porous composites = Príprava a charakterizácia
Si₃N₄ - HA pórovitých kompozitov. In *Príprava a vlastnosti progresívnych
keramických materiálov : Odborný seminár. Zborník rozšírených abstraktov.
Terchová-Biely Potok, 26.-28.11.2014.* Ed. D. Galusková. - Trenčín : Trenčianska
univerzita A. Dubčeka, 2014, s. 44-50. ISBN 978-80-8075-667-3.
- AFD08 DŽUPON, Miroslav - SPIŠÁK, Emil - BALKO, Ján. Nedeštruktívna kontrola
morphológie PVD povlakov u tvarovo zložitých nástrojov. In *Workshop Výskumné
centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie
"PROMATECH". Košice, 26.2.2015.* - Košice : UMV SAV, 2015. ISBN
978-80-89782-01-7.
- AFD09 FALAT, Ladislav - ČIRIPOVÁ, Lucia - KEPIČ, Ján - HOMOLOVÁ, Viera -
ŠEVC, Peter. Vplyv tepelného spracovania v kaliacich peciach na mikroštruktúru a
tvrdosť odliatkov experimentálnych martenzitických zliatin pre creepové aplikácie.
In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné
a budúce aplikácie "PROMATECH". Košice, 26.2.2015.* - Košice : ÚMV SAV,
2015. ISBN 978-80-89782-01-7.
- AFD10 FIDES, Martin - BALKO, Ján - HVIZDOŠ, Pavol - KOVALČÍKOVÁ,
Alexandra. Nanotribologické skúšky keramiky na báze ZrO₂. Rec. Juraj Belan,
Otakar Bokůvka. In *SEMDOK 2015 : 20th jubilee international seminar of Ph.D
students. Terchová, 28.-30.1.2015.* - Žilina : Žilinská univerzita, 2015, p. 131-134.
ISBN 978-80-554-0981-8.
- AFD11 GAALOVÁ, Petra - GALUSKOVÁ, Dagmar - ŠVANČÁRKOVÁ, Anna -
BALKO, Ján - GALUSEK, D. Corrosion of natural and synthetic biomaterials in
acidic media and its effect on mechanical properties. In *Preparation of ceramic
materials : Proceedings of the 11th international conference. Herľany, 9.-11.6.2015.*
Ed. František Lofaj, Miroslav Hnatko a kol. - Košice : Technical University, 2015,
p. 64-67. ISBN 978-80-553-2122-6.
- AFD12 GAVENDOVÁ, Petra - PETRYSHYNETS, Ivan - MOLNÁROVÁ, Mária -
SOPKO, Martin - KOVÁČ, František - PUCHÝ, Viktor. Nanohardness
measurement in selected grains of electrotechnical steel at elevated temperature. In
Metalurgia Junior 2012 : Faculty of Metallurgy PhD students day. Košice,
22.-23.5.2012 [elektronický zdroj]. - Košice : Hutnícka fakulta TU, 2012, p. 24-27.
ISBN 978-80-553-0919-4. Názov z CD. CD ROM.
- AFD13 GAVENDOVÁ, Petra - PETRYSHYNETS, Ivan - MOLNÁROVÁ, Mária -
SOPKO, Martin - PUCHÝ, Viktor. On the measurement of the indentation hardness

of trip steel. In *Metalurgia Junior 2012 : Faculty of Metallurgy PhD students day. Košice, 22.-23.5.2012* [elektronický zdroj]. - Košice : Hutnícka fakulta TU, 2012, p. 28-31. ISBN 978-80-553-0919-4. Názov z CD. CD ROM.

- AFD14 HNATKO, Miroslav - KAŠIAROVÁ, Monika - GALUSKOVÁ, Dagmar - LENČÉŠ, Zoltán - ŠAJGALÍK, Pavol. Korózia konštrukčných keramických materiálov v tavenine železa = Corrosion of engineering ceramics materials by molten iron. In *Interakcie tavenín s progresívnymi anorganickými materiálmi, 3. odborný seminár, 3.-4. október 2012* [elektronický zdroj]. - Košice : Technická univerzita v Košiciach, 2012, s. 56-73. ISBN 978-80-553-0931-6.
- AFD15 HVIŠČOVÁ, Petra - LOFAJ, František - KVETKOVÁ, Lenka - NOVÁK, Michal - FERDINANDY, Milan - PODOBA, Rudolf. Štruktúra a vlastnosti W-C povlakov pripravených HiPIMS a HiTUS technológiou = The structure and properties of W-C based coatings prepared by HiPIMS and HiTUS technology. In *Príprava a vlastnosti progresívnych keramických materiálov : Odborný seminár. Zborník rozšírených abstraktov. Terchová-Biely Potok, 26.-28.11.2014.* Ed. D. Galusková. - Trenčín : Trenčianska univerzita A. Dubčeka, 2014, s. 17-19. ISBN 978-80-8075-667-3.
- AFD16 KAŠIAROVÁ, Monika - TATARKO, Peter - CHLUP, Zdeněk - DLOUHÝ, Ivo. Ceramic matrix reinforced by BN nanofillers. In *Preparation of ceramic materials : Proceedings of the 11th international conference. Herľany, 9.-11.6.2015.* Ed. František Lofaj, Miroslav Hnatko a kol. - Košice : Technical University, 2015, p. 33-36. ISBN 978-80-553-2122-6.
- AFD17 KOLLÁR, P. - BIRČÁKOVÁ, Zuzana - FÜZER, J. - BUREŠ, Radovan - FÁBEROVÁ, Mária. Vplyv veľkosti magnetických častíc a podielu izolačnej hmoty na DC magnetické vlastnosti kompozitných materiálov na báze železa. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH". Košice, 26.2.2015.* - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.
- AFD18 KOVÁČ, František - PETRYSHYNETS, Ivan - SOPKO, Martin - ŠEBEK, Martin - PUCHÝ, Viktor - MARUŠ, Jozef. Research and development of grain-oriented electrotechnical steels. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH". Košice, 26.2.2015.* - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.
- AFD19 KOVALČÍKOVÁ, Alexandra - LENČÉŠ, Zoltán - SEDLÁČEK, Jaroslav - ŠAJGALÍK, Pavol - DUSZA, Ján - IGNÁCZ, Martin - MIHALIKOVÁ, Mária, Ing., PhD. Oxidation resistance of SiC ceramics prepared by different processing routes. In *Preparation of ceramic materials : Proceedings of the 11th international conference. Herľany, 9.-11.6.2015.* Ed. František Lofaj, Miroslav Hnatko a kol. - Košice : Technical University, 2015, p. 40-43. ISBN 978-80-553-2122-6.
- AFD20 LOFAJ, František - KVETKOVÁ, Lenka - HVIŠČOVÁ, Petra - NOVÁK, Michal - NÉMETH, Dušan - PODOBA, Rudolf. Hard nanocomposite coatings deposited by highly ionized sputtering. In *Workshop Výskumné centrum*

progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH". Košice, 26.2.2015. - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.

- AFD21 LOFAJ, František - KVETKOVÁ, Lenka - PODOBA, Rudolf. The optimization of the properties of HiTUS W-C based coatings. In *Preparation of ceramic materials : Proceedings of the 11th international conference. Herľany, 9.-11.6.2015*. Ed. František Lofaj, Miroslav Hnatko a kol. - Košice : Technical University, 2015, p. 8-12. ISBN 978-80-553-2122-6.
- AFD22 MARCIN, Jozef - CAPIK, Marek - KOVÁČ, Jozef - ŠVEC, Peter - PETRYSHYNETS, Ivan - KOVÁČ, František - ŠKORVÁNEK, Ivan. Tailoring of functional properties in FeSi steels and FeCo-based soft magnetic alloys by thermal processing under magnetic field. In *Proceedings of the scientific conference Physics of Materials 2012, 17-19 October 2012, Košice, Slovakia*. Editors Jana Tóthová, Vladimír Lisý. - Košice : TU, 2012, p. 149-152. ISBN 978-80-553-1175-3.
- AFD23 MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária - BRIANČIN, Jaroslav. Mikroštruktúra a in vitro charakterizácia biokompozitných systémov typu biopolymér-kalcium fosfát. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH". Košice, 26.2.2015.* - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.
- AFD24 MÚDRA, Erika - SOPČÁK, Tibor. Nanotechnologické laboratórium. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH". Košice, 26.2.2015.* - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.
- AFD25 NOVÁK, Michal - LOFAJ, František - HVIŠCOVÁ, Petra - CSANÁDI, Tamás - PODOBA, Rudolf - NÉMETH, Dušan. Optimization of nanoindentation conditions for measurements of mechanical properties of thin W-C based coatings. In *Príprava a vlastnosti progresívnych keramických materiálov : Odborný seminár. Zborník rozšírených abstraktov. Terchová-Biely Potok, 26.-28.11.2014*. Ed. D. Galusková. - Trenčín : Trenčianska univerzita A. Dubčeka, 2014, s. 36-40. ISBN 978-80-8075-667-3.
- AFD26 PETROVOVÁ, Eva - GIRETOVÁ, Mária - LUPTÁKOVÁ, L. Angiogénna aktivita biomateriálu na chorioalantoickej membráne kuracieho embrya = Angiogenic activity of biomaterial in the chick chorioallantoic membrane. In *18. Košický morfológický deň pri príležitosti nedožitých 90. narodenín prof. MVDr. Petra Popeska, DrSc. : Zborník vedeckých prác UVLF v Košiciach, 8. december 2015*. Vdoviaková K, Krešáková L, Ševčíková Z, Cigánková V. - Košice : Univerzita veterinárskeho lekárstva a farmácie v Košiciach, 2015, s. 99-102. ISBN 978-80-8077-480-6.
- AFD27 PETRYSHYNETS, Ivan - KOVÁČ, František - SOPKO, Martin - ŠEBEK, Martin - PUCHÝ, Viktor - MARUŠ, Jozef. Isotropic electrotechnical steels with low watt losses. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH". Košice, 26.2.2015.* - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.

- AFD28 PODOBA, Rudolf - KOVALČÍKOVÁ, Alexandra - DUSZA, Ján.
Laboratórium SEM/FIB. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH"*. Košice, 26.2.2015. - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.
- AFD29 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Mechanical and microstructural characterization of porous silicon nitride biomaterials. In *Preparation of ceramic materials : Proceedings of the 11th international conference. Herľany, 9.-11.6.2015*. Ed. František Lofaj, Miroslav Hnatko a kol. - Košice : Technical University, 2015, p. 59-63. ISBN 978-80-553-2122-6.
- AFD30 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Mechanické vlastnosti vysoko pórovitých Si₃N₄ materiálov = Mechanical properties of highly porous Si₃N₄ materials. In *Príprava a vlastnosti progresívnych keramických materiálov : Odborný seminár. Zborník rozšírených abstraktov. Terchová-Biely Potok, 26.-28.11.2014*. Ed. D. Galusková. - Trenčín : Trenčianska univerzita A. Dubčeka, 2014, s. 41-43. ISBN 978-80-8075-667-3.
- AFD31 PUCHÝ, Viktor - KOVÁČ, František - PETRYSHYNETS, Ivan - ŠEBEK, Martin - SOPKO, Martin - HVIZDOS, Pavol. Refinement of magnetic domains in GO steels with the fiber laser. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH"*. Košice, 26.2.2015. - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.
- AFD32 PUCHÝ, Viktor - SZABÓ, Juraj - BALKO, Ján - DUSZA, Ján. Spark plasma sintering. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH"*. Košice, 26.2.2015. - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.
- AFD33 REPOVSKÝ, Peter - ČIRIPOVÁ, Lucia - HOMOLOVÁ, Viera. Experimentálne a teoretické štúdium fázového zloženia systému Fe-Mn-B. Rec. Juraj Belan, Otakar Bokúvka. In *SEMDOK 2015 : 20th jubilee international seminar of Ph.D students. Terchová, 28.-30.1.2015*. - Žilina : Žilinská univerzita, 2015, p. 161-164. ISBN 978-80-554-0981-8.
- AFD34 REPOVSKÝ, Peter - ČIRIPOVÁ, Lucia - HOMOLOVÁ, Viera - FALAT, Ladislav - MOLČANOVÁ, Zuzana. Výroba a tepelné spracovanie ternárnych modelových zliatin s bórom. In *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH"*. Košice, 26.2.2015. - Košice : ÚMV SAV, 2015. ISBN 978-80-89782-01-7.
- AFD35 ROSENBERG, Gejza - SINAIOVÁ, Iveta. Effect of ageing and hydrogen embrittlement on mechanical properties of low carbon steels. In *Transfer 2015 : Využívanie nových poznatkov v strojárskej praxi. 16. vedecká konferencia. Trenčín-Záblatie, 5.11.2015*. - Trenčín : Trenčianska univerzita A. Dubčeka, 2015. ISBN 978-80-8075-723-6.

AFD36 ROSENBERG, Gejza - SINAIOVÁ, Iveta - KOČÍK, Marek. Vplyv hrúbky a iných geometrických charakteristik vzoriek na deformačné a lomové vlastnosti ocelí pri rázovom zaťažovaní. In *Transfer 2013 : 14. medzinárodná vedecká konferencia. Trenčianske Teplice, 17.-18.10.2013* [elektronický zdroj]. - Trenčín : Alexander Dubček University, 2013. ISBN 978-80-8075-607-9. Názov z CD. CD ROM.

AFD37 SEDLÁK, Richard - KOVALČÍKOVÁ, Alexandra - BALKO, Ján - DUSZA, Ján. Vplyv prídavku multivrstvového grafénu na tvrdosť a húževnatosť materiálov s Si₃N₄ matricou. Rec. Juraj Belan, Otakar Bokůvka. In *SEMDOK 2015 : 20th jubilee international seminar of Ph.D students. Terchová, 28.-30.1.2015.* - Žilina : Žilinská univerzita, 2015, p. 177-181. ISBN 978-80-554-0981-8.

AFD38 ŠVANČÁRKOVÁ, Anna - GALUSKOVÁ, Dagmar - GAALOVÁ, Petra - BALKO, Ján - FIDES, Martin - GALUSEK, D. Effect of heat treatment on mechanical properties and corrosion resistance of lithium disilicate dental glass ceramics. In *Preparation of ceramic materials : Proceedings of the 11th international conference. Herľany, 9.-11.6.2015.* Ed. František Lofaj, Miroslav Hnatko a kol. - Košice : Technical University, 2015, p. 55-58. ISBN 978-80-553-2122-6.

AFD39 VÝROSTKOVÁ, Anna - FALAT, Ladislav. Prejavy vodíka na lomoch Cr-Mo ocelí pre energetiku. In *Odborná konferencia ŽP VVC 2015 konaná pri príležitosti 175. výročia Železiarní Podbrezová a.s.. Tále, 21.-23.9.2015.* - Podbrezová : ŽP VVC s.r.o., 2015, s. 181-186. ISBN 978-80-972091-4-8.

AFDB Published papers from domestic scientific conferences

AFDB01 GAALOVÁ, Petra - GALUSKOVÁ, Dagmar - ŠVANČÁRKOVÁ, Anna - BALKO, Ján - GALUSEK, Dušan. Vplyv korózie v kyslom prostredí na mikromechanické vlastnosti a odolnosti voči opotrebeniu ľudskej zubnej skloviny = Effect of corrosion in acidic medium on the micromechanical properties and wear resistance of human tooth enamel. In *Príprava a vlastnosti progresívnych keramických materiálov : Odborný seminár. Zborník rozšírených abstraktov. Terchová-Biely Potok, 26.-28.11.2014.* Ed. D. Galusková. - Trenčín : Trenčianska univerzita A. Dubčeka, 2014, s. 6-7. ISBN 978-80-8075-667-3.

AFDB02 ŠVANČÁRKOVÁ, Anna - GALUSKOVÁ, Dagmar - GAALOVÁ, Petra - BALKO, Ján - GALUSEK, Dušan. Vplyv korózie v kyslom prostredí na mikromechanické vlastnosti a odolnosti voči opotrebeniu leucitovej dentálnej keramiky = Corrosion effect in acidic medium on the micromechanical properties and wear resistance of leucite dental ceramics. In *Príprava a vlastnosti progresívnych keramických materiálov : Odborný seminár. Zborník rozšírených abstraktov. Terchová-Biely Potok, 26.-28.11.2014.* Ed. D. Galusková. - Trenčín : Trenčianska univerzita A. Dubčeka, 2014, s. 66-68. ISBN 978-80-8075-667-3.

AFE Abstracts of invited papers from foreign conferences

AFE01 BALLÓKOVÁ, Beáta - BESTERCI, Michal - SÜLLEIOVÁ, Katarína - BALOG, Miroslav - HUANG, Song-Jeng. Effects of ECAP on the mechanical properties of Mg-Al₂O₃ nanocomposites. In *AMME'2015 : 22nd winter international scientific conference on achievements in mechanical and materials*

engineering Winter-AMME'15. Gliwice - Zakopane, 6.-9.12.2015. Ed. L.A. Dobrzanski. - Gliwice, 2015, p. 43. ISBN 978-83-63553-39-5.

- AFE02 BESTERCI, Michal - SÜLLEIOVÁ, Katarína - BALLÓKOVÁ, Beáta - VELGOSOVÁ, Oksana. Models of damage mechanism of glidcop Cu-Al₂O₃ micro and nanomaterials. In *AMME'2015 : 22nd winter international scientific conference on achievements in mechanical and materials engineering Winter-AMME'15. Gliwice - Zakopane, 6.-9.12.2015.* Ed. L.A. Dobrzanski. - Gliwice, 2015, p. 44-45. ISBN 978-83-63553-39-5.
- AFE03 DUSZA, Ján. Ceramic matrix nanocomposites with carbon based fillers. In *Euromat 2015 : European congress and exhibition on advanced materials and processes. Warsaw, 20.-24.9.2015* [elektronický zdroj]. - B.V., 2015. Názov z USB. USB.
- AFE04 DUSZA, Ján. Micro-mechanical testing of WC, Si₃N₄ and ZrB₂ ceramics: nanoindentation and micropillar testing. In *The first Polish-Korean joint workshop on advanced ceramics : Abstracts. Zakopane, 19.9.2015.* Ed. L. Jaworska et al. - Kraków : Polskie Towarzystwo Ceramiczne, 2015. ISBN 978-83-63663-64-3.
- AFE05 GALUSKOVÁ, Dagmar - KAŠIAROVÁ, Monika - HNATKO, Miroslav - GALUŠEK, Dušan - ŠAJGALÍK, Pavol - DUSZA, Ján. Influence of corrosion on the surface characteristics and mechanical properties of structural ceramics. In *PASNPG. Potential and applications of surface nanotreatment of polymers and glass, october 15-17, 2012 : book of extended abstracts.* Eds. Vratislav Kapička, Vít Kudrle, Pavel Souček, Dana Skácelová, Jaroslav Hnilica, Petr Zeman, Pavel Baroch, Petra Prokopčáková, Adam Pazourek. - Brno, Czech Republic : Masarykova universita, 2012, p. 9-10. ISBN 978-80-210-5979-5.
- AFE06 HVIZDOŠ, Pavol - BALKO, Ján - KOVALČÍKOVÁ, Alexandra - FIDES, Martin. Tribological properties of silicon nitride based composites with graphene and boron nitride nanoparticles. In *The first Polish-Korean joint workshop on advanced ceramics : Abstracts. Zakopane, 19.9.2015.* Ed. L. Jaworska et al. - Kraków : Polskie Towarzystwo Ceramiczne, 2015, p. 28. ISBN 978-83-63663-64-3.
- AFE07 ŠAJGALÍK, Pavol - SEDLÁČEK, Jaroslav - LENČÉŠ, Zoltán - DUSZA, Ján - LIN, Hua-Tay. Additive-free hot-pressed silicon carbide ceramics - a material with exceptional mechanical properties. In *ISNT 2014. 8th international symposium on nitrides in conjunction with 7th international workshop on spinel nitrides and related materials and Marie Curie ITN 7th framework program FUNEA, Wildbad Kreuth, Germany, august 31st - september 5th, 2014 : conference program with abstracts.* - Germany : Technische Universität Darmstadt, 2014, p. 39.
- AFE08 ŠAJGALÍK, Pavol - SEDLÁČEK, Jaroslav - LENČÉŠ, Zoltán - DUSZA, Ján - LIN, Hua-Tay. Additive-free hot-pressed silicon carbide ceramics - a material with exceptional mechanical properties. In *ICACC 2015. 39th international conference and exposition on advanced ceramics and composites, Daytona Beach, Florida, USA, january 25-30, 2015 : abstract book.* - USA : The American Ceramic Society, 2015, p. 113.

- AFE09 ŠAJGALÍK, Pavol - SEDLÁČEK, Jaroslav - LENČÉŠ, Zoltán - DUSZA, Ján - LIN, Hua-Tay. Additive-free hot-pressed silicon carbide ceramics - a material with exceptional mechanical properties. In *ACTSEA 2015. 5th international symposium on advanced ceramics and technology for sustainable energy applications, Tainan, Taiwan, 8-11 november 2015.* - Taiwan, 2015, p. 67-68.
- AFE10 ŠAJGALÍK, Pavol - SEDLÁČEK, Jaroslav - LENČÉŠ, Zoltán - DUSZA, Ján - LIN, Hua-Tay. Dense additive-free hot-pressed silicon carbide ceramics. In *PACRIM 11. The 11th Pacific Rim conference of ceramic societies, Jeju, Korea, august 30 - september 4, 2015 : book of abstracts.* - Korea, 2015, p. 272.
- AFE11 ŠAJGALÍK, Pavol - HNATKO, Miroslav - LENČÉŠ, Zoltán - KOVALČÍKOVÁ, Alexandra. Easy machinable SiC ceramics with high electrical conductivity. In *ISSNOX4. 4th international symposium on SiAlONs and non-oxides, may 25-28, 2014, Nagahama Royal Hotel, Shiga, Japan : program & abstracts.* - Japan, 2014, p. 23.
- AFE12 ŠAJGALÍK, Pavol - SEDLÁČEK, Jaroslav - LENČÉŠ, Zoltán - DUSZA, Ján - LIN, Hua-Tay. Energy efficient processing of additive-free hot-pressed silicon carbide ceramics. In *CMCEE. 11th International conference on ceramic materials and components for energy and environmental applications, Vancouver, BC, Canada, June 14-19, 2015 : abstract book.* - The American Ceramic Society, 2015, p. 88.
- AFE13 ŠAJGALÍK, Pavol - HNATKO, Miroslav - LENČÉŠ, Zoltán - GALL, Marián - DUSZA, Ján - TATARCO, Peter - CHLUP, Zdeněk. GB chemistry of silicon nitride based nano-composites - implications to mechanical, tribological and chemical properties. In *ISAC-5. 5th international symposium on advanced ceramics, Wuhan, China, december 9-12, 2013 : program and abstracts.* - Japan : The Japan Society for the Promotion of Science, 2013, p. 47-48.
- AFE14 ŠAJGALÍK, Pavol - HNATKO, Miroslav - LENČÉŠ, Zoltán - GALL, Marián - DUSZA, Ján - TATARCO, Peter - CHLUP, Zdeněk. GB chemistry of silicon nitride based nano-composites - implications to mechanical, tribological and chemical properties. In *ICACC 2015. 39th international conference and exposition on advanced ceramics and composites, Daytona Beach, Florida, USA, january 25-30, 2015 : abstract book.* - USA : The American Ceramic Society, 2015, p. 67.
- AFE15 ŠAJGALÍK, Pavol - HNATKO, Miroslav - LENČÉŠ, Zoltán - GALL, Marián - DUSZA, Ján - TATARCO, Peter - CHLUP, Zdeněk. Chemistry composition of GB in Si₃N₄ - simulation and experiment. In *International workshop on Sintering and microstructural evolution in ceramics, KAIST, Daejeon, Korea, august 27-29, 2015 : abstracts.* - Korea : KAIST, 2015, p. 29.
- AFE16 ŠAJGALÍK, Pavol - HNATKO, Miroslav - LENČÉŠ, Zoltán - GALL, Marián - DUSZA, Ján - TATARCO, Peter - CHLUP, Zdeněk. Role of GB chemistry of silicon nitride based ceramics with respect to the mechanical properties - experimental and theoretical approach. In *ECERS 2015. 14th International conference of the European ceramic society, Toledo, España, 21-25 June, 2015 :*

book of abstracts. - España : Spanish Ceramics and Glass Society, 2015, iD: 01918. ISBN 978-84-606-9257-7.

AFF Abstracts of invited papers from domestic conferences

- AFF01 CSANÁDI, Tamás - CHINH, Nguyen Quang - SZOMMER, Péter - DUSZA, Ján - LENČÉŠ, Zoltán - ŠAJGALÍK, Pavol - GRASSO, Salvatore - REECE, Michael J. Nano and micromechanical testing of advanced ceramics. In *Advanced research workshop Engineering Ceramics 2015, materials for better life, Smolenice castle, may 10-14, 2015 : book of abstracts*. Eds. Zoltán Lenčés, Jana Valúchová. - Bratislava, Slovakia : Institute of Inorganic Chemistry SAS, 2015, p. 61. ISBN 978-80-971648-3-6.
- AFF02 DUSZA, Ján. Deformation and fracture of advanced ceramics at nano and micro level. In *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015*. Ed. B. Ballóková, K. Ondrejová. - Košice : Institute of Materials Research SAS, 2015.
- AFF03 DUSZA, Ján. Nano-indentation and micropillar testing of WC grains in WC-Co. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014*. Beáta Ballóková et al. - Košice : Institute of Materials Research SAS, 2014, p. 23. ISBN 978-80-970964-8-9.
- AFF04 DUSZA, Ján. Silicon nitride + graphene platelet nanocomposites. In *NANOVED 2013 & NANO INFO DAY : 6th International Conference on Nanosciences, Nanotechnologies, Nanomaterials and NANO INFO DAY of the Nanoforce Project*. Svit, 22.-25.9.2013. - Brno : TRIBUN EU, 2013, p. O-18. ISBN 978-80-263-0511-8.
- AFF05 FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. - LAUDA, M. - DOBÁK, S. - STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária - BUREŠ, Radovan - KABÁTOVÁ, Margita - DUDROVÁ, Eva. Permeabilita kompozitných materiálov na báze železa. In *Progresívne magnetické materiály : Zborník abstraktov. Košice, 25.10.2013*. - Košice : Ústav materiálového výskumu SAV, 2013, s. 8. ISBN 978-80-970964-6-5.
- AFF06 FÜZEROVÁ, Jana - FÜZER, J. - KOLLÁR, P. - LAUDA, M. - BIRČÁKOVÁ, Zuzana - STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária - BUREŠ, Radovan - KABÁTOVÁ, Margita - DUDROVÁ, Eva. Elektrický odpor a koercivita kompozitných materiálov na báze železa. In *Progresívne magnetické materiály : Zborník abstraktov. Košice, 25.10.2013*. - Košice : Ústav materiálového výskumu SAV, 2013, s. 7. ISBN 978-80-970964-6-5.
- AFF07 HVIZDOŠ, Pavol. Pokročilé metódy hodnotenia lokálnych vlastností kompozitov. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 29.4.2014*. - Košice : Ústav materiálového výskumu SAV, 2014, s. 14. ISBN 978-80-970964-7-2.
- AFF08 KABÁTOVÁ, Margita - DUDROVÁ, Eva. Static and fatigue crack nucleation, coalescence and growth to failure in sintered steels. In *Fraktografia - Fractography*

2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015. Ed. B. Ballóková, K. Ondrejová. - Košice : Institute of Materials Research SAS, 2015.

AFF09 KOLLÁR, P. - VOJTEK, Vladimír - BIRČÁKOVÁ, Zuzana - FÜZER, J. - FÁBEROVÁ, Mária - BUREŠ, Radovan. Magnetické vlastnosti kompozitných materiálov pri premagnetovaní v kvazistatickom režime. In *Progresívne magnetické materiály : Zborník abstraktov. Košice, 25.10.2013.* - Košice : Ústav materiálového výskumu SAV, 2013, s. 6. ISBN 978-80-970964-6-5.

AFF10 KOVÁČ, František - PETRYSHYNETS, Ivan. Dizajn a evolúcia nekonvenčných mikroštruktúr v elekrotechnických oceliach. In *Progresívne magnetické materiály : Zborník abstraktov. Košice, 25.10.2013.* - Košice : Ústav materiálového výskumu SAV, 2013, s. 13. ISBN 978-80-970964-6-5.

AFF11 SAKSL, Karel. Príprava práškových materiálov z biodegradovateľných zliatin. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 19.5.2015.* - Košice : Ústav materiálového výskumu SAV, 2015, s. 2. ISBN 978-80-89782-02-04.

AFG Abstracts of papers from foreign conferences

AFG01 BALGA, Dušan - OSTROUSHKO, Dmytro - SAKSL, Karel - MAZANCOVÁ, Eva. Mechanical and metallographic properties of explosively welded Mg-Al bimetal. In *Explosive production of new materials: science, technology, business, and innovations : 12th international symposium. Cracow, 25.-30.5.2014.* - Cracow : Nokturn, 2014, p. 42-44. ISBN 978-83-938502-2-8.

AFG02 BALKO, Ján - HVIZDOŠ, Pavol - CÓRDOBA, J.M. - CHICARDI, E. Instrumented indentation of composite materials prepared by methods of mechanochemistry. In *Local mechanical properties 2013. LMP 2013 : 10th international conference. Book of abstracts. Kutná Hora, 6.-8.11.2013.* - Praha : ČVUT, 2013, p. 45. ISBN 978-80-01-05374-4.

AFG03 BALKO, Ján - KAŠIAROVÁ, Monika - HVIZDOŠ, Pavol. Wear behavior of stoichiometric and nonstoichiometric zirconia. In *Local mechanical properties 2015 : Proceedings of 12th international conference. Liberec, 4.-6.11.2015.* - B.V., 2015, p. 4.

AFG04 BIRČÁKOVÁ, Zuzana - KOLLÁR, P. - FÜZER, J. - FÁBEROVÁ, Mária - BUREŠ, Radovan. Analysis of the energy losses in Fe-based composite material. In *JEMS 2012. Joint European magnetic symposia : Book of abstracts. Parma, 9.-14.9.2012.* - B.V., 2012, p. 219.

AFG05 BIRČÁKOVÁ, Zuzana - KOLLÁR, P. - FÜZER, J. - BUREŠ, Radovan - FÁBEROVÁ, Mária. Influence of interaction between magnetic particles on the energy losses of iron-based composite materials. In *Soft Magnetic Materials 21. SMM 21 : Conference program and book of abstracts. Budapest, 1.-4.9.2013.* - B.V., 2013.

AFG06 BLANDA, Marek - DUSZOVÁ, Annamária - CSANÁDI, Tamás - HVIZDOŠ, Pavol - LOFAJ, František - DUSZA, Ján - MORGIEL, Jerzy. Nanohardness testing

of WC-Co hardmetal. In *10th international conference on the science of hard materials 2014 : ICSHM10. Extended abstracts. Cancún, Mexico, 10.-14.3.2014.* - B.V., 2014, p. 79-80.

- AFG07 BLÁNDA, Marek - CSANÁDI, Tamás - DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - DUSZA, Ján. Nanoindentation study on tungsten carbide crystals in WC-Co hardmetal in comparison with AFM measurements. In *Local mechanical properties 2013. LMP 2013 : 10th international conference. Book of abstracts. Kutná Hora, 6.-8.11.2013.* - Praha : ČVUT, 2013, p. 61. ISBN 978-80-01-05374-4.
- AFG08 DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - LOFAJ, František - DUSZA, Ján. Indentation fatigue of WC-Co cemented carbides. In *Materials structure and micromechanics of fracture : 7th international conference. MSMF7. Abstract booklet. Brno, 1.-3.7.2013.* - Brno : University of Technology, 2013, p. 167. ISBN 978-80-214-4739-4.
- AFG09 DYMÁČEK, Petr - DOBEŠ, Ferdinand - BALLÓKOVÁ, Beáta. Compressive creep testing of MoSi₂-SiC nanocomposites. In *The Czech-Japanese workshop on high-temperature intermetallics. Brno, 13.-16.4.2014.* - B.V., 2014, p. 19.
- AFG10 FEDORKOVÁ, Andrea - ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - KUPKOVÁ, Miriam - WIEMHÖFER, H.-D. - AUDINOT, Jean Nicolas - GUILLOT, J. Electrochemical and XPS studies of PPy/PEG LiFePO₄ cathode material. In *13th ABAF : Advanced Batteries, Accumulators and Fuel Cells. International Conference. Brno, 26.-30.8.2012.* - Brno : University of Technology, 2012, p. 29. ISBN 978-80-214-4570-3.
- AFG11 FIDES, Martin - KOVALČÍKOVÁ, Alexandra - HVIZDOŠ, Pavol - HNATKO, Miroslav. Local mechanical properties of SiC-TiNbC composite and its constituents. In *Local mechanical properties 2015 : Proceedings of 12th international conference. Liberec, 4.-6.11.2015.* - B.V., 2015, p. 12.
- AFG12 FÜZER, J. - KOLLÁR, P. - STREČKOVÁ, Magdaléna - BUREŠ, Radovan - FÁBEROVÁ, Mária - MEDVECKÝ, Ľubomír. Magnetic properties of composites based on Fe powder and phenol-formaldehyde resin modified with silicon dioxide. In *JEMS 2012. Joint European magnetic symposia : Book of abstracts. Parma, 9.-14.9.2012.* - B.V., 2012, p. 218.
- AFG13 GAALOVÁ, Petra - ŠVANČÁRKOVÁ, Anna - BALKO, Ján - GALUSKOVÁ, Dagmar - LOFAJ, František - GALUŠEK, Dušan. Corrosion in acidic media, micromechanical properties and wear of human tooth enamel. In *ECERS 2015. 14th International conference of the European ceramic society, Toledo, España, 21-25 June, 2015 : book of abstracts.* - España : Spanish Ceramics and Glass Society, 2015, iD: 01747. ISBN 978-84-606-9257-7.
- AFG14 GALUSKOVÁ, Dagmar - ŠVANČÁRKOVÁ, Anna - GAALOVÁ, Petra - BALKO, Ján - LOFAJ, František - GALUŠEK, Dušan. Evaluation of chemical stability and corrosion of dental glass-ceramics in aqueous acidic solutions and its influence on micromechanical properties. In *ECERS 2015. 14th International conference of the European ceramic society, Toledo, España, 21-25 June, 2015 :*

book of abstracts. - España : Spanish Ceramics and Glass Society, 2015, iD: 01890. ISBN 978-84-606-9257-7.

- AFG15 HOMOLOVÁ, Viera - ČIRIPOVÁ, Lucia - VÝROSTKOVÁ, Anna. Experimental and theoretical study of Fe-B-Cr ternary system. In *TOFA 2014 : 14th discussion meeting on the thermodynamics of alloys. Book of abstracts. Brno, 7.-11.9.2014.* - B.V., 2014, p. 100.
- AFG16 HOMOLOVÁ, Viera - REPOVSKÝ, Peter - ČIRIPOVÁ, Lucia - VÝROSTKOVÁ, Anna. Phase equilibria investigation of the B-Fe-X (X=C, Mn) systems. In *APDIC Phase diagram conference. Miskolc, 13.2.2015.* - B.V., 2015, p. 11.
- AFG17 HOMOLOVÁ, Viera - ČIRIPOVÁ, Lucia - VÝROSTKOVÁ, Anna. Study of phase equilibria in Fe-B-Cr ternary system. In *The associated phase diagram and thermodynamics committee : 14th annual meeting. Book of abstracts. Krakow, 29.3.2014.* - Krakow : IMMS PAS, 2014, p. 12.
- AFG18 HVIŠČOVÁ, Petra - LOFAJ, František - NOVÁK, Michal. Nanohardness of CrN coatings vs. deposition parameters. In *Local mechanical properties 2013. LMP 2013 : 10th international conference. Book of abstracts. Kutná Hora, 6.-8.11.2013.* - Praha : ČVUT, 2013, p. 54. ISBN 978-80-01-05374-4.
- AFG19 HVIZDOŠ, Pavol - JAKUBÉCZYOVÁ, Dagmar - HLOCH, S. - KLOC, Ján - BALKO, Ján - MONKA, Peter. Local mechanical properties of various bone cements. In *Materials structure and micromechanics of fracture : 7th international conference. MSMF7. Abstract booklet. Brno, 1.-3.7.2013.* - Brno : University of Technology, 2013, p. 201. ISBN 978-80-214-4739-4.
- AFG20 HVIZDOŠ, Pavol - BALKO, Ján - CÓRDOBA, J.M. - CHICARDI, E. Nanoindentation of (Ti,Ta)(C,N)-Co cermets prepared by methods of mechanochemistry. In *10th international conference on the science of hard materials 2014 : ICSHM10. Extended abstracts. Cancún, Mexico, 10.-14.3.2014.* - B.V., 2014, p. 187-188.
- AFG21 KAŠIAROVÁ, Monika - GALUSKOVÁ, Dagmar - GAALOVÁ, Petra - PRAMUKOVÁ, Zuzana - GALUSEK, D. Corrosion behaviour of human teeth measured by nanoindentation method. In *Local mechanical properties 2013. LMP 2013 : 10th international conference. Book of abstracts. Kutná Hora, 6.-8.11.2013.* - Praha : ČVUT, 2013, p. 68. ISBN 978-80-01-05374-4.
- AFG22 KAŠIAROVÁ, Monika - GALUSKOVÁ, Dagmar - GALUSEK, D. Corrosion resistance of dental replacements measured by nanoindentation. In *EUROMAT 2013 : European Congress and Exhibition on Advanced Materials and Processes. Sevilla, 8.-13.9.2013.* - Sevilla : FEMS, 2013.
- AFG23 KAŠIAROVÁ, Monika - MICHÁLKOVÁ, Monika - KOVALČÍKOVÁ, Alexandra - KVETKOVÁ, Lenka - ŠAJGALÍK, Pavol - DUSZA, Ján. Mechanical properties of Si₃N₄-graphene multiplatelets prepared by different processing routes.

In *EUROMAT 2013 : European Congress and Exhibition on Advanced Materials and Processes. Sevilla, 8.-13.9.2013.* - Sevilla : FEMS, 2013. Názov z USB. USB.

- AFG24 KAŠIAROVÁ, Monika - TATARKO, Peter - BURÍK, Peter - DUSZA, Ján - ŠAJGALÍK, Pavol. Thermal shock resistance of Si₃N₄-SiC composites sintered with rare earth oxide additives. In *ECERS XIII. 13th conference of the European ceramic society, june 23-27, 2013 : book of abstracts.* - France, 2013, p. 503.
- AFG25 KOLLÁR, P. - BIRČÁKOVÁ, Zuzana - FÜZER, J. - BUREŠ, Radovan - FÁBEROVÁ, Mária. DC and AC permeability of Fe-based composite material. In *JEMS 2012. Joint European magnetic symposia : Book of abstracts. Parma, 9.-14.9.2012.* - B.V., 2012, p. 218.
- AFG26 KOVÁČ, František - PETRYSHYNETS, Ivan - MARCIN, Jozef - ŠKORVÁNEK, Ivan. Effect of VC nano - inhibitors and dynamic continuous annealing on the magnetic properties of GO steels. In *12th Joint MMM-Intermag Conference : Abstracts. Chicago, USA, 14.-18.1.2013.* - Internet, 2013, p. 223.
- AFG27 KOVÁČ, František - PETRYSHYNETS, Ivan - ŠKORVÁNEK, Ivan - FALAT, Ladislav - MARCIN, Jozef. Effect of VC inhibitors in combination with unconventional dynamical heat treatment on the magnetic properties of GO steel. In *JEMS 2012. Joint European magnetic symposia : Book of abstracts. Parma, 9.-14.9.2012.* - B.V., 2012, p. 360.
- AFG28 KOVÁČ, František - PETRYSHYNETS, Ivan - SOPKO, Martin. Influence of new system nano inhibitors on the abnormal grain growth with goss crystallographic orientation in silicon steels. In *THERMEC 2013 : International conference on processing and manufacturing of advanced materials. Book of abstracts. Las Vegas, USA, 2.-6.12.2013.* - B.V., 2013, p. 332.
- AFG29 KOVAL, Vladimír - ŠKORVÁNEK, Ivan - MITOSERIU, L. - YAN, Haixue. A weak ferromagnetism in Tb-substituted BiFeO₃ ceramics. In *COST MP0904: Single- and multiphase ferroics and multiferroics with restricted geometries (SIMUFER) : Closing conference and final management committee meeting. Book of abstracts. Genoa, 30.1.-1.2.2014.* - B.V., 2014.
- AFG30 KOVAL, Vladimír - ŠKORVÁNEK, Ivan - YAN, Haixue - MITOSERIU, L. - REECE, Michael J. Effect of rare earth substitution on structural and multiferroic properties of BiFeO₃ ceramics. In *Single and multiphase ferroics and multiferroics with restricted geometries : Abstracts of workshop of COST action MP0904: Advances in ferroelectrics and multiferroics. Praha, 20.-21.7.2013.* - Praha : FÚ AV ČR, 2013, p. 42.
- AFG31 KOVAL, Vladimír - ŠKORVÁNEK, Ivan - YAN, Haixue - ĎURIŠIN, Juraj - STREČKOVÁ, Magdaléna - REECE, Michael J. Microstructure and properties of Dy- and Tb- substituted BiFeO₃ ceramics. In *EUROMAT 2013 : European Congress and Exhibition on Advanced Materials and Processes. Sevilla, 8.-13.9.2013.* - Sevilla : FEMS, 2013. Názov z USB. USB.

- AFG32 KOVAL, Vladimír - ĎURIŠIN, Juraj - SOPKO, Martin. Substitution-driven phase transition in (Bi, Tb)FeO₃ ceramics. In *Euromat 2015 : European congress and exhibition on advanced materials and processes. Warsaw, 20.-24.9.2015* [elektronický zdroj]. - B.V., 2015. USB. USB.
- AFG33 KOVALČÍKOVÁ, Alexandra - DUSZA, Ján - BL'ANDA, Marek. Influence of the microstructure on macro versus nano-hardness and fracture toughness of SiC ceramics. In *Local mechanical properties 2013. LMP 2013 : 10th international conference. Book of abstracts. Kutná Hora, 6.-8.11.2013.* - Praha : ČVUT, 2013, p. 42. ISBN 978-80-01-05374-4.
- AFG34 LAUDA, M. - FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. - STREČKOVÁ, Magdaléna - BUREŠ, Radovan. Analysis of the magnetic losses in the iron-silicon soft magnetic composites. In *Soft Magnetic Materials 21. SMM 21 : Conference program and book of abstracts. Budapest, 1.-4.9.2013.* - B.V., 2013.
- AFG35 LOFAJ, František - HVIŠČOVÁ, Petra - NOVÁK, Michal. Nanoindentation, nanoscratching and nanotribology of CrN coatings. In *Local mechanical properties 2013. LMP 2013 : 10th international conference. Book of abstracts. Kutná Hora, 6.-8.11.2013.* - Praha : ČVUT, 2013, p. 55. ISBN 978-80-01-05374-4.
- AFG36 LOFAJ, František - KVETKOVÁ, Lenka - HVIŠČOVÁ, Petra. Superhard nanocrystalline coatings: Processing and characterization. In *The first Polish-Korean joint workshop on advanced ceramics : Abstracts. Zakopane, 19.9.2015.* - Kraków : Polskie Towarzystwo Ceramiczne, 2015, p. 27. ISBN 978-83-63663-64-3.
- AFG37 MAZANCOVÁ, Eva - OSTROUSHKO, Dmytro - SAKSL, Karel - KUČERA, Pavel. Hydrogen susceptibility of explosively welded anticorrosion steel and titanium of commercial purity. In *Metal 2015 : 24th international conference on metallurgy and materials. Proceedings of abstracts. Brno, 3.-5.6.2015.* - Ostrava : Tanger Ltd., 2015. ISBN 978-80-87294-58-1.
- AFG38 MEDVECKÝ, Ľubomír - SOPČÁK, Tibor - GIRMAN, Vladimír - BRIANČIN, Jaroslav. Phase evolution and morphology changes in amorphous calcium phosphates prepared from calcium D-gluconate aqueous solutions. In *COST Action MP1005 : 2nd joint meeting. Book of abstracts. Vienna, 4.-5.9.2012.* - Vienna : Vienna University of Technology, 2012, p. 37-38. ISBN 978-3-9502481-7-3.
- AFG39 NOVÁK, Michal - LOFAJ, František - HVIŠČOVÁ, Petra. The effects of regime, frequency, amplitude and loading rate on depth profiles of nanohardness in thin W-C coatings. In *Nanomeasure 2013 : Abstract book. Warsaw, 24.-25.6.2013.* - B.V., 2013, p. 58-59.
- AFG40 NOVÁK, Michal - LOFAJ, František - HVIŠČOVÁ, Petra. The influence of indentation conditions on nanohardness depth profiles of W-C based coatings. In *Local mechanical properties 2013. LMP 2013 : 10th international conference. Book of abstracts. Kutná Hora, 6.-8.11.2013.* - Praha : ČVUT, 2013, p. 58. ISBN 978-80-01-05374-4.

- AFG41 ORIŇÁK, Andrej - ORIŇÁKOVÁ, Renáta - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - HARVANOVÁ, Denisa - RADOŇAK, J. Degradable iron biomaterials with manganese-doped hydroxyapatite film. In *Nature inspires chemistry engineers. NICE 2014 : 2nd international conference Bioinspired and biobased chemistry and materials. Abstracts.* - B.V., 2014, p. 450.
- AFG42 ORIŇÁK, Andrej - ORIŇÁKOVÁ, Renáta - GIRETOVÁ, Mária - MEDVECKÝ, Ľubomír - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - MASKAĽOVÁ, Iveta. Phosphated carbonyl iron based biodegradable materials for orthopedic applications. In *BioNanoMed 2015 : 6th International congress Nanotechnology in medicine and biology. Graz, 8.-10.4.2015.* - B.V., 2015, p10.
- AFG43 ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - GIRETOVÁ, Mária - MEDVECKÝ, Ľubomír - MASKAĽOVÁ, Iveta. Evaluation of biocompatibility of iron based degradable biomaterials. In *Nature inspires chemistry engineers. NICE 2014 : 2nd international conference Bioinspired and biobased chemistry and materials. Abstracts.* - B.V., 2014, p. 451.
- AFG44 ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - MARKUŠOVÁ BUČKOVÁ, Lucia - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - GIRETOVÁ, Mária - MEDVECKÝ, Ľubomír - DOBROČKA, Edmund. In vitro biocompatibility and degradation of hydroxyapatite coated iron biodegradable materials. In *BioNanoMed 2015 : 6th International congress Nanotechnology in medicine and biology. Graz, 8.-10.4.2015.* - B.V., 2015, p11.
- AFG45 OSTROUSHKO, Dmytro - MAZANCOVÁ, Eva - SAKSL, Karel - ĎURIŠIN, Martin - MILKOVIČ, Ondrej - MICHALIK, Štefan - GAMCOVÁ, Jana. Phase composition of explosive welded clad materials. In *Photon science 2012 : Highlights and annual report. Hamburg, 2012.* - Hamburg : DESY, 2012.
- AFG46 PARCHOVIAŃSKÝ, Milan - GALUŠEK, Dušan - SEDLÁČEK, Jaroslav - ŠVANČÁREK, Peter - KAŠIAROVÁ, Monika - DUSZA, Ján - ŠAJGALÍK, Pavol. Microstructure, mechanical properties and creep behavior of hot pressed Al₂O₃/SiC micro/nano composites. In *ECERS XIII. 13th conference of the European ceramic society, june 23-27, 2013 : book of abstracts.* - France, 2013, p. 848.
- AFG47 PETRYSHYNETS, Ivan - KOVÁČ, František - PUCHÝ, Viktor - ŠEBEK, Martin. Magnetic domains modification of grain oriented silicon steel via the laser treatment technology. In *Euromat 2015 : European congress and exhibition on advanced materials and processes. Warsaw, 20.-24.9.2015 [elektronický zdroj].* - B.V., 2015. Názov z USB. USB.
- AFG48 PETRYSHYNETS, Ivan - KOVÁČ, František - SOPKO, Martin - MARCIN, Jozef. Study of microstructure and texture evolution in grain-oriented steels via coercivity measurements. In *Soft Magnetic Materials 21. SMM 21 : Conference program and book of abstracts. Budapest, 1.-4.9.2013.* - B.V., 2013, p. 108.
- AFG49 PETRYSHYNETS, Ivan - KOVÁČ, František - MARCIN, Jozef - ŠKORVÁNEK, Ivan. The magnetic properties of temper rolled NO FeSi steels with

enhanced rotating cube texture. In *12th Joint MMM-Intermag Conference : Abstracts. Chicago, USA, 14.-18.1.2013.* - Internet, 2013, p. 353.

- AFG50 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - ŠAJGALÍK, Pavol. Determination of local mechanical properties of Si₃N₄ based foams. In *Local mechanical properties 2013. LMP 2013 : 10th international conference. Book of abstracts. Kutná Hora, 6.-8.11.2013.* - Praha : ČVUT, 2013, p. 71. ISBN 978-80-01-05374-4.
- AFG51 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - BODIŠOVÁ, Katarína - HNATKO, Miroslav - DUSZA, Ján - ŠAJGALÍK, Pavol. Mechanical properties of porous Si₃N₄ ceramics used for bioapplication. In *ECERS XIII. 13th conference of the European ceramic society, june 23-27, 2013 : book of abstracts.* - France, 2013, p. 324.
- AFG52 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Microstructure and mechanical properties of biomaterials based on silicon nitride. In *Training school COST action NAMABIO MP1005 : 3rd course. From nano- to macro- biomaterials (design, processing, characterization, modelling) and applications to STEM cells regenerative orthopaedic and dental medicine. Zagreb, 26.-29.4.2014.* - B.V., 2014.
- AFG53 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - BODIŠOVÁ, Katarína - DOMANICKÁ, Magdaléna - ŠAJGALÍK, Pavol - GROMOŠOVÁ, Silvia. Study of mechanical properties of silicon nitride biomaterials used as artificial substitution of human trabecular bone. In *Nanomeasure 2013 : Abstract book. Warsaw, 24.-25.6.2013.* - B.V., 2013, p. 56-57.
- AFG54 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - ŠAJGALÍK, Pavol. The mechanical properties of cellular silicon nitride. In *CellMAT 2014 : Cellular Materials. Dresden, 22.-24.10.2014.* - DGM, 2014.
- AFG55 SEDLÁK, Richard - KOVALČÍKOVÁ, Alexandra - RUTKOWSKI, Paweł - DUSZA, Ján. Indentation fracture toughness of Al₂O₃+GPLS and Si₃N₄+GPLS systems. In *Local mechanical properties 2015 : Proceedings of 12th international conference. Liberec, 4.-6.11.2015.* - B.V., 2015, p. 47.
- AFG56 SHVAB, Ruslan - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. High temperature corrosion of high Cr-alloyed sintered and cast austenitic stainless steels in exhaust gas atmosphere. In *EUROMAT 2013 : European Congress and Exhibition on Advanced Materials and Processes. Sevilla, 8.-13.9.2013.* - Sevilla : FEMS, 2013. Názov z USB. USB.
- AFG57 SHVAB, Ruslan - HVIZDOŠ, Pavol - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. Nanoindentation characterization of mechanical properties of cast and sintered high Cr-alloyed steel. In *Nanomeasure 2013 : Abstract book. Warsaw, 24.-25.6.2013.* - B.V., 2013, p. 61-62.

- AFG58 SHVAB, Ruslan - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. The influence of microstructure of high cr-alloyed steel on high temperature oxidation resistance. In *PPM 2013 : The abstracts of the 1st porous and powder materials symposium and exhibition. Izmir, 3.-6.9.2013.* - B.V., 2013, p. 203.
- AFG59 STREČKOVÁ, Magdaléna - BUREŠ, Radovan - FÁBEROVÁ, Mária - FÜZER, J. - KOLLÁR, P. Characterization of soft magnetic materials based on different magnetic particles and modified phenolic resin. In *EUROMAT 2013 : European Congress and Exhibition on Advanced Materials and Processes. Sevilla, 8.-13.9.2013.* - Sevilla : FEMS, 2013. Názov z USB. USB.
- AFG60 ZELEŇÁK, Adam - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika. Hardness of sintered biodegradable materials based on iron powders. In *Local mechanical properties 2013. LMP 2013 : 10th international conference. Book of abstracts. Kutná Hora, 6.-8.11.2013.* - Praha : ČVUT, 2013, p. 56. ISBN 978-80-01-05374-4.
- AFG61 ZENTKOVÁ, Mária - MIHALIK, Marián - MIHÁLIK, Matúš - TOMAŠOVIČOVÁ, Natália - SIRENKO, V. - EREMENKO, V.V. - BALBASHOV, A.M. - KOVAL'Vladimír - BRIANČIN, Jaroslav. Preparation and physical properties of M-type hexaferrite SrCo₂Ti₂Fe₁₂O₁₉. In *13th European meeting on ferroelectricity : EMF 2015. Porto, 28.6.-3.7.2015* [elektronický zdroj]. - B.V., 2015. USB. USB.
- AFH Abstracts of papers from domestic conferences**
- AFH01 BALKO, Ján - HVIZDOŠ, Pavol - KOVALČÍKOVÁ, Alexandra - BALÁZSI, Csaba - DUSZA, Ján. Effect of counterpart material on tribological behavior of Si₃N₄/MLG composites. In *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015.* - Košice : Institute of Materials Research SAS, 2015.
- AFH02 BUREŠ, Radovan - FÁBEROVÁ, Mária - KUREK, Pavel - STREČKOVÁ, Magdaléna. Fe/MgO composites prepared by microwave sintering process. In *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015.* - Košice : Institute of Materials Research SAS, 2015.
- AFH03 BUREŠ, Radovan - FÁBEROVÁ, Mária - KUREK, Pavel - STREČKOVÁ, Magdaléna. Microwave processing of composites. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 19.5.2015.* - Košice : Ústav materiálového výskumu SAV, 2015, s. 22. ISBN 978-80-89782-02-04.
- AFH04 CSANÁDI, Tamás - DUSZA, Ján - LENČÉŠ, Zoltán - ŠAJGALÍK, Pavol. Nanoindentation induced deformation anisotropy in Si₃N₄ ceramic. In *Advanced research workshop Engineering Ceramics 2015, materials for better life, Smolenice castle, may 10-14, 2015 : book of abstracts.* - Bratislava, Slovakia : Institute of Inorganic Chemistry SAS, 2015, p. 70. ISBN 978-80-971648-3-6.
- AFH05 DUBIEL, Aleksandra - RUTKOWSKI, Paweł - STOBIERSKI, Ludoslaw - DUSZA, Ján. Anisotropy and thermal properties of boron carbide - graphene

composites. In *Advanced research workshop Engineering Ceramics 2015, materials for better life, Smolenice castle, may 10-14, 2015 : book of abstracts.* - Bratislava, Slovakia : Institute of Inorganic Chemistry SAS, 2015, p. 71. ISBN 978-80-971648-3-6.

- AFH06 DŽUPON, Miroslav - KAŠČÁK, Ľuboš - NÉMETH, Dušan - KUBÍK, René. Effect of elastic deformation of tools on adhesion of PVD coating. In *PRO-TECH-MA 2015 and Surface Engineering 2015 : International scientific conferences. High Tatras, 7.-9.10.2015 [elektronický zdroj].* - Košice : Technical University, 2015, p. 24-25. ISBN 978-80-553-2204-9. Názov z CD. CD ROM.
- AFH07 DŽUPON, Miroslav - HUDÁK, J. - TOMÁŠ, Miroslav. Wear and microgeometry changes of contact surface of the hole flanging punch. In *PRO-TECH-MA 2015 and Surface Engineering 2015 : International scientific conferences. High Tatras, 7.-9.10.2015 [elektronický zdroj].* - Košice : Technical University, 2015, p. 22-23. ISBN 978-80-553-2204-9. Názov z CD. CD ROM.
- AFH08 FIDES, Martin - KOVALČÍKOVÁ, Alexandra - HVIZDOŠ, Pavol - SEDLÁK, Richard - HNATKO, Miroslav. Mechanical properties and indentation crack propagation in SiC-TiNbC composite. In *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015.* - Košice : Institute of Materials Research SAS, 2015.
- AFH09 FIDES, Martin - KOVALČÍKOVÁ, Alexandra - HVIZDOŠ, Pavol - SEDLÁK, Richard - BYSTRICKÝ, Roman - SEDLÁČEK, Jaroslav. Microstructure and mechanical properties of electrically conductive SiC based cermets = Mikroštruktúra a mechanické vlastnosti elektricky vodivých kovo-keramických kompozitov na báze SiC. In *Joint annual meeting of the Slovak silicate scientific-technological society & workshop processing and properties of advanced ceramics : book of extended abstracts.* - Košice, Slovak Republic : Institute of Materials Research, 2015, p. 46-49. ISBN 978-80-89782-03-1.
- AFH10 HADRABA, Hynek - STREČKOVÁ, Magdaléna - HUSÁK, Roman. Mechanical properties of Fe-Si and Ni-Fe core-shell particles coated by NiFe₂O₄ ferrite. In *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015.* - Košice : Institute of Materials Research SAS, 2015.
- AFH11 HADRABA, Hynek - STREČKOVÁ, Magdaléna - HUSÁK, Roman - ROUPCOVÁ, Pavla. Mechanické legování Ni-Fe slitiny typu permalloy. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 19.5.2015.* - Košice : Ústav materiálového výskumu SAV, 2015, s. 14. ISBN 978-80-89782-02-04.
- AFH12 HANZEL, Ondrej - KAŠIAROVÁ, Monika - SEDLÁČEK, Jaroslav - ŠAJGALÍK, Pavol. Preparation and characterization of silicon nitride - graphene composites = Príprava a charakterizácia kompozitov Si₃N₄ s prídavkom grafénu. In *Joint annual meeting of the Slovak silicate scientific-technological society & workshop processing and properties of advanced ceramics : book of extended*

abstracts. - Košice, Slovak Republic : Institute of Materials Research, 2015, p. 50-54. ISBN 978-80-89782-03-1.

- AFH13 HRUBOVČÁKOVÁ, Monika - KUPKOVÁ, Miriam - MOROVSKÁ TUROŇOVÁ, Andrea - ORINÁKOVÁ, Renáta - PUCHÝ, Viktor. Microstructure and corrosion behaviour of biodegradable Fe-ZnO material prepared by spark plasma sintering. In *The 2nd International conference on nanomaterials: Fundamentals and applications : Book of abstracts. Košice, 26.-28.10.2015* [elektronický zdroj]. - Košice : NFA, 2015, p. 48. ISBN 978-80-8152-312-0. Názov z CD. CD ROM.
- AFH14 HVIŠČOVÁ, Petra - NOVÁK, Michal - LOFAJ, František - FERDINANDY, Milan - KVETKOVÁ, Lenka - PODOBA, Rudolf. Tenké povlaky na báze W-C pripravené technológiou HiPIMS. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 19.5.2015.* - Košice : Ústav materiálového výskumu SAV, 2015, s. 18. ISBN 978-80-89782-02-04.
- AFH15 HVIZDOŠ, Pavol - FIDES, Martin - BALKO, Ján - CHICARDI, E. - CÓRDOBA, J.M. Nanohardness and mechanical properties of (Ti, Ta)(C,N) based cermets. In *Advanced research workshop Engineering Ceramics 2015, materials for better life, Smolenice castle, may 10-14, 2015 : book of abstracts.* - Bratislava, Slovakia : Institute of Inorganic Chemistry SAS, 2015, p. 63. ISBN 978-80-971648-3-6.
- AFH16 HVIZDOŠ, Pavol - FIDES, Martin - BALKO, Ján - KOVALČÍKOVÁ, Alexandra. Wear damage and fracture of silicon nitride/graphene ceramics. In *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015.* - Košice : Institute of Materials Research SAS, 2015.
- AFH17 JAKUBÉCZYOVÁ, Dagmar - PODOBA, Rudolf. Study of nanocomposite thin coatings prepared by focused ion beam milling method. In *PRO-TECH-MA 2015 and Surface Engineering 2015 : International scientific conferences. High Tatras, 7.-9.10.2015* [elektronický zdroj]. - Košice : Technical University, 2015, p. 110-111. ISBN 978-80-553-2204-9. Názov z CD. CD ROM.
- AFH18 KAŠIAROVÁ, Monika - MICHÁLKOVÁ, Monika - HANZEL, Ondrej - DUSZA, Ján - ŠAJGALÍK, Pavol. Silicon nitride reinforced by graphene nanoplatelets. In *Advanced research workshop Engineering Ceramics 2015, materials for better life, Smolenice castle, may 10-14, 2015 : book of abstracts.* - Bratislava, Slovakia : Institute of Inorganic Chemistry SAS, 2015, p. 50. ISBN 978-80-971648-3-6.
- AFH19 KOBERA, Libor - STREČKOVÁ, Magdaléna - BRUS, Jiří. NMR spektroskopie pevného stavu aluminosilikátových systémů modifikovaných fenol-formaldehydovými pryskyřicemi. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 29.4.2014.* - Košice : Ústav materiálového výskumu SAV, 2014, s. 12. ISBN 978-80-970964-7-2.
- AFH20 KOBERA, Libor - STREČKOVÁ, Magdaléna - ABBRENT, Sabina - BRUS, Jiří. Solid state NMR study of inorgano-organic nanostructured materials. In

Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 19.5.2015. - Košice : Ústav materiálového výskumu SAV, 2015, s. 9. ISBN 978-80-89782-02-04.

- AFH21 KOVÁČ, František - PETRYSHYNETS, Ivan. Elektrotechnické ocele s kompozitnou mikroštruktúrou. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 29.4.2014.* - Košice : Ústav materiálového výskumu SAV, 2014, s. 2. ISBN 978-80-970964-7-2.
- AFH22 KOVÁČ, František - PETRYSHYNETS, Ivan - ŠEBEK, Martin - PUCHÝ, Viktor - SOPKO, Martin. Preparation of NO silicon steels with columnar microstructure and low watt losses. In *Magnetic measurements 2015 : International scientific conference. Book of Abstracts. Košice, 25.-28.8.2015.* - Košice : Technical University of Košice, 2015, p. 59. ISBN 978-80-553-2177-6.
- AFH23 KOVALČÍKOVÁ, Alexandra - BALKO, Ján - BALÁZSI, Csaba - HVIZDOŠ, Pavol - DUSZA, Ján. Effect of graphene and boron nitride nano/microphases on mechanical and tribological properties of silicon nitride based ceramics. In *Advanced research workshop Engineering Ceramics 2015, materials for better life, Smolenice castle, may 10-14, 2015 : book of abstracts.* - Bratislava, Slovakia : Institute of Inorganic Chemistry SAS, 2015, p. 76. ISBN 978-80-971648-3-6.
- AFH24 KOVALČÍKOVÁ, Alexandra - SEDLÁK, Richard - RUTKOWSKI, Paweł - DUSZA, Ján. Mechanical and fracture properties of boron carbide/graphene ceramic composites. In *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015.* - Košice : Institute of Materials Research SAS, 2015.
- AFH25 KUPKOVÁ, Miriam - KUPKA, Martin. On the micro-hardness of metals reinforced by rigid nano-particles. In *The 2nd International conference on nanomaterials: Fundamentals and applications : Book of abstracts. Košice, 26.-28.10.2015 [elektronický zdroj].* - Košice : NFA, 2015, p. 52. ISBN 978-80-8152-312-0. Názov z CD. CD ROM.
- AFH26 KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - KUPKA, Martin - ZELEŇÁK, Adam. The effect of corrosion on the stiffness of sintered iron-manganese alloys immersed in Hank's solution. In *Corrosion and surface treatment in industry 2015 : Proceedings of international conference. Liptovský Mikuláš, 30.9.-2.10.2015.* - Košice : Technical University, 2015, p. 26. ISBN 978-80-553-2196-7.
- AFH27 KVETKOVÁ, Lenka - NOVÁK, Michal - HVIŠČOVÁ, Petra - FERDINANDY, Milan - LOFAJ, František. W-C coatings prepared by high target utilisation sputtering system. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 19.5.2015.* - Košice : Ústav materiálového výskumu SAV, 2015, s. 19. ISBN 978-80-89782-02-04.
- AFH28 LOFAJ, František - KVETKOVÁ, Lenka - FERDINANDY, Milan - PODOBA, Rudolf. Reactive processes in the high target utilization sputtering (HiTUS) W-C based coatings. In *Advanced research workshop Engineering*

Ceramics 2015, materials for better life, Smolenice castle, may 10-14, 2015 : book of abstracts. - Bratislava, Slovakia : Institute of Inorganic Chemistry SAS, 2015, p. 43. ISBN 978-80-971648-3-6.

- AFH29 MARKUŠOVÁ BUČKOVÁ, Lucia - ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - GIRETOVÁ, Mária - MEDVECKÝ, Ľubomír - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - KOVAL, Karol. Carbonyl iron powder biodegradable orthopedic implants with carbon nanotubes and magnesium. In *The 2nd International conference on nanomaterials: Fundamentals and applications : Book of abstracts. Košice, 26.-28.10.2015* [elektronický zdroj]. - Košice : NFA, 2015, p. 22. ISBN 978-80-8152-312-0. Názov z CD. CD ROM.
- AFH30 MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária - ŠTULAJTEROVÁ, Radoslava. Bioaktívne kompozitné systémy biopolymér-kalcium fosfátový cement. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 19.5.2015.* - Košice : Ústav materiálového výskumu SAV, 2015, s. 3. ISBN 978-80-89782-02-04.
- AFH31 MOROVSKÁ TUROŇOVÁ, Andrea - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - PUCHÝ, Viktor. Effect of presence of ZnO nanoparticles on the degradation properties of metallic biomaterials. In *The 2nd International conference on nanomaterials: Fundamentals and applications : Book of abstracts. Košice, 26.-28.10.2015* [elektronický zdroj]. - Košice : NFA, 2015, p. 11. ISBN 978-80-8152-312-0. Názov z CD. CD ROM.
- AFH32 MÚDRA, Erika - BRUNCKOVÁ, Helena - STREČKOVÁ, Magdaléna - DUSZA, Ján - SOPČÁK, Tibor - GIRMAN, Vladimír. Preparation of polycrystalline ceramic nanofibers = Príprava polykryštalických keramických nanovlákien. In *Joint annual meeting of the Slovak silicate scientific-technological society & workshop processing and properties of advanced ceramics : book of extended abstracts.* - Košice, Slovak Republic : Institute of Materials Research, 2015, p. 19-22. ISBN 978-80-89782-03-1.
- AFH33 MÚDRA, Erika - STREČKOVÁ, Magdaléna - SOPČÁK, Tibor - BRUNCKOVÁ, Helena. Príprava polymérnych a keramických nanovlákien metódou elektrostatického zvlákňovania. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 19.5.2015.* - Košice : Ústav materiálového výskumu SAV, 2015, s. 21. ISBN 978-80-89782-02-04.
- AFH34 PETRUŠ, Ondrej - ORIŇÁK, Andrej - ORIŇÁKOVÁ, Renáta - KUPKOVÁ, Miriam - KVETKOVÁ, Lenka. Functional silver film with nanocavities for molecules detection. In *The 2nd International conference on nanomaterials: Fundamentals and applications : Book of abstracts. Košice, 26.-28.10.2015* [elektronický zdroj]. - Košice : NFA, 2015, p. 64. ISBN 978-80-8152-312-0. Názov z CD. CD ROM.
- AFH35 PETRYSHYNETS, Ivan - KOVÁČ, František - ŠEBEK, Martin - PUCHÝ, Viktor - SOPKO, Martin. Effect of VC precipitates on the formation of microstructures and magnetic properties of GO electrical steels. In *Magnetic*

measurements 2015 : International scientific conference. Book of Abstracts. Košice, 25.-28.8.2015. - Košice : Technical University of Košice, 2015, p. 60. ISBN 978-80-553-2177-6.

- AFH36 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - ŠAJGALÍK, Pavol. The influence of technological defects on the mechanical properties of porous Si₃N₄ scaffolds. In *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015.* - Košice : Institute of Materials Research SAS, 2015.
- AFH37 ROUPCOVÁ, Pavla - HADRABA, Hynek - HUSÁK, Roman - STREČKOVÁ, Magdaléna. Crystalline structure development during mechanical alloying and subsequent compaction of Ni-Fe alloy. In *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015.* - Košice : Institute of Materials Research SAS, 2015.
- AFH38 SEDLÁK, Richard - KOVALČÍKOVÁ, Alexandra - RUTKOWSKI, Paweł - DUSZA, Ján. Improvement of mechanical properties of B4C ceramic composites by graphene platelets addition = Zlepšenie mechanických vlastností B4C keramických kompozitov príďavkom grafenových platničiek. In *Joint annual meeting of the Slovak silicate scientific-technological society & workshop processing and properties of advanced ceramics : book of extended abstracts.* - Košice, Slovak Republic : Institute of Materials Research, 2015, p. 55-58. ISBN 978-80-89782-03-1.
- AFH39 STREČKOVÁ, Magdaléna - MÚDRA, Erika - KOVALČÍKOVÁ, Alexandra - GIRMAN, Vladimír. Electrospun carbon fibers doped by Ni₂P nanoparticles as an electrocatalyst for hydrogen evolution reaction. In *The 2nd International conference on nanomaterials: Fundamentals and applications : Book of abstracts. Košice, 26.-28.10.2015 [elektronický zdroj].* - Košice : NFA, 2015, p. 15. ISBN 978-80-8152-312-0. Názov z CD. CD ROM.
- AFH40 ŠEBEK, Martin - KOVÁČ, František - PETRYSHYNETS, Ivan - BALKO, Ján. Povrchová modifikácia mikroštruktúry nástrojovej ocele laserovým žiareniom. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 19.5.2015.* - Košice : Ústav materiálového výskumu SAV, 2015, s. 20. ISBN 978-80-89782-02-04.
- AFH41 ŠKANTÁROVÁ, Lenka - ORIŇÁKOVÁ, Renáta - HEČKOVÁ, M. - KVETKOVÁ, Lenka - ORIŇÁK, Andrej. Functional metallic nanoparticles modifying screen-printed carbon electrodes. In *The 2nd International conference on nanomaterials: Fundamentals and applications : Book of abstracts. Košice, 26.-28.10.2015 [elektronický zdroj].* - Košice : NFA, 2015, p. 17. ISBN 978-80-8152-312-0. Názov z CD. CD ROM.
- AFH42 ŠVANČÁRKOVÁ, Anna - GALUSKOVÁ, Dagmar - BALKO, Ján - FIDES, Martin - GALUŠEK, Dušan. Effect of acidic and basic media on mechanical properties and corrosion resistance of dental ceramics = Vplyv zásaditého a kyslého prostredia na mechanické vlastnosti a koróznu odolnosť dentálnej keramiky. In *Joint annual meeting of the Slovak silicate scientific-technological society & workshop*

processing and properties of advanced ceramics : book of extended abstracts. - Košice, Slovak Republic : Institute of Materials Research, 2015, p. 14-18. ISBN 978-80-89782-03-1.

- AFH43 TENEROWICZ, Monika - DUDROVÁ, Eva - KABÁTOVÁ, Margita - SULOWSKI, Maciej. The fractography of sinteraustempered and sinterhardened Fe-3Mn-0.8C PM steels. In *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015.* - Košice : Institute of Materials Research SAS, 2015.
- AFH44 VARGA, M. - MACKO, Ján - STRAŇÁK, P. - KOVAL' Karol - KUPKOVÁ, Miriam - ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej. Modification of metal nanostructures by SAM and effect on next electrodeposition. In *The 2nd International conference on nanomaterials: Fundamentals and applications : Book of abstracts. Košice, 26.-28.10.2015 [elektronický zdroj].* - Košice : NFA, 2015, p. 19. ISBN 978-80-8152-312-0. Názov z CD. CD ROM.

AFHA Abstracts of papers from international conferences in Slovakia

- AFHA01 BALKO, Ján - KOVALČÍKOVÁ, Alexandra - HVIZDOŠ, Pavol. Effect of static partner material on wear characteristics of yttria stabilized zirconia. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 53. ISBN 978-80-970964-8-9.
- AFHA02 BALKO, Ján - HVIZDOŠ, Pavol - HLOCH, S. - KĽOC, Ján - MONKA, Peter. Wear and mechanical properties of various bone cements. In *Local mechanical properties 2014. LMP 2014 : 11th conference on Local mechanical properties. Book of abstracts. Stará Lesná, 12.-14.11.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 30. ISBN 978-80-970964-9-6.
- AFHA03 BALKO, Ján - HVIZDOŠ, Pavol - BALÁZSI, Csaba. Wear damage in silicon nitride composites with graphene and carbon nanotubes. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 54. ISBN 978-80-970964-2-7.
- AFHA04 BALKO, Ján - HVIZDOŠ, Pavol - BALÁZSI, Csaba. Wear damage of silicon nitride/graphene composites. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 54. ISBN 978-80-970964-8-9.
- AFHA05 BALLÓKOVÁ, Beáta - KVAČKAJ, Tibor - HVIZDOŠ, Pavol - BESTERCI, Michal. Fracture analysis of copper processed by equal channel angular rolling. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 50. ISBN 978-80-970964-2-7.
- AFHA06 BESTERCI, Michal - SÜLLEIOVÁ, Katarína - BALLÓKOVÁ, Beáta - VELGOSOVÁ, Oksana - IVAN, Jozef. Failure mechanism of Cu-Al₂O₃ micro and

nanomaterials observed by "in situ tensile test in SEM". In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 52. ISBN 978-80-970964-8-9.

- AFHA07 BIRČÁKOVÁ, Zuzana - KOLLÁR, P. - VOJTEK, V. - BUREŠ, Radovan - FÁBEROVÁ, Mária. Influence of vitroperm content on the energy losses in composite materials based on the mixture of two ferromagnets. In *CSMAG '13 : 15th Czech and Slovak conference on magnetism. Abstracts. Košice, 17.-21.6.2013.* - Košice : PF UPJŠ, 2013, p. 110. ISBN 978-80-8152-015-0.
- AFHA08 BLANDA, Marek - BALKO, Ján - DUSZOVÁ, Annamária - DUSZA, Ján - HVIZDOŠ, Pavol. Hardness and indentation fracture toughness of alumina-silicon carbide nanocomposites. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 53. ISBN 978-80-970964-2-7.
- AFHA09 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - HVIZDOŠ, Pavol - ĎURIŠIN, Juraj. Microstructure of NaNbO₃ thin films prepared by sol-gel method on alumina and silicon substrates. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 22. ISBN 978-80-970964-2-7.
- AFHA10 BRUNCKOVÁ, Helena - MEDVECKÝ, Ľubomír - ĎURIŠIN, Juraj - HVIZDOŠ, Pavol. Particle morphology of perovskite lanthanum tantalate prepared by polymeric complex sol-gel method. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 48. ISBN 978-80-970964-8-9.
- AFHA11 BRZÓZKA, K. - SOVÁK, Pavol - SZUMIATA, T. - KOLLÁR, P. - FÜZER, J. - FÁBEROVÁ, Mária - BUREŠ, Radovan - GÓRKA, B. - GAWROŃSKI, M. - GZIK-SZUMIATA, M. Mössbauer and magnetic study of Fe+vitroperm+plastic system. In *CSMAG '13 : 15th Czech and Slovak conference on magnetism. Abstracts. Košice, 17.-21.6.2013.* - Košice : PF UPJŠ, 2013, p. 133. ISBN 978-80-8152-015-0.
- AFHA12 BUREŠ, Radovan - FÁBEROVÁ, Mária - KOLLÁR, P. - FÜZER, J. Microstructure and fracture of vitroperm based composites. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 23. ISBN 978-80-970964-2-7.
- AFHA13 BUREŠ, Radovan - FÁBEROVÁ, Mária - STREČKOVÁ, Magdaléna - KOLLÁR, P. - FÜZER, J. Structure and properties of hybrid composites based on two different ferromagnets. In *CSMAG '13 : 15th Czech and Slovak conference on magnetism. Abstracts. Košice, 17.-21.6.2013.* - Košice : PF UPJŠ, 2013, p. 127. ISBN 978-80-8152-015-0.

- AFHA14 BUREŠ, Radovan - FÁBEROVÁ, Mária - STREČKOVÁ, Magdaléna. Špecifiká kompaktizácie práškových kompozitných systémov. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 17.5.2013.* - Košice : ÚMV SAV, 2013, s. 17. ISBN 978-80-970964-4-1.
- AFHA15 CSANÁDI, Tamás - BL'ANDA, Marek - DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - DUSZA, Ján. Nanoindentation on differently orientated WC grains in WC-Co hardmaterial. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 50. ISBN 978-80-970964-8-9.
- AFHA16 CSANÁDI, Tamás - BL'ANDA, Marek - DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - DUSZA, Ján. Nano-indentation and micropillar testing of WC grains in WC-Co. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 23. ISBN 978-80-970964-8-9.
- AFHA17 CSANÁDI, Tamás - BL'ANDA, Marek - CHINH, Nguyen Quang - HVIZDOŠ, Pavol - DUSZA, Ján. Orientation dependent hardness and deformation mechanisms under nanoindentation of WC grains. In *Local mechanical properties 2014. LMP 2014 : 11th conference on Local mechanical properties. Book of abstracts. Stará Lesná, 12.-14.11.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 18. ISBN 978-80-970964-9-6.
- AFHA18 DUDROVÁ, Eva - KABÁTOVÁ, Margita. Interpretation of fracture mechanisms and failure in sintered steels. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 21. ISBN 978-80-970964-8-9.
- AFHA19 ĎURIŠINOVÁ, Katarína - ĎURIŠIN, Juraj - OROLÍNOVÁ, Mária - ĎURIŠIN, Martin - SZABÓ, Juraj. Microstructure and mechanical properties of nanocrystalline dispersion strengthened copper. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 36. ISBN 978-80-970964-8-9.
- AFHA20 DUSZOVÁ, Annamária - BL'ANDA, Marek - HVIZDOŠ, Pavol - LOFAJ, František - DUSZA, Ján. Nano-hardness of individual phases in WC-Co cemented carbides. In *Local mechanical properties 2012. LMP 2012 : 9th International conference. Book of abstracts. Levoča, 7.-9.11.2012.* - Košice : Hutecká fakulta TU, 2012, p. 15. ISBN 978-80-553-1163-0.
- AFHA21 DYMÁČEK, Petr - DOBEŠ, Ferdinand - BALLÓKOVÁ, Beáta. Compressive creep testing of MoSi₂-SiC nanocomposites. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 30. ISBN 978-80-970964-8-9.

- AFHA22 DŽUPON, Miroslav - BALKO, Ján - BREZINOVÁ, Janette. Non-destructive diagnostics of the surfaces of tools and sheets. In *Surface Engineering 2014 : Book of abstracts: International scientific conference. High Tatras, 23.-24.10.2014.* - Košice : Technická univerzita, 2014, p. 20. ISBN 978-80-553-1816-5.
- AFHA23 FIAL, C. - DUDROVÁ, Eva - KABÁTOVÁ, Margita - KUPKOVÁ, Miriam - SELECKÁ, Marcela - SULOWSKI, Maciej - CIAS, A. The effects of heat treatment on the microstructure and mechanical properties of sintered Fe-2Cu-1.5Mo-0.5C and Fe-0.2Mo-0.8Mn-1.5Cr-1.5Ni-0.4C steels. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 20. ISBN 978-80-970964-8-9.
- AFHA24 FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. - BUREŠ, Radovan - STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária - DUDROVÁ, Eva - KABÁTOVÁ, Margita - SELECKÁ, Marcela. Komplexná permeabilita kompozitných materiálov na báze železa. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 17.5.2013.* - Košice : ÚMV SAV, 2013, s. 8. ISBN 978-80-970964-4-1.
- AFHA25 GAVENDOVÁ, Petra - KOVÁČ, František - PETRYSHYNETS, Ivan - SOPKO, Martin - MOLNÁROVÁ, Mária. Nanoindentation measurements in non-oriented silicon steel at elevated temperatures. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 93. ISBN 978-80-553-1412-9.
- AFHA26 GIERL, C. - JALILIZIYAEIAN, Maryam - DANNINGER, Herbert - DUDROVÁ, Eva. Impact behaviour of sintered steels prepared from Mn prealloyed powders. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 15. ISBN 978-80-970964-8-9.
- AFHA27 HADRABA, Hynek - STREČKOVÁ, Magdaléna - HUSÁK, Roman - ROUPCOVÁ, Pavla. Mechanical alloying of 80Ni-14.7Fe-4.4Mo-0.5Mn-0.3Si soft magnetic material of permalloy type. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 32. ISBN 978-80-970964-8-9.
- AFHA28 HADRABA, Hynek - HUSÁK, Roman - KUBĚNA, Ivo - BUREŠ, Radovan - FÁBEROVÁ, Mária - STREČKOVÁ, Magdaléna. Preparation of ferritic 17%Cr ODS steel by mechanical alloying from prealloyed steel powder. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 51. ISBN 978-80-970964-8-9.
- AFHA29 HAGAROVÁ, Mária - DZEDZINA, Rastislav - GAVENDOVÁ, Petra. Properties of Ni-Co alloy coating prepared from sulphate bath. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará*

Lesná, 24.-26.4.2013. - Košice : Technical University, 2013, p. 152. ISBN 978-80-553-1412-9.

- AFHA30 HALGAŠ, Radoslav - DUSZA, Ján - KOVÁCSOVÁ, Lucia - KAIFEROVÁ, Jana - MARKOVSKÁ, Neda. Influence of loading conditions on the deformation behaviour of human enamel studied by instrumented indentation. In *Local mechanical properties 2012. LMP 2012 : 9th International conference. Book of abstracts. Levoča, 7.-9.11.2012.* - Košice : Hutnícka fakulta TU, 2012, p. 19. ISBN 978-80-553-1163-0.
- AFHA31 HNATKO, Miroslav - KAŠIAROVÁ, Monika - GALUSKOVÁ, Dagmar - BYSTRICKÝ, Roman - LENČÉŠ, Zoltán - ŠAJGALÍK, Pavol. Corrosion of engineering ceramic materials (silicon nitride and SiAlON) by molten iron. In *SSC 2014. 11th conference on solid state chemistry, Trenčianske Teplice, Slovak Republic, 6-11 july 2014 : book of abstracts.* - Slovak Republic, 2014, p. 138. ISBN 978-80-971648-0-5.
- AFHA32 HOMOLOVÁ, Viera. Prediction of ternary Fe-B-Cr phase diagram. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 26. ISBN 978-80-553-1412-9.
- AFHA33 HOMOLOVÁ, Viera - VÝROSTKOVÁ, Anna. Study of phase equilibria in systems with boron. In *Annual meeting of associated phase diagram and thermodynamics committee APDTC. Trnava, 7.7.2012.* - Trnava : MTF STU, 2012, p. 6.
- AFHA34 HRUBOVČÁKOVÁ, Monika - KUPKOVÁ, Miriam - ZELEŇÁK, Adam - ORIŇÁKOVÁ, Renáta - MOROVSKÁ TUROŇOVÁ, Andrea. Corrosion properties of iron based biodegradable foams. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 45. ISBN 978-80-970964-8-9.
- AFHA35 HRUBOVČÁKOVÁ, Monika - KUPKOVÁ, Miriam - FEDORKOVÁ, Andrea - ORIŇÁKOVÁ, Renáta - ZELEŇÁK, Adam. Effect of silver content on microstructure and corrosion behavior of material prepared from silver coated iron powder. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 136. ISBN 978-80-553-1412-9.
- AFHA36 HRUBOVČÁKOVÁ, Monika - KUPKOVÁ, Miriam - FEDORKOVÁ, Andrea - ORIŇÁKOVÁ, Renáta. Microstructure and corrosion behavior of materials prepared from Ag coated iron powder. In *1st international conference on nanomaterials: fundamentals and applications : Book of abstracts. Štrbské Pleso, 3.-6.10.2012.* - Košice : NFA, 2012. ISBN 978-80-7097-970-9.
- AFHA37 HRUBOVČÁKOVÁ, Monika - DUDROVÁ, Eva - KABÁTOVÁ, Margita. Oxide reduction processes, microstructure and properties of sintered chromium pre-alloyed steel. In *Metallography 2013 : 15th international symposium on*

metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013. - Košice : Technical University, 2013, p. 133. ISBN 978-80-553-1412-9.

- AFHA38 HVIŠČOVÁ, Petra - KVETKOVÁ, Lenka - LOFAJ, František - NOVÁK, Michal - PODOBA, Rudolf - FERDINANDY, Milan. Mechanical and tribological properties of HiPIMS and HiTUS W-C based coatings. In *Local mechanical properties 2014. LMP 2014 : 11th conference on Local mechanical properties. Book of abstracts. Stará Lesná, 12.-14.11.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 63. ISBN 978-80-970964-9-6.
- AFHA39 JAKUBÉCZYOVÁ, Dagmar - BALLÓKOVÁ, Beáta. Analyse of tribological properties of multi- and nanocomposite coating applied on PM substrate. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 33. ISBN 978-80-970964-8-9.
- AFHA40 JAKUBÉCZYOVÁ, Dagmar - KOČÍK, Marek - HVIZDOŠ, Pavol. Aplikácia fraktografie na hodnotenie kompozitných vrstiev. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, s. 44. ISBN 978-80-970964-2-7.
- AFHA41 JAKUBÉCZYOVÁ, Dagmar - ZUBKO, Pavol - HAGAROVÁ, Mária - ZUBKO, Juraj. Assessment of local mechanical properties of thin coatings prepared by arc evaporation. In *Local mechanical properties 2012. LMP 2012 : 9th International conference. Book of abstracts. Levoča, 7.-9.11.2012.* - Košice : Huteňská fakulta TU, 2012, p. 27. ISBN 978-80-553-1163-0.
- AFHA42 KABÁTOVÁ, Margita - FÜZER, J. - FÜZEROVÁ, Jana - DUDROVÁ, Eva - KOLLÁR, P. Fe/SiO₂/resin soft magnetic composite powder materials prepared by mixing and vacuum/pressure impregnation. In *CSMAG '13 : 15th Czech and Slovak conference on magnetism. Abstracts. Košice, 17.-21.6.2013.* - Košice : PF UPJŠ, 2013, p. 123. ISBN 978-80-8152-015-0.
- AFHA43 KABÁTOVÁ, Margita - DUDROVÁ, Eva - FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. Microstructure of iron/SiO₂/resin composites prepared by vacuum/pressure impregnation. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 140. ISBN 978-80-553-1412-9.
- AFHA44 KABÁTOVÁ, Margita - BRUNCKOVÁ, Helena - DUDROVÁ, Eva. Microstructure of sintered composites based on iron phosphated powder. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 135. ISBN 978-80-553-1412-9.
- AFHA45 KABÁTOVÁ, Margita - DUDROVÁ, Eva - FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. Preparation, microstructure and properties of the SMCs Fe/(0.4-2.6)%SiO₂/polymer. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* -

Košice : Institute of Materials Research SAS, 2014, p. 49. ISBN
978-80-970964-8-9.

- AFHA46 KABÁTOVÁ, Margita - FÜZER, J. - FÜZEROVÁ, Jana - DUDROVÁ, Eva - KOLLÁR, P. SEM analysis of Fe/SiO₂/shellac powder composites prepared by vacuum/pressure impregnation and mixing. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 40. ISBN 978-80-970964-2-7.
- AFHA47 KAŠIAROVÁ, Monika - PRAMUKOVÁ, Zuzana - GHILLÁNYOVÁ, Katarína - HNATKO, Miroslav - DUSZA, Ján - ŠAJGALÍK, Pavol. Mechanical properties of porous silicon nitride. In *Local mechanical properties 2012. LMP 2012 : 9th International conference. Book of abstracts. Levoča, 7.-9.11.2012.* - Košice : Hutnícka fakulta TU, 2012, p. 33. ISBN 978-80-553-1163-0.
- AFHA48 KAŠIAROVÁ, Monika - GHILLÁNYOVÁ, Katarína - PRAMUKOVÁ, Zuzana - HNATKO, Miroslav - DUSZA, Ján - ŠAJGALÍK, Pavol. Mechanical properties of the porous Si₃N₄ ceramics. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 49. ISBN 978-80-970964-2-7.
- AFHA49 KAŠIAROVÁ, Monika - MICHÁLKOVÁ, Monika - DUSZA, Ján - ŠAJGALÍK, Pavol. Scratch resistance of the Si₃N₄-graphene nanoplatelets composites. In *Local mechanical properties 2014. LMP 2014 : 11th conference on Local mechanical properties. Book of abstracts. Stará Lesná, 12.-14.11.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 63. ISBN 978-80-970964-9-6.
- AFHA50 KOLLÁR, P. - BIRČÁKOVÁ, Zuzana - FÜZER, J. - FÁBEROVÁ, Mária - BUREŠ, Radovan. Magnetické straty kompozitných materiálov na báze železa. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 17.5.2013.* - Košice : ÚMV SAV, 2013, s. 7. ISBN 978-80-970964-4-1.
- AFHA51 KOVAL' Vladomír. Impendačná spektroskopia kompozitov. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 17.5.2013.* - Košice : ÚMV SAV, 2013, s. 10-11. ISBN 978-80-970964-4-1.
- AFHA52 KOVALČÍKOVÁ, Alexandra - DUSZA, Ján. Characteristics of fracture origins in SiC based ceramics. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 51. ISBN 978-80-970964-2-7.
- AFHA53 KOVALČÍKOVÁ, Alexandra - BALKO, Ján - BALÁZSI, Csaba - HVIZDOŠ, Pavol - DUSZA, Ján. Mechanical and tribological properties of hBN/Si₃N₄ ceramics composites. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 24. ISBN 978-80-970964-8-9.

- AFHA54 KRYLOV, A.I. - SMIRNOV, Valeryi V. - SMIRNOV, Sergey V. - ANTONOVA, Olga S. - GOLDBERG, Margarita A. - LYSENKO, Anton S. - SHVORNEVA, L.I. - MEDVECKÝ, Ľubomír - ĎURIŠIN, Juraj - BARINOV, S.M. Study of sintering and microstructure of composite materials based on system zirconia-aluminia containing fluorhydroxyapatite. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 43. ISBN 978-80-970964-8-9.
- AFHA55 KUPKOVÁ, Miriam - ZELEŇÁK, Adam - ORIŇÁKOVÁ, Renáta. Hardness of sintered samples with microgradient structure. In *Local mechanical properties 2012. LMP 2012 : Book of abstracts. Levoča, 2012.* - Košice : Hutička fakulta TU, 2012, p. 40. ISBN 978-80-553-1163-0.
- AFHA56 KUPKOVÁ, Miriam - ORIŇÁKOVÁ, Renáta - FEDORKOVÁ, Andrea - KUPKA, Martin - HRUBOVČÁKOVÁ, Monika. PM materials prepared from powders consisting of polymer coated iron microparticles. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 134. ISBN 978-80-553-1412-9.
- AFHA57 KUPKOVÁ, Miriam - ORIŇÁKOVÁ, Renáta - FILKUSOVÁ, M. - BALAZSI, K. - ZELEŇÁK, Adam. Properties of PM materials prepared from iron microparticles coated with a composite copper-carbon nanotubes layer. In *1st international conference on nanomaterials: fundamentals and applications : Book of abstracts. Štrbské Pleso, 3.-6.10.2012.* - Košice : NFA, 2012. ISBN 978-80-7097-970-9.
- AFHA58 KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - ZELEŇÁK, Adam. Structure and compressive properties of iron and iron-phosphorus PM foams. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 46. ISBN 978-80-970964-8-9.
- AFHA59 KVETKOVÁ, Lenka - KAŠIAROVÁ, Monika - DORČÁKOVÁ, Františka - DUSZA, Ján - KUN, Péter - BALÁZSI, Csaba. Fracture mechanism in Si₃N₄ - graphene platelets composites. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 43. ISBN 978-80-970964-2-7.
- AFHA60 LAUDA, M. - FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. - STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária. Magnetic properties of soft magnetic FeSi composite powder cores. In *CSMAG '13 : 15th Czech and Slovak conference on magnetism. Abstracts. Košice, 17.-21.6.2013.* - Košice : PF UPJŠ, 2013, p. 129. ISBN 978-80-8152-015-0.
- AFHA61 LOFAJ, František - DUSZA, Ján - DUSZOVÁ, Annamária. The evolution of the indent morphology in WC-Co during indentation fatigue using AFM. In *Local mechanical properties 2012. LMP 2012 : 9th International conference. Book of*

abstracts. Levoča, 7.-9.11.2012. - Košice : Hutnícka fakulta TU, 2012, p. 41. ISBN 978-80-553-1163-0.

- AFHA62 MATOUŠEK, Tomáš - PONÍŽIL, Petr - BUREŠ, Radovan - FÁBEROVÁ, Mária. Estimation of resin distribution in sintered powder material. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012. - Košice : Ústav materiálového výskumu SAV, 2012, p. 55. ISBN 978-80-970964-2-7.*
- AFHA63 MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária. In-vitro charakterizácia a degradácia polyhydroxybutyrát-chitosanových kompozítov. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 17.5.2013. - Košice : ÚMV SAV, 2013, s. 6. ISBN 978-80-970964-4-1.*
- AFHA64 MILKOVIČ, Ondrej - SAKSL, Karel - HAGAROVÁ, Mária - MICHALIK, Štefan - GAMCOVÁ, Jana. Structure characterisation of electrodeposited Ni-Co alloy. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013. - Košice : Technical University, 2013, p. 102. ISBN 978-80-553-1412-9.*
- AFHA65 MORGIEL, Jerzy - DUSZA, Ján. TEM and HRTEM analyses of ceramic nanocomposites. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013. - Košice : Technical University, 2013, p. 78. ISBN 978-80-553-1412-9.*
- AFHA66 NÉMETH, Dušan - LOFAJ, František - KUČERA, Ján. FEA of the cortical bone thickness effect on the stress distribution in dental implants. In *Local mechanical properties 2014. LMP 2014 : 11th conference on Local mechanical properties. Book of abstracts. Stará Lesná, 12.-14.11.2014. - Košice : Institute of Materials Research SAS, 2014, p. 53. ISBN 978-80-970964-9-6.*
- AFHA67 NOVÁK, Michal - LOFAJ, František - HVIŠCOVÁ, Petra - PODOBA, Rudolf - SAHUL, Martin - ČAPLOVIČ, Ľubomír. Nanohardness of DC magnetron sputtered W-C coatings as a function of composition and residual stresses. In *Local mechanical properties 2014. LMP 2014 : 11th conference on Local mechanical properties. Book of abstracts. Stará Lesná, 12.-14.11.2014. - Košice : Institute of Materials Research SAS, 2014, p. 13. ISBN 978-80-970964-9-6.*
- AFHA68 ORIŇÁKOVÁ, Renáta - ORIŇÁK, Andrej - KUPKOVÁ, Miriam - HRUBOVČÁKOVÁ, Monika - FEDORKOVÁ, Andrea - MOROVSKÁ TUROŇOVÁ, Andrea. Štúdium degradácie biologicky odbúrateľných kovových materiálov. In *ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 65. Zjazd chemikov : Tatranské Matliare : 9. - 13. 9. 2013, 2013, roč. 9, č. 1, s. 73-74. ISSN 1336-7242.*
- AFHA69 OROLÍNOVÁ, Mária - ĎURIŠIN, Juraj - ĎURIŠINOVÁ, Katarína - DANKOVÁ, Zuzana - ĎURIŠIN, Martin - SZABÓ, Juraj. Thermal stability of Cu-Al₂O₃ and CuCr material. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014. -*

Košice : Institute of Materials Research SAS, 2014, p. 37. ISBN 978-80-970964-8-9.

AFHA70 OSTROUSHKO, Dmytro - MAZANCOVÁ, Eva - SAKSL, Karel. Phase analysis explosive weld ED Ti-Cr/Ni steel in as-received state and after heat treatment using synchrotron (BW-S). In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 46. ISBN 978-80-553-1412-9.

AFHA71 PETRYSHYNETS, Ivan - KOVÁČ, František - MOLNÁROVÁ, Mária - GAVENDOVÁ, Petra - SOPKO, Martin - PETROV, Branislav. Columnar grain growth with enhanced rotation texture in temper rolled NO silicon steels. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 92. ISBN 978-80-553-1412-9.

AFHA72 PETRYSHYNETS, Ivan - KOVÁČ, František - MARCIN, Jozef - ŠKORVÁNEK, Ivan. Improved processing technique for preparation of non-oriented electrical steels with low coercivity. In *CSMAG '13 : 15th Czech and Slovak conference on magnetism. Abstracts. Košice, 17.-21.6.2013.* - Košice : PF UPJŠ, 2013, p. 157. ISBN 978-80-8152-015-0.

AFHA73 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Local mechanical properties of highly porous Si₃N₄ for trabecular bone replacement. In *Local mechanical properties 2014. LMP 2014 : 11th conference on Local mechanical properties. Book of abstracts. Stará Lesná, 12.-14.11.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 61. ISBN 978-80-970964-9-6.

AFHA74 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Preparation and properties of silicon nitride cellular biomaterials for bone replacement. In *SSC 2014. 11th conference on solid state chemistry, Trenčianske Teplice, Slovak Republic, 6-11 july 2014 : book of abstracts.* - Slovak Republic, 2014, p. 147. ISBN 978-80-971648-0-5.

AFHA75 SHVAB, Ruslan - DUDROVÁ, Eva - HVIZDOŠ, Pavol - BERGMAN, Ola - BENGTSSON, Sven. Fracture of high chromium alloyed PM steel at room and high temperature tensile test. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 42. ISBN 978-80-970964-2-7.

AFHA76 SHVAB, Ruslan - HVIZDOŠ, Pavol - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. Local mechanical properties of cast and sintered high Cr-alloyed steel. In *Local mechanical properties 2012. LMP 2012 : 9th International conference. Book of abstracts. Levoča, 7.-9.11.2012.* - Košice : Hutecká fakulta TU, 2012, p. 65. ISBN 978-80-553-1163-0.

AFHA77 SHVAB, Ruslan - HRYHA, Eduard - SHYKULA, Petro - DUDROVÁ, Eva - BERGMAN, Ola - BENGTSSON, Sven. Metallographic study of microstructure of

high Cr-alloyed sintered steel. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 75. ISBN 978-80-553-1412-9.

- AFHA78 SHVAB, Ruslan - HRYHA, Eduard - SHYKULA, Petro - BERGMAN, Ola - DUDROVÁ, Eva - BENGTSSON, Sven. Prediction, formation and analysis of microstructure of high chromium-alloyed PM stainless steel sintered in different atmospheres. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 18. ISBN 978-80-970964-8-9.
- AFHA79 SMIRNOV, Valeryi V. - SMIRNOV, Sergey V. - KRYLOV, A.I. - ANTONOVA, Olga S. - GOLDBERG, Margarita A. - SHVORNEVA, L.I. - TITOV, D.D. - MEDVECKÝ, Ľubomír - BAIKIN, Alexander - BARINOV, S.M. Ceramics based on zirconia with a low sintering temperature. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 25. ISBN 978-80-970964-8-9.
- AFHA80 SOPKO, Martin - KOVÁČ, František - PETRYSHYNETS, Ivan - MOLNÁROVÁ, Mária - GAVENDOVÁ, Petra. Differential scanning calorimetry and metallographic analysis of Fe-Si electrical steel. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 88. ISBN 978-80-553-1412-9.
- AFHA81 SOPKO, Martin - MILKOVIČ, Ondrej - NIŽNÍK, Štefan - ŠKORVÁNEK, Ivan. Structure and magnetic properties of iron/iron-oxide nanoparticles prepared by precipitation from solid state solution. In *CSMAG '13 : 15th Czech and Slovak conference on magnetism. Abstracts. Košice, 17.-21.6.2013.* - Košice : PF UPJŠ, 2013, p. 192. ISBN 978-80-8152-015-0.
- AFHA82 STREČKOVÁ, Magdaléna - BUREŠ, Radovan - FÁBEROVÁ, Mária. Elektroizolačné povlaky v magneticky mäkkých kompozitoch. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 17.5.2013.* - Košice : ÚMV SAV, 2013, s. 16. ISBN 978-80-970964-4-1.
- AFHA83 STREČKOVÁ, Magdaléna - BUREŠ, Radovan - FÁBEROVÁ, Mária. Characterization of soft magnetic materials based on different ferromagnetic material. In *Local mechanical properties 2012. LMP 2012 : 9th International conference. Book of abstracts. Levoča, 7.-9.11.2012.* - Košice : Hutecká fakulta TU, 2012, p. 67. ISBN 978-80-553-1163-0.
- AFHA84 STREČKOVÁ, Magdaléna - BAŤKOVÁ, Marianna - BAŤKO, Ivan - HADRABA, Hynek - BUREŠ, Radovan. Imaging of magnetic domains and domain walls in spherical Fe-Si powder using magnetic force microscopy. In *CSMAG '13 : 15th Czech and Slovak conference on magnetism. Abstracts. Košice, 17.-21.6.2013.* - Košice : PF UPJŠ, 2013, p. 97. ISBN 978-80-8152-015-0.

- AFHA85 STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária - BUREŠ, Radovan. On the improvement of mechanical properties of the soft magnetic composite through different hybrid inorganic-organic insulating coatings. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 23. ISBN 978-80-970964-2-7.
- AFHA86 STREČKOVÁ, Magdaléna - HADRABA, Hynek - ROUPCOVÁ, Pavla - BUREŠ, Radovan. Soft magnetic composite base on ferromagnetic core and NiFe₂O₄ shell. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 31. ISBN 978-80-970964-8-9.
- AFHA87 SULOWSKI, Maciej - KABÁTOVÁ, Margita - DUDROVÁ, Eva. The effect of sintering atmosphere on the microstructure, properties and fracture behaviour of Cr-Mn low-alloyed sintered steels. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 47. ISBN 978-80-970964-2-7.
- AFHA88 VOJTKO, Marek - ZUBKO, Pavol - ĎURIŠIN, Martin. Use of decomposition of non-termoelastic martensite for structural changes of CuZnAl shape memory alloys. In *Metallography 2013 : 15th international symposium on metallography. Abstract booklet. Stará Lesná, 24.-26.4.2013.* - Košice : Technical University, 2013, p. 132. ISBN 978-80-553-1412-9.
- AFHA89 ZELEŇÁK, Adam - KUPKOVÁ, Miriam. Hardness of sintered Fe-Mn samples with microgradient structure. In *Local mechanical properties 2014. LMP 2014 : 11th conference on Local mechanical properties. Book of abstracts. Stará Lesná, 12.-14.11.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 62. ISBN 978-80-970964-9-6.
- AFHA90 ZELEŇÁK, Adam - KUPKOVÁ, Miriam - GEORGIEV, Jordan Stefanov - ORIŇÁKOVÁ, Renáta. Hardness of sintered PM materials with microgradients in composition. In *Fraktografia - Fractography 2012 : International conference. Book of abstracts. Stará Lesná, 21.-24.10.2012.* - Košice : Ústav materiálového výskumu SAV, 2012, p. 33. ISBN 978-80-970964-2-7.
- AFHA91 ZELEŇÁK, Adam - HRUBOVČÁKOVÁ, Monika - KUPKOVÁ, Miriam - FEDORKOVÁ, Andrea - ORIŇÁKOVÁ, Renáta. Spekané biologicky odbúrateľné materiály na báze práškového železa. In *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou. Zborník abstraktov. Košice, 17.5.2013.* - Košice : ÚMV SAV, 2013, s. 15. ISBN 978-80-970964-4-1.
- AFHA92 ZELEŇÁK, Adam. The impact of microgradient structure on the mechanical properties of investigated systems. In *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* - Košice : Institute of Materials Research SAS, 2014, p. 47. ISBN 978-80-970964-8-9.

AFHB Abstracts of papers from domestic conferences

- AFHB01 BALKO, Ján - HVIZDOŠ, Pavol - BALÁZSI, Csaba. Opotrebenie kompozitov Si₃N₄/grafén pri izbovej a zvýšených teplotách = Wear damage of Si₃N₄/graphene composites at room and elevated temperatures. In *Príprava a vlastnosti progresívnych keramických materiálov, odborný seminár, 18.-19. november 2013 : zborník rozšírených abstraktov. Ružín, 18.-19.11.2013.* - Bratislava : Ústav anorganickej chémie SAV, 2013, s. 6-7. ISBN 978-80-971499-4-9.
- AFHB02 BALKO, Ján - HVIZDOŠ, Pavol - BALÁZSI, Csaba. Tribological testing of silicon nitride composites with graphene and carbon nanotubes. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 6. ISBN 978-80-970964-3-4.
- AFHB03 BLĀNDA, Marek - BALKO, Ján - DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - DUSZA, Ján - RAVERON, Helen. Hardness of alumina-silicon carbide nanocomposites. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 7. ISBN 978-80-970964-3-4.
- AFHB04 BLĀNDA, Marek - CSANÁDI, Tamás - DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - DUSZA, Ján - FARYNA, Marek - MORGIEL, Jerzy. Vplyv orientácie zrn na ich tvrdosť v systéme WC-9CO = Effect of grain orientation on their hardness in WC-9CO system. In *Príprava a vlastnosti progresívnych keramických materiálov, odborný seminár. : zborník rozšírených abstraktov. Ružín, 18.-19.11.2013.* - Bratislava : Ústav anorganickej chémie SAV, 2013, s. 8-10. ISBN 978-80-971499-4-9.
- AFHB05 BUREŠ, Radovan - FÁBEROVÁ, Mária - KOVAL, Vladimír - KOLLÁR, P. - FÜZER, J. - BIRČÁKOVÁ, Zuzana. Vplyv veľkosti častíc na vlastnosti magneticky mäkkých kompozitov. In *Progresívne magnetické materiály : Zborník abstraktov. Košice, 25.10.2013.* - Košice : Ústav materiálového výskumu SAV, 2013, s. 17. ISBN 978-80-970964-6-5.
- AFHB06 CSANÁDI, Tamás - BLĀNDA, Marek - DUSZOVÁ, Annamária - HVIZDOŠ, Pavol - DUSZA, Ján. Investigation of WC monocrystals in WC-Co composite using nanoindentation and AFM techniques = Štúdium monokryštálov WC vo WC-Co kompozitoch použitím nanoindentácie a AFM techník. In *Príprava a vlastnosti progresívnych keramických materiálov, odborný seminár : zborník rozšírených abstraktov. Ružín, 18.-19.11.2013.* - Bratislava : Ústav anorganickej chémie SAV, 2013, p. 11-14. ISBN 978-80-971499-4-9.
- AFHB07 DOMANICKÁ, Magdaléna - BODIŠOVÁ, Katarína - LENČÉŠ, Zoltán - PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - HNATKO, Miroslav - ŠAJGALÍK, Pavol. Príprava pórovitej keramiky na báze nitridu kremičitého replikačnou metódou pre bioaplikácie = Preparation of porous silicon nitride based ceramics by the replica method for bioapplication. In *Príprava a vlastnosti progresívnych keramických materiálov. Odborný seminár. Ružín, 18.-19. november 2013 : zborník rozšírených abstraktov.* - Bratislava : Ústav anorganickej chémie SAV, 2013, s. 15-16. ISBN 978-80-971499-4-9.

- AFHB08 DUSZOVÁ, Annamária - HALGAŠ, Radoslav - BLANDA, Marek - PRIPUTEN, Martin - HVIZDOŠ, Pavol - LOFAJ, František - DUSZA, Ján. Hardness anisotropy in individual grains of WC-Co cemented carbides. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 12. ISBN 978-80-970964-3-4.
- AFHB09 FÁBEROVÁ, Mária - BUREŠ, Radovan - KABÁTOVÁ, Margita - STREČKOVÁ, Magdaléna. Kompaktizácia práškového systému Fe/MgO. In *Progresívne magnetické materiály : Zborník abstraktov. Košice, 25.10.2013.* - Košice : Ústav materiálového výskumu SAV, 2013, s. 16. ISBN 978-80-970964-6-5.
- AFHB10 FERDINANDY, Milan - LOFAJ, František - DUSZA, Ján. Preparation of WC coatings by W(CO)₆ decomposition using PE CVD. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 13. ISBN 978-80-970964-3-4.
- AFHB11 GAALOVÁ, Petra - ŠIMÁKOVÁ, Anna - GALUSKOVÁ, Dagmar - LOFAJ, František - GALUŠEK, Dušan. Biomaterials for dental replacements - mechanisms and kinetics of corrosion. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 14. ISBN 978-80-970964-3-4.
- AFHB12 HADRABA, Hynek - STREČKOVÁ, Magdaléna - ROUPCOVÁ, Pavla - HUSÁK, Roman. Příprava magneticky měkké slitiny Ni-Fe typu Permalloy : mechanickým legováním v tuhém stavu. In *Progresívne magnetické materiály : Zborník abstraktov. Košice, 25.10.2013.* - Košice : Ústav materiálového výskumu SAV, 2013, s. 15. ISBN 978-80-970964-6-5.
- AFHB13 HALGAŠ, Radoslav - DUSZA, Ján. Influence of loading conditions on the deformation behaviour of human enamel studied by instrumented indentation. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 17. ISBN 978-80-970964-3-4.
- AFHB14 HEGEDÜSOVÁ, Lucia - CENIGA, Ladislav - DUSZA, Ján. Contact strength and crack formation in laminar ceramics. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 35. ISBN 978-80-970964-3-4.
- AFHB15 HEGEDÜSOVÁ, Lucia - DUSZA, Ján. Laminar ceramics - contact strength and crack formation = Laminárna keramika - kontaktná pevnosť a tvorba trhlín. In *Príprava a vlastnosti progresívnych keramických materiálov, odborný seminár : zborník rozšírených abstraktov. Ružín, 18.-19.11.2013.* - Bratislava : Ústav anorganickej chémie SAV, 2013, p. 23-25. ISBN 978-80-971499-4-9.
- AFHB16 HNATKO, Miroslav - BODIŠOVÁ, Katarína - DOMANICKÁ, Magdaléna - ŠAJGALÍK, Pavol - LOFAJ, František - VOJTAŠŠÁK, Ján. Characterizations and in vitro assessment of the cytotoxicity and genotoxicity of a novel Si₃N₄ porous

ceramics. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 18. ISBN 978-80-970964-3-4.

- AFHB17 HORŇÁK, Peter - FERDINANDY, Milan - LOFAJ, František. Vplyv podmienok depozície nanokompozitných WC-C povlakov na ich nanotvrdoť a tribologické vlastnosti = Influence of deposition conditions of nanocomposite WC-C coatings on their nanohardness and tribological properties. In *Príprava a vlastnosti progresívnych keramických materiálov, odborný seminár : zborník rozšírených abstraktov. Ružín, 18.-19.11.2013.* - Bratislava : Ústav anorganickej chémie SAV, 2013, s. 26-28. ISBN 978-80-971499-4-9.
- AFHB18 HVIŠČOVÁ, Petra - NOVÁK, Michal - LOFAJ, František. Porovnanie nanotvrdoť a trenia povlakov na báze WC a CrN = Comparison of nanohardness and friction behaviour of WC and CrN coatings. In *Príprava a vlastnosti progresívnych keramických materiálov. Odborný seminár. Ružín, 18.-19. november 2013 : zborník rozšírených abstraktov.* - Bratislava : Ústav anorganickej chémie SAV, 2013, s. 32-34. ISBN 978-80-971499-4-9.
- AFHB19 HVIŠČOVÁ, Petra - LOFAJ, František - NOVÁK, Michal. The comparison of different PVD technologies of W-C and B₆O thin films on their composition and nanohardness. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 20. ISBN 978-80-970964-3-4.
- AFHB20 HVIZDOŠ, Pavol - BALKO, Ján. Wear of ZrO₂ and Al₂O₃ based composites prepared by EPD. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 21. ISBN 978-80-970964-3-4.
- AFHB21 KABÁTOVÁ, Margita - DUDROVÁ, Eva - SELECKÁ, Marcela - FÜZER, J. - FÜZEROVÁ, Jana - KOLLÁR, P. Magneticky mäkké kompozity pripravené vákuovo/tlakovou impregnáciou. In *Progresívne magnetické materiály : Zborník abstraktov. Košice, 25.10.2013.* - Košice : Ústav materiálového výskumu SAV, 2013, s. 18. ISBN 978-80-970964-6-5.
- AFHB22 KAŠIAROVÁ, Monika - MICHÁLKOVÁ, Monika - TATARKO, Peter - ŠAJGALÍK, Pavol. Pevnosť v štvorbodovom ohybe materiálov Si₃N₄-7hm.%GNP pripravených rôznymi metódami = Bending strength of Si₃N₄-7wt.%GNP prepared by different processing routes. In *Príprava a vlastnosti progresívnych keramických materiálov. Odborný seminár. Ružín, 18.-19. november 2013 : zborník rozšírených abstraktov.* - Bratislava : Ústav anorganickej chémie SAV, 2013, s. 38-39. ISBN 978-80-971499-4-9.
- AFHB23 KAŠIAROVÁ, Monika - BURÍK, Peter - TATARKO, Peter - ŠAJGALÍK, Pavol - DUSZA, Ján. Thermal shock resistance of Si₃N₄-SiC sintered with different rare-earth oxide additives. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 22. ISBN 978-80-970964-3-4.

- AFHB24 KOVALČÍKOVÁ, Alexandra - BALKO, Ján - BALÁZSI, Csaba - DUSZA, Ján - HVIZDOŠ, Pavol. Influence of H-BN content on mechanical properties and wear resistance of BN/Si₃N₄ composites = Vplyv prídatku H-BN na mechanické vlastnosti a odolnosť voči opotrebeniu BN/Si₃N₄ kompozitov. In *Príprava a vlastnosti progresívnych keramických materiálov, odborný seminár : zborník rozšírených abstraktov. Ružín, 18.-19.11.2013.* - Bratislava : Ústav anorganickej chémie SAV, 2013, p. 42-43. ISBN 978-80-971499-4-9.
- AFHB25 KOVALČÍKOVÁ, Alexandra - DUSZA, Ján. Tribological properties of silicon carbide ceramics. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 24. ISBN 978-80-970964-3-4.
- AFHB26 KVETKOVÁ, Lenka - DUSZA, Ján. Characterization of Si₃N₄ with graphene platelets. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 25. ISBN 978-80-970964-3-4.
- AFHB27 KVETKOVÁ, Lenka - DUSZOVÁ, Annamária - KAŠIAROVÁ, Monika - DORČÁKOVÁ, Františka - DUSZA, Ján - BALÁZSI, Csaba. Influence of processing on fracture toughness of Si₃N₄ + graphene platelet composites = Vplyv spracovania na lomovú húževnatosť Si₃N₄ + s grafénovými platičkami. In *Príprava a vlastnosti progresívnych keramických materiálov, odborný seminár : zborník rozšírených abstraktov. Ružín, 18.-19.11.2013.* - Bratislava : Ústav anorganickej chémie SAV, 2013, p. 44-47. ISBN 978-80-971499-4-9.
- AFHB28 NÉMETH, Dušan - LOFAJ, František - KUČERA, Ján - IVANČO, Vladimír. Modelovanie napäti v dentálnom implantáte a kosti = Modeling of stress distribution in dental implant and bone. In *Príprava a vlastnosti progresívnych keramických materiálov. Odborný seminár. Ružín, 18.-19. november 2013 : zborník rozšírených abstraktov.* - Bratislava : Ústav anorganickej chémie SAV, 2013, s. 48-52. ISBN 978-80-971499-4-9.
- AFHB29 NOVÁK, Michal - LOFAJ, František. Nanoindentation studies of WC/C coatings prepared by different techniques of magnetron sputtering. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012.* - Košice : Institute of Materials Research SAS, 2012, p. 29. ISBN 978-80-970964-3-4.
- AFHB30 NOVÁK, Michal - LOFAJ, František - HVIŠČOVÁ, Petra. Rozličné indentačné podmienky a ich vplyv na hĺbkové profily nanotvrdosti tenkých W-C povlakov = Different indentation conditions and their influence on nanohardness depth profiles of thin W-C coatings. In *Príprava a vlastnosti progresívnych keramických materiálov, Odborný seminár. Ružín, 18.-19. november 2013 : zborník rozšírených abstraktov.* - Bratislava : Ústav anorganickej chémie SAV, 2013, s. 53-56. ISBN 978-80-971499-4-9.
- AFHB31 PARCHOVIANSKÝ, Milan - GALUSEK, Dušan - SEDLÁČEK, Jaroslav - KAŠIAROVÁ, Monika. Microstructure, mechanical properties and creep behavior of hot pressed Al₂O₃/SiC micro/nano composites. In *Progress in advanced ceramic*

materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012. - Košice : Institute of Materials Research SAS, 2012, p. 30. ISBN 978-80-970964-3-4.

AFHB32 PARCHOVIAŃSKÝ, Milan - GALUSEK, Dušan - SEDLÁČEK, Jaroslav - ŠVANČAREK, Peter - KAŠIAROVÁ, Monika - DUSZA, Ján - ŠAJGALÍK, Pavol. Mikroštruktúra, mechanické a funkčné vlastnosti a vysokoteplotné správanie Al₂O₃/SiC mikro/nano kompozitov = Microstructure, mechanical and functional properties and creep behavior of Al₂O₃/SiC micro/nano composites. In *Príprava a vlastnosti progresívnych keramických materiálov. Odborný seminár. Ružín, 18.-19. november 2013 : zborník rozšírených abstraktov.* - Bratislava : Ústav anorganickej chémie SAV, 2013, s. 57-58. ISBN 978-80-971499-4-9.

AFHB33 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - BODIŠOVÁ, Katarína - HNATKO, Miroslav - DUSZA, Ján - ŠAJGALÍK, Pavol - GROMOŠOVÁ, Silvia. Mechanical properties of biomaterials based on Si₃N₄. In *Progress in advanced ceramic materials : Workshop. Book of abstracts. Ružín-Košice, 27.-28.11.2012. - Košice : Institute of Materials Research SAS, 2012, p. 34. ISBN 978-80-970964-3-4.*

AFHB34 PRAMUKOVÁ, Zuzana - KAŠIAROVÁ, Monika - DOMANICKÁ, Magdaléna - ŠAJGALÍK, Pavol. Mikroštruktúra a mechanické vlastnosti biomateriálov na báze nitridu kremičitého = Microstructure and mechanical properties of silicon nitride based biomaterials. In *Príprava a vlastnosti progresívnych keramických materiálov. Odborný seminár. Ružín, 18.-19. november 2013 : zborník rozšírených abstraktov.* - Bratislava : Ústav anorganickej chémie SAV, 2013, s. 66-68. ISBN 978-80-971499-4-9.

AFHB35 STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária - BUREŠ, Radovan - HADRABA, Hynek - ROUPCOVÁ, Pavla. Magneticky mäkké kompozity pozostávajúce z feromagnetických práškových častíc povlakovaných elektroizolačnou vrstvou. In *Progresívne magnetické materiály : Zborník abstraktov. Košice, 25.10.2013. - Košice : Ústav materiálového výskumu SAV, 2013, s. 14. ISBN 978-80-970964-6-5.*

AFHB36 VÝROSTKOVÁ, Anna - PECHA, Jozef - ČIRIPOVÁ, Lucia - FALAT, Ladislav - HOMOLOVÁ, Viera. Trhliny vo zvarových spojoch materiálu T24. In *Odborný seminár ŽP VVC : Zborník abstraktov. Tále, 26.-27.9.2013. - Podbrezová : Železiarne Podbrezová, 2013, s. 36-37.*

AFL Domestic conferences posters

AFL01 FIDES, Martin - HVIZDOŠ, Pavol - NOVÁK, Michal. Nanoindentation of (Ti, Ta) carbonitride cermets with various cobalt based binders prepared by mechanochemistry. In *Preparation of ceramic materials : Proceedings of the 11th international conference. Herľany, 9.-11.6.2015. - Košice : Technical University, 2015, p. 145-147. ISBN 978-80-553-2122-6.*

AFL02 SEDLÁK, Richard - KOVALČÍKOVÁ, Alexandra - PRAMUKOVÁ, Zuzana - RUTKOWSKI, Paweł - DUSZA, Ján. Microstructure and basic mechanical properties of Si₃N₄ + graphene platelets composites. In *Preparation of ceramic*

materials : Proceedings of the 11th international conference. Herľany, 9.-11.6.2015.
- Košice : Technical University, 2015, p. 131-133. ISBN 978-80-553-2122-6.

AFL03 SOPČÁK, Tibor - MEDVECKÝ, Ľubomír - ŠTULAJTEROVÁ, Radoslava -
ĎURIŠIN, Juraj. Influence of the pH value on phase composition and morphology
of CaO-SiO₂-P₂O₅ bioactive glasses synthesized by sol-gel precipitation. In
*Preparation of ceramic materials : Proceedings of the 11th international
conference. Herľany, 9.-11.6.2015.* - Košice : Technical University, 2015, p.
114-115. ISBN 978-80-553-2122-6.

AFL04 ŠTULAJTEROVÁ, Radoslava - MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária
- SOPČÁK, Tibor. Preparation and characterization bioceramics prepared from
tetracalcium phosphate-nanomonetite cement. In *Preparation of ceramic materials :
Proceedings of the 11th international conference. Herľany, 9.-11.6.2015.* - Košice :
Technical University, 2015, p. 112-113. ISBN 978-80-553-2122-6.

**AGJ Patent applications, utility model applications, design applications, trademark
applications, applications for granting supplementary protection certificate, applications
for registration of topographies of semiconductor products, designations of origin
applications, geographical indications of goods and products applications, breeder's
certificate applications**

AGJ01 BUREŠ, Radovan - STREČKOVÁ, Magdaléna - FÁBEROVÁ, Mária -
KOLLÁR, P. - FÜZER, J. *Spôsob prípravy magnetických kompozitov s polymérnym
elektroizolačným spojivom : Patentová prihláška č. PP 00095-2013.* Banská
Bystrica : ÚPV SR, 2013.

AGJ02 FERDINANDY, Milan - DUSZA, Ján - LOFAJ, František - KOTTFER,
Daniel - HEGEDÜSOVÁ, Lucia. *Zariadenie na prípravu vrstiev karbidov, nitridov,
silicidov, boridov W, Cr, Mo, Re, Os, Rh, Ru a multivrstvových a kompozitných
štruktúr na vnútornnej valcovej ploche elektricky vodivej rúry : Patent č. 288155.*
Banská Bystrica : Úrad priemyselného vlastníctva SR, 2013.

AGJ03 KOTTFER, Daniel - FERDINANDY, Milan - DUSZA, Ján - LOFAJ,
František. *Spôsob a zariadenie na povrchovú úpravu vnútorných plôch rotačných
telies : Patentový spis č. SK 288278 B6.* Banská Bystrica : Úrad priemyselného
vlastníctva SR, 2015. 4 s.

AGJ04 KOTTFER, Daniel - FERDINANDY, Milan - DUSZA, Ján - LOFAJ,
František. *Zariadenie na vytváranie ochranných vrstiev na vnútorných plochách
rotačných telies odparovaním látky elektrickým lúčom : Patent č. 288254.* Banská
Bystrica : Úrad priemyselného vlastníctva SR, 2014.

AGJ05 KOVÁČ, František - PETRYSHYNETS, Ivan - STOYKA, Volodymyr -
KVAČKAJ, Tibor - ŠKORVÁNEK, Ivan. *Spôsob výroby izotropných
elektrotechnických ocelí s nízkymi wattovými stratami : Patent č. 288322.* Banská
Bystrica : ÚPV SR, 2015.

AGJ06 KOVÁČ, František - PETRYSHYNETS, Ivan. *Vysokopevná izotrópna
elektrotechnická ocel s kompozitnou mikroštruktúrou : Podaná patentová prihláška
č. PP 00090-2015.* Banská Bystrica : ÚPV SR, 2015.

- AGJ07 KOVÁČ, František - PETRYSHYNETS, Ivan. *Zrnovo orientovaná elektrotechnická ocel mikrolegovaná vanádom a spôsob jej výroby : Patentová prihláška PP 00091-2012.* Banská Bystrica : ÚPV SR, 2012.
- AGJ08 MEDVECKÝ, Ľubomír - GIRETOVÁ, Mária - PETROVOVÁ, Eva. *Biopolymérny kompozitný systém na regeneráciu chrupavky : Podaná patentová prihláška č. PP 00089-2014.* Banská Bystrica : ÚPV SR, 2014.
- AGJ09 MEDVECKÝ, Ľubomír. *Spôsob prípravy prekurzorovej zmesi kalcium fosfátových cementov : Patentová prihláška PP 00049-2012.* 2012.
- DAI Dissertations and habilitation theses**
- DAI01 BALGA, Dušan. *Atómová štruktúra kovových skiel a ich teplotná stabilita : Písomná práca k dizertačnej skúške.* Košice : Ústav materiálového výskumu SAV, 2014. 63 s.
- DAI02 BALKO, Ján. *Tribologické vlastnosti krehkých kompozitných systémov : dizertačné doktorandské práce (PhD.,Dr.).* Košice : Ústav materiálového výskumu SAV, 2015. 103 s.
- DAI03 BALKO, Ján. *Tribological properties of brittle composite systems : Written part of PhD. thesis.* Košice : Institute of Materials Research SAS, 2013. 76 p.
- DAI04 CENIGA, Ladislav. *Analytical models of thermal stresses in multi-component materials : dizertačné doktorské práce (DrSc.).* Praha : Akademie věd ČR, 2012. 168 s.
- DAI05 ĎURIŠIN, Martin. *Charakterizácia štruktúry amorfín a nanokryštalických materiálov : Písomná práca k dizertačnej skúške.* Košice : Ústav materiálového výskumu SAV, 2013. 62 s.
- DAI06 ĎURIŠIN, Martin. *Charakterizácia štruktúry amorfín a nanokryštalických materiálov : dizertačné doktorandské práce (PhD.,Dr.).* Košice : Ústav materiálového výskumu SAV, 2015. 142 s.
- DAI07 DUSZOVÁ, Annamária. *Micro/nano tribology and indentation of WC-based materials : dizertačné doktorandské práce (PhD.,Dr.).* Košice : Institute of Materials Research SAS, 2013. 132 p.
- DAI08 GAŠKO, Martin. *Stanovenie lokálnych vlastností materiálov prostredníctvom skúšania miniatúrnych vzoriek : Teoretická časť dizertačnej práce.* Košice : ŠAV, 2012. 69 s.
- DAI09 HORŇÁK, Peter. *Influence of deposition conditions of nanocomposite PVD coatings on their nanohardness and tribological properties : Written part of dissertation examination.* Košice : IMR SAS, 2012. 78 p.

- DAI10 HVIŠČOVÁ, Petra. *Technológia a mechanické vlastnosti keramických povlakov : Písomná časť dizertačnej skúšky.* Košice : Ústav materiálového výskumu SAV, 2013. 101 s.
- DAI11 KEPIČ, Ján. *Degradácia štruktúry a vlastností zvarových spojov progresívnych žiaruvevných ocelí : dizertačné doktorandské práce (PhD.,Dr.).* Košice : Hutnícka fakulta TU, 2013. 158 s.
- DAI12 MACKO, Roman. *Posúdenie náchylnosti Cr-Mo(Ni) ocelí a ich zvarov na vodíkové krehnutie : dizertačné doktorandské práce (PhD.,Dr.).* Košice : Hutnícka fakulta TU, 2013. 135 s.
- DAI13 NOVÁK, Michal. *Mechanické a nanomechanické vlastnosti vysokotvrďých povlakov : Písomná práca k dizertačnej skúške.* Trnava : MTF STU, 2014. 85 s.
- DAI14 NOVÁK, Michal. *Mechanické a nanomechanické vlastnosti vysokotvrďých povlakov : dizertačné doktorandské práce (PhD.,Dr.).* Trnava : MTF STU, 2015. 131 s.
- DAI15 PRAMUKOVÁ, Zuzana. *Mikroštruktúra a mechanické vlastnosti biomateriálov na báze nitridu kremičitého : Písomná časť dizertačnej skúšky.* Košice : Ústav materiálového výskumu SAV, 2014. 93 s.
- DAI16 REPOVSKÝ, Peter. *Modelovanie fázových diagramov systémov s bórom : Písomná práca k dizertačnej skúške.* Košice : HF TU a ÚMV SAV, 2014. 57 s.
- DAI17 SHVAB, Ruslan. *High temperature properties of PM components for turbocharger applications : Written part of dissertation examination.* Košice : Ústav materiálového výskumu SAV, 2012. 58 p.
- DAI18 SHVAB, Ruslan. *High temperature properties of PM components for turbocharger applications : PhD thesis.* Košice : HF TU, 2014. 147 p.
- DAI19 SOPČÁK, Tibor. *Vplyv prídavku fázy na báze bioskla na vlastnosti kompozitných kalcium fosfátových systémov : Písomná časť dizertačnej práce.* Košice : HF TU a ÚMV SAV, 2014. 70 s.
- DAI20 SOPKO, Martin. *Štúdium vlastností nanočastíc Fe izolovaných z tuhej fázy : dizertačné doktorandské práce (PhD.,Dr.).* Košice : Hutnícka fakulta TU, 2012. 131 s.
- DAI21 SZABÓ, Juraj. *Teplotná stabilita štruktúry práškových kompozitov na báze medi : Písomná práca k dizertačnej skúške.* Košice : Ústav materiálového výskumu SAV, 2015. 58 s.
- DAI22 ZELEŇÁK, Adam. *Spekané materiály s mikrogradientnou štruktúrou : Písomná práca dizertačnej skúšky.* Košice : Ústav materiálového výskumu SAV, 2013. 52 s.

DAI23 ZELEŇÁK, Adam. *Spekané materiály s mikrogradientnou štruktúrou.* Košice : Hutnícka fakulta TU, 2015. 98 s.

FAI Editorial work on book publications (bibliographies, encyclopedias, catalogues, dictionaries, collective publications/proceedings, atlases ...)

- FAI01 *Deformation and fracture in PM materials DFPM 2014 : International conference. Book of abstracts. Stará Lesná, 26.-29.10.2014.* Beáta Ballóková et al. Košice : Institute of Materials Research SAS, 2014. ISBN 978-80-970964-8-9.
- FAI02 *Fraktografia - Fractography 2015 : International conference. Book of abstracts. Stará Lesná, 18.-21.10.2015.* Ed. B. Ballóková, K. Ondrejová. Košice : Institute of Materials Research SAS, 2015.
- FAI03 *Workshop Výskumné centrum progresívnych materiálov a technológií pre súčasné a budúce aplikácie "PROMATECH".* Košice, 26.2.2015. Košice : ÚMV SAV, 2015. CD. ISBN 978-80-89782-01-7.
- FAI04 *Proceedings of the workshop Fractography of sintered materials : Principles and application.* Košice, 23.-25.3.2015. Ed. M. Hrubovčáková, E. Dudrová, M. Kabátová. Košice : IMR SAS, 2015. ISBN 978-80-89782-00-0.
- FAI05 *Joint annual meeting of the Slovak silicate scientific-technological society & workshop processing and properties of advanced ceramics : book of extended abstracts.* Eds. Alexandra Kovalčíková, Petra Hviščová. Košice, Slovak Republic : Institute of Materials Research, 2015. ISBN 978-80-89782-03-1.
- FAI06 *Mechanical properties of materials from nano to micro/meso-scale : Selected, peer reviewed papers from the Local mechanical properties (LMP 2014), November 12-14, 2014, High Tatras, Slovac Republic.* Edited by Alexandra Kovalčíková, František Lofaj. Pfaffikon : Trans Tech Publications Ltd., 2015. 271 p. Key Engineering Materials, Vol. 662 (2015). ISSN 1013-9826.
- FAI07 *Local mechanical properties 2014. LMP 2014 : 11th conference on Local mechanical properties. Book of abstracts.* Stará Lesná, 12.-14.11.2014. Ed. L. Kvetková et al. Košice : Institute of Materials Research SAS, 2014. 63 p. ISBN 978-80-970964-9-6.
- FAI08 *Preparation of ceramic materials : Proceedings of the 11th international conference.* Herľany, 9.-11.6.2015. Ed. František Lofaj, Miroslav Hnatko a kol. Košice : Technical University, 2015. 153 p. ISBN 978-80-553-2122-6.
- FAI09 *Advanced implants seeded with STEM cells for hard tissues regeneration and reconstruction : Information bulletin.* Ed. Ľubomír Medvecký. Košice : IMR SAS, 2012. 11 p.
- FAI10 *Fraktografia - Fractography 2012 : International conference. Book of abstracts.* Stará Lesná, 21.-24.10.2012. Košice : Ústav materiálového výskumu SAV, 2012. 55 s. ISBN 978-80-970964-2-7.

- FAI11 *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou.*
 Zborník abstraktov. Košice, 17.5.2013. Košice : ÚMV SAV, 2013. ISBN
 978-80-970964-4-1.
- FAI12 *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou.*
 Zborník abstraktov. Košice, 19.5.2015. Košice : Ústav materiálového výskumu
 SAV, 2015. 23 s. ISBN 978-80-89782-02-04.
- FAI13 *Funkčné kompozitné materiály : Konferencia s medzinárodnou účasťou.*
 Zborník abstraktov. Košice, 29.4.2014. Košice : Ústav materiálového výskumu
 SAV, 2014. 14 s. ISBN 978-80-970964-7-2.
- FAI14 *Progresívne magnetické materiály : Zborník abstraktov. Košice, 25.10.2013.*
 Košice : Ustav materiálového výskumu SAV, 2013. 19 s. ISBN 978-80-970964-6-5.
- FAI15 *Progress in advanced ceramic materials : Workshop. Book of abstracts.*
 Ružín-Košice, 27.-28.11.2012. Košice : Institute of Materials Research SAS, 2012.
 35 p. ISBN 978-80-970964-3-4.