

**PUBLICATIONS (most important publications in 2016)**

List of publications contains authentic translations of the titles into English in the original wording as translated by the Institute, i.e. without English language proofreading.

ABDERRAHIM, Hamza - CHELLALI, Mohammed Reda - HAMOU, Ahmed. Forecasting PM10 in Algiers: efficacy of multilayer perceptron networks. In *Environmental science and pollution research*. Vol. 23, iss. 2 (2016), s. 1634-1641. ISSN 0944-1344. V databáze: SCOPUS ; MLJ ; WOS: CCC:000368200200066.

BOŠÁK, Ondrej - MINÁRIK, Stanislav - LABAŠ, Vladimír - ANČIKOVÁ, Z. - KOŠTIAL, Pavel - ZIMNÝ, A. - KUBLIHA, M. - POULAIN, Marcel - SOLTANI, M.T. Artificial neural network analysis of optical measurements of glasses based on Sb<sub>2</sub>O<sub>3</sub>. In *Journal of Optoelectronics and Advanced Materials*. Vol. 18, iss. 3-4 (2016), s. 240-247. ISSN 1454-4164. V databáze: WOS ; SCOPUS ; MLJ: CCC:000375964800009.

ČERNIČKOVÁ, Ivona - ĎURIŠKA, Libor - PRIPUTEN, Pavol - JANIČKOVIČ, Dušan - JANOVEC, Jozef. Isothermal Section of the Al-Pd-Co Phase Diagram at 850 A degrees C Delimited by Homogeneity Ranges of Phases Epsilon, U, and F. In *Journal of Phase Equilibria and Diffusion*. Vol. 37, iss. 3 (2016), s. 301-307. ISSN 1547-7037. V databáze: WOS: WOS:000376112300006 ; SCOPUS ; CC: CCC:000376112300006 ; DOI: DOI: 10.1007/s11669-016-0456-0.

DRIENOVSKÝ, Marián - RÍZEKOVÁ TRNKOVÁ, Lýdia - OŽVOLD, Milan - ČERNIČKOVÁ, Ivona - PALCUT, Marián - JANOVEC, Jozef. Melting behavior and oxidation resistance of Ce-Sn alloy designed for lead-free solder manufacturing. In *Journal of Thermal Analysis and Calorimetry*. Vol. 125, iss. 3 (2016), s. 1009-1015. ISSN 1388-6150. V databáze: DOI: DOI 10.1007/s10973-016-5482-y ; WOS ; MLJ: CCC:000383142000002 ; SCOPUS.

GARSKAITE, E. - ALINAUSKAS, L. - DRIENOVSKÝ, Marián - KRAJČOVIČ, Jozef - ČIČKA, Roman - PALCUT, Marián - JONUSAUSKAS, L. - MALINAUSKAS, M. - STANKEVICIUTE, Z. - KAREIVA, A. Fabrication of a composite of nanocrystalline carbonated hydroxyapatite (cHAP) with polylactic acid (PLA) and its surface topographical structuring with direct laser writing (DLW). In *RSC Advances*. Vol. 6, iss. 76 (2016), s. 72733-72743. ISSN 2046-2069. V databáze: DOI: DOI: 10.1039/c6ra11679e ; MLJ ; SCOPUS ; WOS: CCC:000381513300109.

CHAUS, Alexander - MARUKOVICH, Evgeny I. - SAHUL, Martin. Microstructure and Properties of Secondary Al-12%Si Alloy Rapidly Quenched from the Melt. In *Journal of Materials Engineering and Performance*. Vol. 25, iss. 11 (2016), online, s. 4776-4784. ISSN 1059-9495. V databáze: SCOPUS ; WOS: WOS:000386688600020 ; MLJ.

CHELLALI, Mohammed Reda - LIU, Zheng - SCHLESIGER, R. - BAKHTI, B. - HAMOU, A. - JANOVEC, Jozef - SCHMITZ, Gerhard. Grain boundary segregation in binary nickel-bismuth alloy. In *Acta Materialia*. Vol. 103, 15 January 2016

(2016), s. 754-760. ISSN 1359-6454. V databáze: SCOPUS ; MLJ ; WOS: CCC:000367630500075.

JANKOVIČ, Ľuboš - VÉGSÖ, Karol - ŠIFFALOVIČ, Peter - ŠAUŠA, Ondrej - ČAPLOVIČ, Ľubomír - ČAPLOVIČOVÁ, Mária - MEDLÍN, Rostislav - UHLÍK, Peter - NÓGELLOVÁ, Zuzana. XRD, SAXS, and PALS investigations of three different polymers reinforced with tetraoctylammonium exchanged montmorillonite. In *International Journal of Polymer Analysis and Characterization* [elektronický zdroj]. Vol. 21, iss. 6 (2016), online, s. 524-536. ISSN 1023-666X(P). V databáze: DOI: DOI:10.1080/1023666X.2016.1176760 ; SCOPUS ; WOS: CCC:000383477600008.

KOLEŇÁK, Roman - KOSTOLNÝ, Igor - SAHUL, Martin. Direct bonding of silicon with solders type Sn-Ag-Ti. In *Soldering and Surface Mount Technology*. Vol. 28, Iss. 3 (2016), s. 149-158. ISSN 0954-0911. V databáze: SCOPUS: DOI: 10.1108/SSMT-11-2015-0040 ; WOS ; MLJ: CCC:000382170800004.

KUBLIHA, Marian - TRNOVCOVÁ, Viera - ONDRUŠKA, Ján - ŠTUBŇA, Igor - BOŠÁK, Ondrej - KALJUVEE, Tiit - BAČÍK, Peter. DC conductivity of illitic clay after various firing. In *Journal of Thermal Analysis and Calorimetry*. Vol. 124, iss. 1 (2016), s. 81-86. ISSN 1388-6150. V databáze: DOI: DOI 10.1007/s10973-015-5129-4 ; WOS: WOS:000372261900009 ; SCOPUS ; MLJ.

MICHAL, Róbert - DWORNICZEK, Ewa - ČAPLOVIČOVÁ, Mária - MONFORT, Olivier - LIANOS, Panagiotis - ČAPLOVIČ, Ľubomír - PLESCH, Gustáv. Photocatalytic properties and selective antimicrobial activity of TiO<sub>2</sub>(Eu)/CuO nanocomposite. In *Applied Surface Science*. Vol. 371, (2016), s. 538-546. ISSN 0169-4332. V databáze: DOI: doi:10.1016/j.apsusc.2016.03.003 ; MLJ ; WOS: CCC:000375052200066 ; SCOPUS.

MICHALCOVÁ, Eva - GÖMÖRY, Fedor - FROLEK, Ľubomír - DRIENOVSKÝ, Marián - PEKARČÍKOVÁ, Marcela - SKARBA, Michal - MIŠÍK, Jozef - JANOVEC, Jozef. Joining of CC Tapes With Lead-Free Solders. In *IEEE Transactions on Applied Superconductivity*. Vol. 26, iss. 3 (2016), Article 8801104. ISSN 1051-8223. V databáze: DOI: 10.1109/TASC.2016.2539419 ; WOS: CCC:000376186400001 ; SCOPUS ; MLJ.

MIKULA, Marián - PLAŠIENKA, Dušan - ROCH, Tomáš - ŠTYRÁKOVÁ, Kamila - SATRAPINSKYY, L - DRIENOVSKÝ, Marián - GIRMAN, Vladimír - GRANCIČ, Branislav - PLECENÍK, Andrej - KÚŠ, Peter. Structural evolution of TaN-alloyed Cr-Al-Y-N coatings. In *Surface & Coatings Technology*. Vol. 288, (2016), s. 203-210. ISSN 0257-8972. V databáze: SCOPUS ; WOS ; MLJ: CCC:000371549200024.

MIKULA, Marián - PLAŠIENKA, Dušan - SANGIOVANNI, Davide G. - SAHUL, Martin - ROCH, Tomáš - TRUCHLÝ, Martin - GREGOR, Maroš - ČAPLOVIČ, Ľubomír - PLECENÍK, Andrej - KÚŠ, Peter. Toughness enhancement in highly NbN-alloyed Ti-Al-N hard coatings. In *Acta Materialia*. Vol. 121, (2016), s. 59-67. ISSN 1359-6454. V databáze: SCOPUS: DOI: 10.1016/j.actamat.2016.08.084 ; WOS: WOS:000386984500006 ; MLJ: CCC:000386984500006.

MIŠÍK, Jozef - GÖMÖRY, Fedor - VÁVRA, Ivo - SOLOVIOV, Mykola - VOJENČIAK, Michal - GIRMAN, Vladimír - SKARBA, Michal - PEKARČÍKOVÁ, Marcela - MICHALCOVÁ, Eva - JANOVEC, Jozef. Structural study of commercially produced (RE)BCO films. In *IEEE Transactions on Applied Superconductivity*. Vol. 26, iss. 3 (2016), s. 804-804. ISSN 1051-8223. V databáze: WOS: CCC:000372745800001 ; SCOPUS ; MLJ: DOI: 10.1109/TASC.2016.2516348.

PRIPUTEN, Pavol - ČERNIČKOVÁ, Ivona - LEJČEK, Pavel - JANIČKOVIČ, Dušan - JANOVEC, Jozef. A Partial Isothermal Section at 1000°C of Al-Mn-Fe Phase Diagram in Vicinity of Taylor Phase and Decagonal Quasicrystal. In *Journal of Phase Equilibria and Diffusion*. Vol. 37, iss. 2 (2016), s. 130-134. ISSN 1547-7037. V databáze: SCOPUS: DOI: 10.1007/s11669-015-0432-0 ; MLJ ; WOS: CCC:000372172100005.

SOBOTOVÁ, Jana - JURČI, Peter - DLOUHÝ, Ivo. The effect of subzero treatment on microstructure, fracture toughness and wear resistance of Vanadis 6 tool steel. In *Materials Science and Engineering A. Structural Materials. Properties, Microstructure and Processing*. Vol. 652, January 15 (2016), s. 192-204. ISSN 0921-5093. V databáze: SCOPUS ; WOS: CCC:000369556500021 ; MLJ.

ŠIMEG VETERNÍKOVÁ, Jana - DEGMOVÁ, Jarmila - PEKARČÍKOVÁ, Marcela - ŠIMKO, František - PETRISKA, Martin - SKARBA, Michal - MIKULA, Peter - PUPALA, Martin. Thermal stability study for candidate stainless steels of GEN IV reactors. In *Applied Surface Science*. Vol. 387, (2016), s. 965-970. ISSN 0169-4332. V databáze: CC: 000381251100118 ; SCOPUS: 2-s2.0-84978271672 ; MLJ.

YADAV, Surya Deo - KALÁCSKA, Szilvia - DOMÁNKOVÁ, Mária - YUBERO, David Canelo - RESEL, Roland - GROMA, István - BEAL, Coline - SONDEREGGER, Bernhard - SOMMITSCH, Christof - POLETTI, Cecilia. Evolution of the substructure of a novel 12% Cr steel under creep conditions. In *Materials Characterization [elektronický zdroj]*. Vol. 115, (2016), online, s. 23-31. ISSN 1044-5803. V databáze: SCOPUS: doi:10.1016/j.matchar.2016.03.015 ; WOS: CCC:000376217100004 ; MLJ.

NEMEC, Matej - JURČI, Peter - KOSNÁČOVÁ, Petra - KUČEROVÁ, Marta. Evaluation of structural isotropy of Cr-V ledeburitic steel made by powder metallurgy of rapidly solidified particles. In *Kovové materiály. Metallic materials*. Vol. 54, iss. 6 (2016), s. 453-462. ISSN 0023-432X. V databáze: WOS ; SCOPUS ; MLJ: CCC:000390642600007.

ŠVEC, Pavol - SCHREK, Alexander - DOMÁNKOVÁ, Mária. Microstructure of fibre laser welded joint of dual phase steel with bake hardening steel. In *Kovové materiály. Metallic materials*. Vol. 54, iss. 6 (2016), s. 407-416. ISSN 0023-432X. V databáze: SCOPUS ; WOS ; CC: CCC:000390642600003.

JURČI, Peter - BÍLEK, Pavel. Cr<sub>2</sub>N - Ag thin films - a short review. In *Manufacturing technology*. Vol. 16, no. 4 (2016), online, s. 712-720. ISSN 1213-2489. V databáze: SCOPUS.

