

## **2017**

### **Monografie popularnonaukowe:**

1. G. Michta i in. (red.) - *Fascynujący mikroświat. Zobacz obrazy mikrostruktur*, AGH Kraków, 2017.

### **Artykuły w czasopismach międzynarodowych, w tym z bazy Journal Citation Report (JCR):**

1. S. Fidan, F. Muhaffel, M. Riool, **G. Cempura**, L. de Boer, S.A.J Zaat, **A. Czyrska-Filemonowicz**, H. Cimenoglu - *Fabrication of oxide layer on zirconium by micro-arc oxidation: Structural and antimicrobial characteristics*, Materials Science & Engineering C, 71(2017)565-569; JCR.
2. **M. Ziętara**, S. Neumeier, M. Göcken, **A. Czyrska-Filemonowicz** - *Characterisation of  $\gamma$  and  $\gamma'$  phases in 2nd and 4th generations single crystal nickel-base superalloys*, Metals and Materials International, 23(1) (2017)126-131; JCR.
3. **J. Karbowniczek**, F. Muhaffel, **G. Cempura**, H. Cimenoglu, **A. Czyrska-Filemonowicz** - *Influence of electrolyte composition on microstructure, adhesion and bioactivity of micro-arc oxidation coatings produced on biomedical Ti6Al7Nb alloy*, Surface and Coatings Technology, 321(2017)97-107; JCR.
4. **B. Rutkowski**, A. Gil, A. Agüero, V. González, **A. Czyrska-Filemonowicz** - *Microstructure, chemical- and phase composition of Sanicro 25 austenitic steel after oxidation in steam at 700 °C*, Oxidation of Metals; JCR; dostępny on-line 19-12-2017; <http://dx.doi.org/10.1007/s11085-017-9824-3>; JCR.
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6. **A. P. Kryshnal**, A. A. Minenkov, P. J. Ferreira - *Interfacial Kinetics in Nanosized Au/Ge Films: an in Situ TEM study*, Applied Surface Science, 409(2017)343-349; DOI: 10.1016/j.apsusc.2017.03.037; JCR.
7. **S. Lech**, **G. Cempura**, **A. Kruk**, **A. Czyrska-Filemonowicz** - *Characterisation of phases strengthening Incoloy 718 and Allvac 718Plus superalloys*, zgłoszony do Archives of Metallurgy and Materials Science; JCR.

8. **K. Zawadzka**, E. Godlewska, K. Mars, M. Nocuń, **A. Kryształ**, **A. Czyrska-Filemonowicz** - *Enhancement of oxidation resistance of CoSb<sub>3</sub> thermoelectric material by glass coating*, *Materials Design*, 119(2017)65-75; JCR.
9. **J. Karbowniczek**, L. Cordero-Arias, S. Misra, E. Valsami-Jones, **B. Rutkowski**, K. Górecki, P. Bała, **A. Czyrska-Filemonowicz**, A. R. Boccaccini - *Electrophoretic deposition of organic/inorganic composite coatings containing ZnO nanoparticles exhibited antibacterial properties*, *Materials Science and Engineering C, Biomimetic Materials, Sensors and Systems*, 77(2017)780-789; JCR.
10. **A. Kruk**, **A. Czyrska-Filemonowicz** - *Metrology and 3D imaging of microstructural elements in materials for extreme conditions and environmentally friendly power plants*, *Acta Physica Polonica A*, 131(2017)1311-1315; JCR.
11. **J. Karbowniczek**, **A. Gruszczyński**, **A. Kruk**, **A. Czyrska-Filemonowicz** - *Visualization of the interface between cells and ceramic coating by electron microscopy and tomography techniques*, *Acta Physica Polonica A*, 131(2017)1357-1361; JCR.
12. G. Barucca, Th. Speliotis, G. Giannopolous, D. Niarchos, **B. Rutkowski**, **A. Czyrska-Filemonowicz**, E. Agostinelli, S. Laureti, A.M. Testa, G. Varvaro - *Magnetic anisotropy phase-graded Al/L10-FePt films on amorphous glass substrates*, *Materials Design*, 123(2017)147-153; <http://dx.doi.org/10.1016/j.matdes.2017.03.032>; JCR.
13. **U. Stachewicz**, **P. Szewczyk**, **A. Kruk**, A.H. Barber, **A. Czyrska-Filemonowicz** - *Pore shape and size dependence on cells growth into electrospun fiber scaffolds for tissue engineering: 2D and 3D analyses using SEM and FIB-SEM tomography*, *Materials Science and Engineering C*, w druku; JCR; [doi.org/10.1016/j.msec.2017.08.076](https://doi.org/10.1016/j.msec.2017.08.076); JCR.
14. **A. Kruk**, **A. Czyrska-Filemonowicz** - *The 3D imaging and metrology of microstructural elements in innovative materials for clean energy systems and aeronautics*, *Metals Science Forum*, 879(2017)1019-1024.
15. F. Mao, M. Taher, **O. Kryształ**, **A. Kruk**, **A. Czyrska-Filemonowicz**, M. Ottosson, A.M. Andersson, U. Wiklund, U. Jansson – *Correction to combinatorial study of gradient Ag-Al thin films: microstructure, phase formation, mechanical and electrical properties*, *ACS Applied Materials & Interfaces*, 9(7)(2017)6653; DOI: 10.1021/acsami.7b01155; JCR.
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18. D. Teker Aydogan, F. Muhaffel, M. Menekse Kılıc, O. Karabıyık Acar, **G. Cempura**, **A. Czyrska-Filemonowicz**, M. Baydogan, N. Karaguler, G.Torun Köse, H. Cimenoglu -

*Optimization of micro-arc oxidation electrolyte for fabrication of antibacterial coating on titanium*, Materials Technology: Advanced Performance Materials, dostępny on-line 24-10-2017, JCR; DOI: 101080/10667857.2017.1391931.

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21. G. Viola, F. D'Isanto, A. El-razek Mahmoud, M. J. Reece, **G. Cempura**, F. Smeacetto, M. Salvo - *The effect of processing conditions on phase and microstructure of  $CaGeO_3$  ceramics*, Ceramics International; <http://dx.doi.org/10.1016/j.ceramint.2017.06.0561>, JCR.
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25. **U. Stachewicz**, J.F. Dijkstra, Ch. Soudami, L.B. Tunnicliffe, J.J.C. Busfield, A.H. Barber *Surface free energy analysis of electrospun fibers based on Rayleigh-Plateau/Weber instabilities*, European Polymer Journal, 91(2017)368-375; JCR.

#### **Publikacje w materiałach konferencyjnych:**

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2<sup>nd</sup> International Conference on Sustainable Materials Science and Technology, SMST'2, 19-21.07.2017, Canary Islands, Hiszpania, ScienceKNOW Conferences, s.138 (abstrakt).

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4. G. Barucca, P. Mengucci, A. Gatto, E. Bassoli, L. Denti, F. Fiori, E. Girardin, **B. Rutkowski, A. Czyrska-Filemonowicz** - *Structural characterization of biocompatible Co-Cr-Mo-W parts produced by Powder Bed Fusion*, Multinational Conference on Microscopy, MCM'2017, 24-29.09.2017, Rovinj, Chorwacja.
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8. **U. Stachewicz** – *3D analysis of cell responses to electrospun polymer nanofibers scaffolds*, j.w., s. 46 (abstrakt).
9. **A. Kruk, G. Cempura** - *Application of analytical electron microscopy and FIB/SEM tomographic technique for phase analysis in as-cast Allvac 718Plus superalloy*, XVI Int. Conference on Electron Microscopy- Conference Program and Book of Abstracts, 10-13.09.2017, Jachranka, abstrakt, s.52 (abstrakt).
10. **O. Dziuba, G. Michta, A. Kruk** - *Effect of postweld heat treatment on the microstructure and mechanical properties of as-cast Allvac 718Plus electron beam welded joint*, j.w. , s. 72
11. **O. Kryshstal, A. Kruk, F. Mao, U. Jansson, A. Czyrska-Filemonowicz** - *Characterization of the Ag-Al thin films sputtered on the steel substrate by advanced electron microscopy*, j.w. , s. 105.
12. **J. Karbowniczek, A. Gruszczyński, A. Kruk, A. Czyrska-Filemonowicz** - *FIB-SEM tomography in biomaterials research*, j.w., s. 93.
13. **A. Kryshstal, A. Minenkov, S. Bogatyrenko, A. Gruszczyński** - *Melting process and the size dependence of the eutectic temperature of Ag-Ge films*, j.w., s. 106.
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  16. **S. Metwally, J. Krzysztofek, A. Czyrska-Filemonowicz, U. Stachewicz** - *Microscopy analysis of teeth resorption process at cementoenamel junctions, j.w., s. 152.*
  17. **B. Rutkowski, A. Gil, A. Agüero, A. Czyrska-Filemonowicz** - *Electron microscopy and spectroscopy for characterization of thin oxide scales: an application to Sanicro 25 steel after oxidation in steam at 700 °C, j.w., s. 144.*
  18. **M. Ziętara, A. Gruszczyński, A. Czyrska-Filemonowicz, A. Kruk** – *Application of 3D imaging for qualitative and quantitative characterisation of gas turbine blade after service exposure, j.w., s. 177.*
  19. **Ł. Rakoczy, G. Cempura, A. Kruk, A. Czyrska-Filemonowicz, A. Zielińska-Lipiec** - *Morphological evolution and X-ray investigation of  $\gamma'$  precipitates in Ni based superalloy during rapid quenching, j.w., s. 53.*
  20. **J. Karbowniczek, S. Metwally, P.K. Szewczyk, A. Gruszczyński, A. Kruk, A. Czyrska-Filemonowicz, U. Stachewicz** - *3D investigation and visualization of biomaterials at micro- and nanoscale, 7th KMM-VIN Industrial Workshop on Biomaterials: Key technologies for better healthcare, 27-28.09.2017, Erlangen, Niemcy (abstrakt).*
  21. **A. Janas, B. R. Jany, K. Szajna, O. Kryshtal, G. Cempura, A. Kruk, A. Czyrska-Filemonowicz, F. Krok** - *Synteza anizotropowych nanostruktur metalicznych na powierzchniach kryształów półprzewodnikowych typu AIIIIV, NanoMat 2017: doktoranckie sympozjum nanotechnologii, 19-20.06.2017, Łódź, Wydawnictwo Politechniki Łódzkiej, 2017, s. 67 (abstrakt)*
  22. **A. Janas, B. R. Jany, K. Szajna, O. Kryshtal, G. Cempura, A. Kruk, A. Czyrska-Filemonowicz, F. Krok** - *Synteza anizotropowych nanostruktur metalicznych na powierzchniach kryształów półprzewodnikowych typu AIIIIV (Synthesis of anisotropic metallic nanostructures on AIIIIV semiconductor crystals surfaces), VIII Krajowa Konferencji Nanotechnologii, 20-23.06.2017, Łódź, Wydawnictwo Politechniki Łódzkiej, 2017, s. 42 (abstrakt)*
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  24. **J. Karbowniczek, L. Grenho, A. Czyrska-Filemonowicz, M.H. Fernandes** - *Biocompatibility evaluation of ceramic coatings on titanium alloy, COST MP1301 Final Event "Patient-specific bone tissue engineering - An ambitious goal requiring a „holistic“ approach", 28-29.08.2017, Vienna, Austria (abstrakt).*
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33. **K. Zawadzka**, E. Godlewska, K. Mars, M. Nocuń - *Oxidation protection of magnesium silicide by glass coating*, 15th European Conference on Thermoelectrics, Padua, Italy, 25–27.09.2017, Dysk Flash, s. 99–100 P84 (abstrakt).
34. **U. Stachewicz** - *Cells and materials – electron microscopy characterization and beyond*, BIOMECA: biomaterials and advanced physical techniques for regenerative cardiology and neurology, COST Action CA16122, 10-12.10.2017, Bucharest, Rumunia, s.1 (abstrakt).