

2018**Articles in international journals, including the base of Journal Citation Report (JCR):**

1. **A. Kruk**, A.M. Wusatowska-Sarnek, **M. Ziętara**, K. Jemielniak, Z. Siemiątkowski and **A. Czyrska-Filemonowicz** - *Characterisation on White Etching Layer formed during ceramic milling of Inconel 718*, Metals and Materials International, 24(2018)1036-1045; DOI: 10.1007/s12540-018-0056-0; JCR.
2. **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, in press, DOI: 10.1016/j.msec.2017.08.076; JCR
3. **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, 89(2018)183-195; DOI: 10.1007/s11085-017-9824-3; JCR.
4. V. Casalegno, S. Kondo, T. Hinoki, M. Ferraris, M. Salvo, **A. Czyrska-Filemonowicz**, T. Moskalewicz, Y. Katoh: *CaO-Al₂O₃ glass-ceramic as joining material for SiC based components: a microstructural study of the effect of Si-ion irradiation*, Journal of Nuclear Materials, 501(2018)172-180; DOI: 10.1016/j.jnucmat.2018.01.033; JCR.
5. **A.G. Sabato**, A. Chrysanthou, M. Salvo, **G. Cempura**, F. Smaecetto - *Interface stability between bare, Mn-Co spinel coated AISI 441 stainless steel and a diopside- based glass-ceramic sealant*, International Journal of Hydrogen Energy, 43(2018)368-375; JCR.
6. D. Teker Aydogan, F. Muhaffel, M. Menekse, 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, 33(2018)119-126; DOI: 101080/10667857.2017.1391931; JCR.
7. B. Dubiel, P. Indyka, I. Kalemba-Rec, **A. Kruk**, T. Moskalewicz, A. Radziszewska, S. Kaç, A. Kopia, K. Berent, M. Gajewska - *Examination of chemical elements partitioning between the gamma and gamma' phases in CMSX-4 superalloy using EDS microanalysis and electron tomography*, Journal of Alloys and Compounds, 731 (2018)693 - 703; JCR.
8. **S. Lech**, A. Gil, **G. Cempura**, A. Agüero, **A. Kruk**, **A. Czyrska-Filemonowicz** - *Microstructure of the oxide scale formed on Allvac 718Plus superalloy during oxidation at 850 °C in dry air characterised by analytical electron microscopy*, International Journal of Materials Research, posted on-line: 09.07.2018; JCR.

9. **A. Kruk, G. Cempura** - *Application of analytical electron microscopy and FIB/SEM tomographic technique for phase analysis in as-cast Allvac 718Plus superalloy*, International Journal of Materials Research, posted on-line: 16.06.2018; JCR.
10. S. Molin, A. G. Sabato, H. Javed, **G. Cempura**, A. R. Boccaccini, F. Smeacetto - *Co-deposition of CuO and Mn_{1.5}Co_{1.5}O₄ powders on Crofer22APU by electrophoretic method: structural, compositional modifications and corrosion properties*, Materials Letters, 218(2018)329-333; JCR.
11. S.I. Bogatyrenko, A.A. Minenkov, **A.P. Kryshnal** - *Supercooling under crystallization of Bi-Sn eutectic alloy in contact with Bi, Sn and amorphous C*, Vacuum: Surface Engineering, Surface Instrumentation & Vacuum Technology, 152(2018)1-7.
12. A.A. Minenkov, S.I. Bogatyrenko, **A.P. Kryshnal** - *Effect of size on phase transformation temperatures in Ge/Bi/Ge films*, Journal of Alloys and Compounds, 756(2018)50-56; JCR.
13. Ł. Rakoczy, **G. Cempura, A. Kruk, A. Czyrska-Filemonowicz**, A. Zielińska-Lipiec - *Morphological evolution and X-ray investigation of γ' precipitates in Ni based superalloy during rapid quenching*, International Journal of Materials Research, in press; JCR
14. F. Wierońska, P. Burmistrz, A. Strugała, D. Makowska, **S. Lech** - *Effect of using coke dust as a sorbent for removing mercury from flue gases on the contents of selected ecotoxic elements in fly ash*, Energy & Fuels, 32(5)(2018)5693-5700; DOI:10.1021/acs.energyfuels.7b035557; JCR.
15. A. Turk, D. Bombač, J. Jelita Rydel, **M. Ziętara** - *Grain boundary carbides as hydrogen diffusion barrier in a Fe-Ni alloy: A thermal desorption and modelling study*, Materials and Design 160 (2018) 985–998; JCR.
16. **P.K. Szewczyk, J. Knapczyk-Korczak, D.P. Ura, S. Metwally, A. Gruszczyński, U. Stachewicz** - *Biomimicking wetting properties of spider web from *emph* {*Linothele megalheloides*} with electrospun fibers*, Materials Letters, 233(2018) 211-214; JCR.

Conference proceedings:

1. **A. Kruk, G. Cempura, S. Lech**, A. M. Wusatowska-Sarnek and **A. Czyrska-Filemonowicz** - *Application of Analytical Electron Microscopy and Tomographic Techniques for Metrology and 3D Imaging of Microstructural Elements in Allvac 718Plus*, Proceedings of the 9th International Symposium on the Superalloy 718 & Derivatives: Energy, Aerospace and Industrial Applications. The Minerals, Metals & Materials Series. Springer, Cham, E. Ott et al.(eds), pp. 1035-1050. 3-6.06.2018. Pittsburg, USA. DOI: 10.1007/978-3-319-89480-5_69.
2. **S. Lech, A. Kruk, G. Cempura**, A. M. Wusatowska-Sarnek and **A. Czyrska-Filemonowicz** - *2D and 3D analysis of ATI718Plus superalloy after heat treatment with*

- gradient of temperature*, Eurosuperalloys 2018, 9-13.09.2018, Oxford, UK (abstract).
3. V. Casalegno, M. Ferraris, M. Salvo, T. Moskalewicz, **A. Czyrska-Filemonowicz**, S. Kondo, T. Hinoki, L. Gozzelino, G. Ghigo - *Irradiation stability of SiC-based joints for nuclear applications*, 5th Workshop on TEM with in situ Irradiation (WOTWISI-5), 11-13.04.2018, Huddersfield, UK (abstract).
 4. A. Gil, **O. Kryshnal**, T. Brylewski, **A. Czyrska-Filemonowicz** - *Microscopic investigations of a Cr₂O₃ scale formed on a substrate with implanted yttrium ions*, European Corrosion Congress, EUROCORR 2018, 9-13.09.2018, Krakow, Flash Disk (abstract).
 5. **G. Cempura**, A. Gil, A. Agüero, M. Gutierrez, **A. Kruk**, **A. Czyrska-Filemonowicz** - *Microstructure of Sanicro 25 steel after long-term oxidation characterised by advanced microscopy techniques*, European Corrosion Congress, EUROCORR 2018, 9-13.09.2018, Krakow, Flash Disk, pp. 1-9.
 6. **S. Metwally**, **U. Stachewicz** - *Electrospinning of charged induced fiber scaffolds*, ELECTROSPIN2018: international conference, 16-18.01.2018, Stellenbosch, South Africa, p. 44 (abstract).
 7. **U. Stachewicz** - *Electrospun fibers in 3D – FIB-SEM tomography*, *ibid*, p. 53 (abstract).
 8. **P.K. Szewczyk**, **U. Stachewicz** - *Controlling crystalline phase in electrospun PVDF nanofibers with altering voltage polarity*, *ibid*, p. 60 (abstract).
 9. **U. Stachewicz** - *3D imaging of cell interactions with nanofiber based scaffolds*, New frontiers in biomaterials, 9th international workshop on interfaces - book of abstracts, Santiago de Compostela, 16-18.04.2018, p. 43 (abstract).
 10. B.R. Jany, A. Janas, K. Szajna, **O. Kryshnal**, **G. Cempura**, **A. Kruk**, **A. Czyrska-Filemonowicz**, F. Krok - *Chemically driven growth of gold-rich nanostructures on IIIIV semiconductor surfaces*, 34th European Conference on Surface Science, 26-31.08.2018, Aarhus, Denmark (abstract).
 11. **S. Metwally**, **J. Karbowniczek**, M. Marzec, A. Bernasik, **U. Stachewicz** - *Electrospun PCL scaffolds for tissue engineering* AGH-HU joint symposium, Book of abstracts, Wydawnictwo Naukowe Akapit, 14-16.05.2018, AGH Kraków, p. 44 (abstract).
 12. **J. Knapczyk**, M. Gajek, M. Marzec, A. Bernasik, **U. Stachewicz** – *Wetting of electrospun fibers for water harvesting*, *ibid*, p. 90 (abstract).
 13. Ł. Rakoczy, **B. Rutkowski**, A. Zielińska-Lipiec - *The comprehensive study of carbides morphology in Ni-based superalloy*, *ibid*, p. 91 (abstract).
 14. **K. Zawadzka**, E. Godlewska, K. Mars, **A. Czyrska-Filemonowicz** - *Reactive diffusion in skutterudites*, C-MAC Euroschool 2018, 24-29.06.2018, AGH Kraków (abstract).
 15. A. Gil, **O. Kryshnal**, T. Brylewski, **A. Czyrska-Filemonowicz** - *Growth mechanism of a Cr₂O₃ scale formed on chromium implanted with yttrium*, 18th International Polish-French Conference on Reactivity of Solids, Program and Abstracts, 2-4.07.2018, AGH

Kraków, p. 24 (abstract).

16. **A.P. Kryshnal**, A.A. Minenkov, S.I. Bogatyrenko - *Melting and crystallization of nanosized Bi films confined between Ge layers*, International conference on Diffusion in Solids and Liquids, 25–29.06.2018, Amsterdam, Netherlands, Flash Disk, p. 157 (abstract).
17. **A.P. Kryshnal**, S. Bogatyrenko, A. Minenkov, P. Ferreira - *In Situ Aberration-Corrected STEM of Metal-Induced Crystallization: The Case of the Ag/Ge Couple*, The Twentieth Annual Conference YUCOMAT 2018, 3-7.09.2018, Herceg Novi, Montenegro, p. 84 (abstract).
18. **O. Dziuba, G. Michta, A. Kruk** - *Mikrostruktura i właściwości mechaniczne wybranych obszarów złącza spawanego metodą GTAW wykonanego z nadstopu ALLVAC 718Plus*, XLVI Szkoła Inżynierii Materiałowej, Ryto, 25-28.09.2018, Wydawnictwo Naukowe Akapit, 2018, pp. 51-55.
19. **J. Knapczyk**, M. Gajek, **U. Stachewicz** - *Wetting properties and morphology of electrospun fibers from hydrophobic and hydrophilic polymers*, 4th international conference on Biomedical polymers & polymeric biomaterials, Kraków, 15-18.07.2018, Book of abstracts, Wydawnictwo Naukowe Akapit, 2018, p. 203 (abstract).
20. **S. Metwally, J.E. Karbowniczek, A. Gruszczyński, P.K. Szewczyk, U. Stachewicz** - *PCL fibers' porosity impact on cells attachment and proliferation for tissue engineering*, 4th international conference on Biomedical polymers & polymeric biomaterials, 15-18.08.2018, Kraków, book of abstracts, p. 77 (abstract).
21. **P.K. Szewczyk, S. Metwally, J.E. Karbowniczek, A. Gruszczyński, M.M. Marzec, A. Bernasik, U. Stachewicz** - *Surface charge controlled cell proliferation on electrospun Polyvinylidene Fluoride fibers*, *ibid*, p. 114 (abstract).