

## Veröffentlichungsliste

1. **Marginean G.**, Brandl W., Toma D., Bubert H., Jenett H., „Surface Characterisation of Vapour Grown Carbon Fibres (VGCF) Treated by Oxygen Plasma“, Proceedings of the 15<sup>th</sup> International Symposium on Plasma Chemistry, Orleans, France, 2001, pp. 527-532;
2. **Marginean G.**, Toma D., Brandl W., Vogel H., Henk W., „Hydrothermal Treatment of Vapour Grown Carbon Fibres (VGCF)“, Proceedings of the 6<sup>th</sup> Conference on Supercritical Fluids and their Applications, Maiori, Italy, 2001, pp. 493-498;
3. Toma D., Brandl W., **Marginean G.**, Lake M.L., „Surface Modification of Carbon Fibres“, Proceedings of the International Conference on Carbon 2001, Lexington, Kentucky, 2001;
4. Toma D., Brandl W., **Marginean G.**, „Wear and corrosion behaviour of thermally sprayed cermet coatings“, Surface and Coatings Technology 138, pp. 149-158, 2001;
5. Bubert H., Brandl W., Kittel S., **Marginean G.**, Toma D., „Analytical Investigation on Plasma-Treated Carbon Fibres“, Anal Bioanal Chem 374, pp. 1237-1241, 2002;  
[doi.org/10.1007/s00216-002-1640-0](https://doi.org/10.1007/s00216-002-1640-0)
6. Brandl W., **Marginean G.**, „Overview of Carbon Nanotubes“, Proceedings of the 2<sup>nd</sup> International Conference on Advanced Materials and Structures, Timisoara, Romania, pp. 41-46, 2002;
7. Bubert H., Ai X., Haiber S., Heintze M., Brüser V., Pasch E., Brandl W., **Marginean, G.**, „Basic analytical investigation of plasma-chemically modified carbon fibers“, Spectrochimica Acta Part B 57, pp. 1601–1610, 2002; [doi.org/10.1016/S0584-8547\(02\)00101-5](https://doi.org/10.1016/S0584-8547(02)00101-5)
8. Brandl W., **Marginean G.**, Heintze M., Bubert H., Pasch E., „Functionalisation of Vapour Grown Carbon Nano-Fibres“, Proceedings of the 8<sup>th</sup> International Conference on Plasma Surface Engineering, Garmisch-Partenkirchen, Germany, 2002;
9. **Marginean G.**, Brandl W., Maghet D., Utu D., „Alumina Scale Formation after Oxidation of HVOF-Sprayed MCrAlY-Coatings“, Journal of Corrosion Science and Engineering, Volume 6, pp.10, 2003;
10. S. Haiber, X. Ai, H. Bubert, M. Heintze, V. Brüser, W. Brandl, **G. Marginean**, „Analysis of functional groups on the surface of plasma-treated carbon nanofibers“, Analytical and Bioanalytical Chemistry, Volume 375, Issue 7, pp. 875 – 883, 2003;  
[doi.org/10.1007/s00216-003-1792-6](https://doi.org/10.1007/s00216-003-1792-6)

11. Heintze M., Brüser V., Brandl W., **Marginean G.**, Bubert H., Haiber S., „Surface functionalisation of carbon nano-fibres in fluidised bed plasma“, *Surface & Coatings Technology* 174-175, pp. 831-834, 2003; [doi.org/10.1016/S0257-8972\(03\)00410-9](https://doi.org/10.1016/S0257-8972(03)00410-9)
12. Brandl W., **Marginean G.**, Maghet D., Utu D., „Oxidation Behaviour of Thermally Sprayed MCrAlY-Coatings“, Tagungsband „6. Werkstofftechnisches Kolloquium und 5. Industriefachtagung - Oberflächen und Wärmebehandlungstechnik“, Band 016 (Teil I), pp. 111-119, Chemnitz, 2003;
13. Radovan C., Brandl W., Chiriac V.A., **Marginean G.**, Dascalu D., „Surface films formed on the aluminium electrode in aqueous solutions containing sodium fluoride. Morphological Aspects“, *Annals of West University of Timisoara, Series Chemistry* 12 (3), pp. 679-690, 2003;
14. H. Ackermann, D. Diarra, G. Berger, K. Lucka, W. Brandl, **G. Marginean**, N. Marginean, H. Köhne, „Werkstofffragen bei der Einführung von schwefelarmem Heizöl“, Third European Conference on Small Burner Technology and Heating Equipment; 4. Aachener Kolloquium – Heizwärme aus Ölverbrennung, pp. 17, 2003;
15. H. Bubert, S. Haiber, W. Brandl, **G. Marginean**, M. Heintze, V. Brüser, „Characterization of the uppermost layer of plasma-treated carbon nanotubes“ *Diamond and Related Materials*, Volume 12, Iss. 3-7, pp. 811, 2003; [doi.org/10.1016/S0925-9635\(02\)00353-9](https://doi.org/10.1016/S0925-9635(02)00353-9)
16. W. Brandl, **G. Marginean**, V. Chirila, W. Warschewski, „Production and Characterization of Vapour Grown Carbon Fibres/Polypropylene Composites“, *Carbon* 42, pp.5-9, 2004; [doi.org/10.1016/j.carbon.2003.09.012](https://doi.org/10.1016/j.carbon.2003.09.012)
17. W. Brandl, **G. Marginean**, „Functionalisation of Carbon Nanofibres by Plasma Treatment“, *Thin Solid Films* 447-448, pp. 181-186, 2004; [doi.org/10.1016/S0040-6090\(03\)01077-0](https://doi.org/10.1016/S0040-6090(03)01077-0)
18. O.F.-K. Schlüter, B.I. Wehner, D. Hu, W. Xia, T. Quandt, **G. Marginean**, W. Brandl, M. Muhler, „The iron-catalyzed synthesis of carbon microfibres from methane: the influence of growth conditions on conversion, selectivity, morphology and structure of the fibres“, *Applied Catalysis A: General* 274, pp. 71-77, 2004; [doi.org/10.1016/j.apcata.2004.05.023](https://doi.org/10.1016/j.apcata.2004.05.023)
19. **G. Marginean**, W. Brandl, D. Utu, D. Maghet, „High Performance Coatings for Protection of Components Against High Temperature Corrosion“, *Advanced Materials*, pp. 57-64, Timisoara, Romania, 2004;
20. W. Brandl, **G. Marginean**, D. Maghet, D. Utu, „Effects of specimen treatment and surface preparation on the isothermal oxidation behaviour of the HVOF-sprayed MCrAlY

- coatings“, Surface & Coatings Technology 188-189, pp. 20-26, 2004;  
[doi.org/10.1016/j.surfcoat.2004.07.111](https://doi.org/10.1016/j.surfcoat.2004.07.111)
21. Munteanu, C., **Marginean, G.**, Iovi, A., Negrea, P., “Studies on the thermal behaviour of the ammonium cobalt phosphate”, REVISTA DE CHIMIE, 55 (2), pp. 81-85, 2004;
22. V. Brüser, M. Heintze, W. Brandl, **G. Marginean** and H. Bubert, “Surface modification of carbon nanofibres in low temperature plasmas” Diamond and Related Materials, Volume 13, Issues 4-8, pp. 1177, 2004; [doi.org/10.1016/j.diamond.2003.10.061](https://doi.org/10.1016/j.diamond.2003.10.061)
23. D. Utu, W. Brandl, **G. Marginean**, I. Cartis, V.A. Serban, “Morphology and phase modification of HVOF-sprayed MCrAlY-coatings remelted by electron beam irradiation”, Vacuum 77/4, pp. 451-455, 2005; [doi.org/10.1016/j.vacuum.2004.09.006](https://doi.org/10.1016/j.vacuum.2004.09.006)
24. Utu, D., **Marginean, G.**, Brandl, W., Cartis, I., „Improvement of the oxidation behaviour of electron beam remelted MCrAlY coatings“, Solid State Sciences 7(2005) 459-464; [doi.org/10.1016/j.solidstatesciences.2005.01.003](https://doi.org/10.1016/j.solidstatesciences.2005.01.003)
25. V. Chirila, **G. Marginean**, W. Brandl, “Effect of the oxygen plasma treatment parameters on the carbon nanotubes surface properties”, Surface and Coatings Technology 200 (1-4), pp. 548-551, 2005; [doi.org/10.1016/j.surfcoat.2005.01.089](https://doi.org/10.1016/j.surfcoat.2005.01.089)
26. D. Utu, **G. Marginean**, W. Brandl, I. Cartis, “Experimental studies for determination of the minimal remelting depth necessary for a good oxidation behaviour of MCrAlY-coatings”, Scientific Bulletin of the “Politehnica” University of Timisoara, Transaction on Mechanics Special Issue Tom 50 (64), pp. 89-94, 2005;
27. Wei Xia, D. Su, A. Birkner, L. Ruppel, Y. Wang, C. Wo, J. Qian, C. Liang, **G. Marginean**, W. Brandl, M. Muhler, „Chemical Vapor Deposition and Synthesis on Carbon Nanofibers: Sintering of Ferrocene-Derived Supported Iron Nanoparticles and the Catalytic Growth of Secondary Carbon Nanofibers“, Chemistry of Materials 17 (23), pp. 5737-5742, 2005;
28. V. Chirila, **G. Marginean**, W. Brandl and T. Iclanzan, „Vapour Grown Carbon Nanofibres Polypropylene Composites and their Properties“, NATO Science Series Vol.222, Book Carbon Nanotubes, pp. 227-228, 2006;
29. D. Frunzaverde, V. Campian, G. Marginean, “Metallographic Investigations on Anti-Cavitation Lips of Kaplan Blades”, 23rd IAHR SYMPOSIUM on Hydraulic Machinery and Systems, Yokohama, Japan, October 17<sup>th</sup> - October 21<sup>st</sup> , International Association of Hydraulic Research, ISBN 4-8190-1809-4, <http://stork.mach.me.ynu.ac.jp>

30. C. Pacurariu, I. Lazau, Z. Ecsedi, R. Lazau, P. Barvinschi, **G. Marginean**, „New synthesis methods of  $MgAl_2O_4$  spinel“, Journal of the European Ceramic Society 27, pp. 707-710, 2007;
31. V. Chirila, **G. Marginean**, T. Iclanzan, C. Merino, W. Brandl, „Method for Modifying Mechanical Properties of Carbon Nano-fiber Polymeric Composites“, Journal of Thermoplastic Composite Materials 20, pp. 277-289, 2007;
32. W. Brandl, **G. Marginean**, N. Marginean, V. Chirila, D. Utu, „Prevention of metal-dusting on Ni-based alloys by MCrAlY coatings“, Corrosion Science 49 (10), pp. 3765-3771, 2007;
33. **G. Marginean**, D. Frunzaverde, W. Brandl, „Oxidationsverhalten von HVOF-geschichteten MCrAlY-Schichten“, Materialwissenschaft und Werkstofftechnik 38, No. 3 pp. 222, 2007;
34. **G. Marginean**, D. Frunzaverde, D. Utu, R. Crista and W. Brandl, „Influence of Electron Beam and Laser Remelting on the Oxidation Behavior of HVOF-sprayed CoNiCrAlYCoatings“, BHM, 152, Heft 1, pp. 32-38, 2007;
35. D. Utu, **G. Marginean**, C. Pogan, W. Brandl, V.A. Serban, „Improvement of the Wear Resistance of Titanium Alloyed with Boron Nitride by Electron-Beam Irradiation“, Surface and Coatings Technology 201 (14), pp. 6387-6391, 2007;
36. C. Pogan, **G. Marginean**, V.-A. Serban, W. Brandl, „Surface alloying of Titanium by electron beam irradiation“, Scientific Bulletin of the “Politehnica” University of Timisoara, Transaction on Mechanics Tom 52(66), Fasc. 2, pp. 167-170, 2007;
37. D. Maghet, **G. Marginean**, I. Mitelea, A. Davidescu, W. Brandl, „Comparison of oxidation behaviour of various thermally sprayed MCrAlY coatings“, Proceedings of the international conference EUROCORR 2007, Freiburg, Germany, 2007;
38. D. Frunzaverde, W. Brandl, **G. Marginean**, V. Câmpian, „Failure analysis of cavitation resisting layers deposited by repair welding on Kaplan turbine runner blades“, Proceedings of EUROMAT 2007, European Congress and Exhibition on Advanced Materials and Processes, 10-13 September 2007, Nürnberg, Germany;
39. V. Campian, D. Nedelcu, D. Frunzaverde, **G. Marginean**, „Failure Analysis of a Kaplan Turbine Runner Blade“, Proceedings of the 24<sup>th</sup> IAHR Symposium on Hydraulic Machinery and Systems, Foz do Iguassu, Brazilia, 27-31 Octombrie 2008;
40. Preuß, C., G. Marginean, E.-R. Sievers, W. Brandl: Praktisch angewandte Oberflächenanalytik zur Charakterisierung von verzinkten Blechen beim

---

Laserstrahlhartlöten. Vortrag anlässlich der 15. Arbeitstagung "Angewandte Oberflächenanalytik" vom 08. - 10. September 2008, Soest

41. D. Utu, **G. Marginean**, D. Buzdugan, I. Secosan, V.-A. Serban, „The Influence of deposition process on corrosion and sliding wear behaviour of WC-Co coatings”, Scientific Bulletin of the „Politehnica” University of Timisoara, Romania, Transactions on Mechanics Tom 54(68), Fasc. 2, pp. 1-4, 2009;
42. **G. Marginean**, D. Utu, “Microstructure refinement and alloying of WC–CoCr coatings by electron beam treatment”, Surface and Coatings Technology 205 (7), pp. 1985-1989, 2010;
43. I. V. Rigou, **G. Marginean**, C. V. Campian, D. Frunzaverde, W. Brandl, „Optimization of the Parameters for Galvanic Deposition of Silver/Diamond Dispersion Coatings“, Proceedings of the Conference Advances in Control, Chemical Engineering, Civil Engineering and Mechanical Engineering '10, Puerto de la Cruz, Tenerife, pp. 206-209, 2010;
44. V. Cojocaru, D. Frunzaverde, V. Campian, G. Marginean, R. Ciubotariu, A. M. Pittner, “Cavitation erosion investigations on thermal spray coatings”, Proceedings of the 3rd WSEAS International Conference on Engineering Mechanics, Structures, Engineering Geology (EMESEG '10), Corfu Island Greece, July 22-24, 2010, WSEAS Press, pp. 177-180;
45. D. Frunzaverde, V. Campian, D. Nedelcu, G.R. Gillich, **G. Marginean**, “Failure Analysis of a Kaplan Turbine Runner Blade by Metallographic and Numerical Methods”, Proceedings of the 7th WSEAS International Conference on Fluid Mechanics (FLUIDS '10), University of Cambridge, UK, February 23-25, 2010, WSEAS Press, pp. 60-67;
46. D. Frunzaverde, V. Campian, V. Cojocaru, **G. Marginean**, M. Baran, R. Ciubotariu, "Influence of welded layers thickness on the cavitation erosion resistance", Proceedings of the 6th WSEAS International Conference on Energy, Environment, Ecosystems and Sustainable Development (EEESD'10), Politehnica University of Timisoara, Romania, WSEAS Press, pp. 316-320;
47. D. Utu, **G. Marginean**, V.A. Serban, C. Codrean, "Corrosion behaviour of laser remelted CoNiCrAlY based composite coatings", Engineering Vol 2. Nr. 5, pp. 322-327, ISSN 1947-394X, 2010; [10.4236/eng.2010.25042](https://doi.org/10.4236/eng.2010.25042)

48. D. Utu, **G. Marginean**, C. Opris, V.A. Serban, "Corrosion and sliding wear behaviour of conventional and nanostructured WC-Co coatings", *Metalurgia International*, Volume 16, Issue 5, pp. 21-24, 2011;
49. V.I. Rigou, **G. Marginean**, D. Frunzäverde, C.V. Câmpian, "Silver based composite coatings with improved sliding wear behaviour", *Wear* Vol. 290-291, pp. 61-65, 2012;
50. **G. Marginean**, D. Utu, "Cyclic oxidation behaviour of different treated CoNiCrAlY coatings", *Applied Surface Science* Vol. 258, Iss. 20, pp. 8307-8311, 2012;
51. V.A. Serban, D. Utu, **G. Marginean**, "Corrosion and sliding wear behaviour of Cr<sub>3</sub>Cr<sub>2</sub>-NiCr coatings alloyed by electron beam treatment", *Optoelectronics and Advances Materials* Vol.8, No. 1-2, pp. 153-157, 2014;
52. C. Strübbe, **G. Marginean**, V.A. Serban, "Influence of the Si-Content on the High Temperature Oxidation Behaviour of NiCrBSi-Coatings", *Solid State Phenomena* Vol. 216, pp.79, 2014;
53. D. Utu, G. Marginean, I. Hulka, V.-A. Serban, D. Cristea, "Properties of the thermally Sprayed Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> coatings deposited on titanium substrate", *International Journal of Refractory Metals and Hard Materials*, Vol. 51, pp. 118-123, 2015;
54. V.A. Serban, D. Utu, G. Marginean, "Substrate influence on the properties of thermally sprayed WC-Cr<sub>3</sub>C<sub>2</sub>-Ni cermet coatings", *Jurnal of Optoelectronics and Advanced Materials* Vol. 17, Iss. 9-10, pp. 1425 - 1430, 2015;
55. C.-R. Ciubotariu, D. Frunzaverde, **G. Marginean**, V.-A. Serban, A.-V. Birdeanu, "Optimization of the laser remelting process for HVOF-sprayed Stellite 6 wear resistant coatings", *Optics & Laser Technology* Vol. 77, pp. 98-103, 2016;  
<https://doi.org/10.1016/j.optlastec.2015.09.005>
56. C.-R. Ciubotariu, E. Secosan, G. Marginean, D. Frunzaverde, V.C. Campian, "Experimental study regarding the cavitation and corrosion resistance of Stellite 6 and self-fluxing remelted coatings", *Journal of Mechanical Engineering* Vol. 62 (Band 3), pp. 154-162, 2016; <https://doi.org/10.5545/sv-jme.2015.2663>
57. N. Kazamer, D. T. Pascal, **G. Marginean**, V.A. Şerban, C. Codrean, I. D. Uţu, "A Comparison between Hardness, Corrosion and Wear Performance of APS Sprayed WC-CoMo and WC-Co Coatings", *Solid State Phenomena*, Vol. 254, pp. 71-76, 2016;  
<doi.org/10.4028/www.scientific.net/SSP.254.71>
58. D. T. Pascal, V. A. Şerban, **G. Marginean**, "Optimization of Process Parameters for the Manufacturing of High Temperature Vacuum Brazed WC-NiCrBSi Coatings", *Solid State*

Phenomena, Vol. 254, pp. 164-169, 2016;

[doi.org/10.4028/www.scientific.net/SSP.254.164](https://doi.org/10.4028/www.scientific.net/SSP.254.164)

59. U. Rost, R. Muntean, P. Podleschny, **G. Marginean**, M. Brodmann, V. A. Şerban, "Influence of the Graphitisation Degree of Carbon Nano Fibres Serving as Support Material for Noble Metal Electro Catalysts on the Performance of PEM Fuel Cells", Solid State Phenomena, Vol. 254, pp. 27-32, 2016; [doi.org/10.4028/www.scientific.net/SSP.254.27](https://doi.org/10.4028/www.scientific.net/SSP.254.27)
60. I. D. Uţu, **G. Marginean**, I. Hulka, V. A. Şerban, "Sliding Wear Behavior of Remelted Al<sub>2</sub>O<sub>3</sub>- TiO<sub>2</sub> Plasma Sprayed Coatings on Titanium", Solid State Phenomena, Vol. 254, pp. 231-236, 2016; DOI: [10.4028/www.scientific.net/SSP.254.231](https://doi.org/10.4028/www.scientific.net/SSP.254.231)
61. R. Muntean, U. Rost, **G. Marginean**, N. Vaszilcsin, "Optimisation of the Electrodeposition Parameters for Platinum Nanoparticles on Carbon Nanofibers Support", Solid State Phenomena, Vol. 254, pp. 153-158, 2016; DOI: [10.4028/www.scientific.net/SSP.254.153](https://doi.org/10.4028/www.scientific.net/SSP.254.153)
62. U. Rost ; **G. Marginean** ; R. Muntean ; P. Podleschny ; M. Brodmann ; C. Merino ; R. Díez, "A cost-effective PEM fuel cell test system based on hydraulic compression with optimized platinum catalyst loading", International Energy and Sustainability Conference (IESC) 2016 International, DOI: [10.1109/IESC.2016.7569500](https://doi.org/10.1109/IESC.2016.7569500), 19 Sept. 2016;
63. R. Muntean, U. Rost, D.T. Pascal, **G. Marginean**, N. Vaszilcsin, "Determination of the electrochemical surface area for CNF/Pt electrocatalyst using cyclic voltammetry", Chemical Bulletin of Politehnica University of Timisoara, Romania, Vol. 61(75), 2, 2016;
64. U. Rost, R. Muntean, **G. Marginean**, C. Merino, R. Díez, N. Vaszilcsin, M. Brodmann ; "Effect of Process Parameters for Oxygen Plasma Activation of Carbon Nanofibers on the Characteristics of Deposited Platinum Nanoparticles as Electrocatalyst in Proton Exchange Membrane Fuel Cells" International Journal of Electrochemical Science, Vol. 11, pp. 9110-9122, [doi: 10.20964/2016.11.55](https://doi.org/10.20964/2016.11.55), October 2016;
65. D.T. Pascal, R. Muntean, N. Kazamer, **G. Marginean**, W. Brandl, V.A. Serban, "Characteristics of high temperature vacuum brazed WC-Co-NiCrBSi functional composite coatings", NANOCON 2016, Brno, Czech Republic, Conference proceedings pp. 775-781, ISBN: 978-80-87294-71-0, October 2016;
66. N. Kazamer, D.T. Pascal, **G. Marginean**, V.A. Serban, W. Brandl, P.C. Valean, "Aspects concerning the wear and corrosion behaviour of WC-CoCr coatings and respectively DLC/WC-CoCr systems", NANOCON 2016, Brno, Czech Republic, Conference proceedings pp. 383-389, ISBN: 978-80-87294-71-0, October 2016;

67. R. Muntean, D.T. Pascal, **G. Marginean**, N. Vaszilcsin, "Carbon nanofibres decorated with Pt-Co nanoparticles as catalysts for electrochemical cell applications. I. Synthesis and structural characterization", *International journal of Electrochemical Science* 12, pp. 4597-4609, [doi.org/10.20964/2017.05.25](https://doi.org/10.20964/2017.05.25), Mai 2017;
68. I. D. Uțu, **G. Marginean**, "Effect of electron beam remelting on the characteristics of HVOF sprayed Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> coatings deposited on titanium substrate", *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, Vol. 526, pp. 70-75, [doi.org/10.1016/j.colsurfa.2016.10.034](https://doi.org/10.1016/j.colsurfa.2016.10.034), August 2017;
69. N. Kazamer, P.C. Valean, D.T. Pascal, R. Muntean, **G. Marginean**, V.A. Serban, "Microstructure and Phase Composition of NiCrBSi-TiB<sub>2</sub> Vacuum Furnace Fused Flame-Sprayed Coatings", *IOP Conferences Series: Materials Science and Engineering*, Volume 416, 012001, [doi.org/10.1088/1757-899X/416/1/012001](https://doi.org/10.1088/1757-899X/416/1/012001), 2018;
70. P.C. Valean, N. Kazamer, R. Muntean, D.T. Pascal, Y. Kilic, **G. Marginean**, V.A. Serban, "Investigations on the Characteristics of Thermally Sprayed NiCrBSi Coatings Fused by Flame and Inductive Processing", *IOP Conferences Series: Materials Science and Engineering*, Volume 416, 012002, [doi.org/10.1088/1757-899X/416/1/012002](https://doi.org/10.1088/1757-899X/416/1/012002), 2018;
71. D.T. Pascal, N. Kazamer, R. Muntean, P.C. Valean, **G. Marginean**, V.A. Serban, "Electrochemical Corrosion Behavior of High Temperature Vacuum Brazed WC-Co-NiP Functional Composite Coatings", *IOP Conferences Series: Materials Science and Engineering*, Volume 416, 012003, [doi.com/10.1088/1757-899X/416/1/012003](https://doi.org/10.1088/1757-899X/416/1/012003), 2018;
72. R. Muntean, D.T. Pascal, U. Rost, P. Podleschny, M. Schumacher, **G. Marginean**, "Studies on Pulse Electrodeposition of Pt-Ni binary Alloy for Electrochemical Cell Applications", *IOP Conferences Series: Materials Science and Engineering*, Volume 416, 012004, [doi.com/10.1088/1757-899X/416/1/012004](https://doi.org/10.1088/1757-899X/416/1/012004), 2018;
73. U. Rost, P. Podleschny, M. Schumacher, R. Muntean, D.T. Pascal, C. Mutascu, J. Koziolok, **G. Marginean**, M. Brodmann, "Long-term Stable Electrodes Based on Platinum Electrocatalysts Supported on Titanium Sintered Felt for the Use in PEM Fuel Cells", *IOP Conferences Series: Materials Science and Engineering*, Volume 416, 012013, [doi.org/10.1088/1757-899X/416/1/012013](https://doi.org/10.1088/1757-899X/416/1/012013), 2018;
74. P. Podleschny, U. Rost, R. Muntean, **G. Marginean**, A. Heinzl, V. Peinecke, I. Radev, M. Muhler, M. Brodmann, "Investigation of Carbon Nanofiber-supported Electrocatalysts with Ultra-low Platinum Loading for the Use in PEM Fuel Cells", *Fuel Cells* No. 0, 1-8, 2018, [doi.org/10.1002/fuce.201700220](https://doi.org/10.1002/fuce.201700220)
75. P.C. Valean, N. Kazamer, D.T. Pascal, R. Muntean, L. Baranyi, **G. Marginean**, V.A. Serban, "Characteristics of Thermally Sprayed NiCrBSi Coatings before and after



- Electromagnetic Induction Remelting Process", *Acta Polytechnica Hungarica*, vol. 16, no.3, pp. 1-18, 2019;
76. T. Schwanekamp, **G. Marginean**, M. Reuber, "Laser beam Melting of  $\text{Cr}_3\text{C}_2\text{-NiCr}$ ", *International Journal of Refractory Metals and Hard Materials*, vol. 85, 2019 / <https://doi.org/10.1016/j.ijrmhm.2019.105069>
77. T. Schwanekamp, **G. Marginean**, M. Reuber, Thermal Post-Treatment of Additively Manufactured WC-Co Processed by Laser Powder Bed Fusion, Euro PM 2019 Congress and Exhibition, Maastricht, 2019  
(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7368155/>)
78. T. Schwanekamp, **G. Marginean**, M. Reuber, "The impact of different binder systems in laser powder bed fusion of tungsten carbide composites", Lasers in Manufacturing Conference 2019, Munich 2019, Germany;
79. R. Muntean, D.T. Pascal, U. Rost, **G. Marginean**, M. Brodmann, N. Vaszilcsin, Synthesis and characterisation of platinum–cobalt–manganese ternary alloy catalysts supported on carbon nanofibers: An alternative catalyst for hydrogen evolution reaction, *International Journal of Hydrogen Energy* Vol. 45, Issue 49, pp. 26217-26225, 2020, [doi.org/10.1016/j.ijhydene.2020.02.041](https://doi.org/10.1016/j.ijhydene.2020.02.041)
80. Böhm K, Näther J, Underberg M, Kazamer N, Holtkotte L, Rost U, **Marginean G**, Wirkert F-J, Brodmann M, Hülser T, Köster F, Pulsed electrodeposition of iridium catalyst nanoparticles on titanium suboxide supports for application in PEM electrolysis 5(5), 4254-4259, *Materials Today 2021: Proceedings*, [doi.org/10.1016/j.matpr.2020.12.507](https://doi.org/10.1016/j.matpr.2020.12.507)
81. N. Kazamer, P.C. Valean, D.T. Pascal, R. Muntean, **G. Marginean**, V.-A. Serban, Development, optimization, and characterization of NiCrBSi-TiB<sub>2</sub> flame-sprayed vacuum fused coatings, *Surface and Coatings Technology*, Vol. 406, 2021, [doi.org/10.1016/j.surfcoat.2020.126747](https://doi.org/10.1016/j.surfcoat.2020.126747)
82. N. Kazamer, R. Muntean, P.C. Valean, D.T. Pascal, **G. Marginean**, V.-A. Serban, Comparison of Ni-Based Self-Fluxing Remeted Coatings for Wear and Corrosion Applications, *Materials* 2021, Vol. 14, pp. 3293, [doi.org/10.3390/ma14123293](https://doi.org/10.3390/ma14123293)
83. Ambrus S., Soporan R.A, Kazamer N, Pascal D.T., Muntean R., Dume I.A., **Marginean G.**, Serban V-A., Characterization and mechanical properties of fused deposited PLA material, *Materials Today: Proceedings* 2021; 45(5), 4356-4363, 2021, <https://doi.org/10.1016/j.matpr.2021.02.760>
84. V. Cojocar, D. Frunzaverde, D. Nedelcu, C. Miclosina, **G. Marginean**, Study Regarding the Influence of the Printing Orientation Angle on the Mechanical Behavior of Parts

- Manufactured by Material Jetting, *Mater. Plast.*, 58(3), 2021, 198-209.  
<https://doi.org/10.37358/MP.21.3.5517>
85. M. Kiryc, N. Kazamer, D. Kurumlu, **G. Marginean**, “Comparative Study on the Thermal Performance of Cr-CrxOy and YSZ-CoNiCrAlY Coatings Exposed at 900 °C, *Materials* 2021, 14, 6040. <https://doi.org/10.3390/ma14206040>
86. D. Woelk, N. Kazamer, **G. Marginean**, “Comparative studies on the microstructure and corrosion behaviour of forged and SLM processed 316L stainless steel”, 2021, *Advanced Technology and Materials*, doi: [10.24867/ATM-2021-1-001](https://doi.org/10.24867/ATM-2021-1-001)
87. Muntean R, Pascal D-T, Kazamer N, **Marginean G**, Şerban V-A. Sliding Wear Behavior of High-Temperature Vacuum-Brazed WC-Co-NiP Functional Composite Coatings. *Materials*. 2022; 15(1):88. <https://doi.org/10.3390/ma15010088>
88. V. Cojocar, D. Frunzaverde, C.-O. Miclosina, **G. Marginean**, The Influence of the Process Parameters on the Mechanical Properties of PLA Specimens Produced by Fused Filament Fabrication—A Review, *Polymers* 2022, 14(5), 886; <https://doi.org/10.3390/polym14050886>
89. T. Schwanekamp, **G. Marginean**, M. Reuber, A. Ostendorf, Impact of cobalt content and grain growth inhibitors in laser-based powder bed fusion of WC-Co, *International Journal of Refractory Metals and Hard Materials*, Vol. 105, 105814, 2022, <https://doi.org/10.1016/j.ijrmhm.2022.105814>
90. C.-R. Ciubotariu, D. Frunzaverde, **G. Marginean**, Investigations of Cavitation Erosion and Corrosion Behavior of Flame-Sprayed NiCrBSi/WC-12Co Composite Coatings, *Materials* 2022, 15(8), 2943; <https://doi.org/10.3390/ma15082943>
91. D. Frunzaverde, V. Cojocar, C.-R. Ciubotariu, C.-O. Miclosina, D.-D. Ardeljan, E.-F. Ignat, **G. Marginean**, The Influence of the Printing Temperature and the Filament Color on the Dimensional Accuracy, Tensile Strength, and Friction Performance of FFF-Printed PLA Specimens, *Polymers* 2022, 14(10), 1978; [doi.org/10.3390/polym14101978](https://doi.org/10.3390/polym14101978)
92. Uțu, I.-D.; Hulka, I.; Kazamer, N.; Constantin, A.T.; Mărginean, G. Hot-Corrosion and Particle Erosion Resistance of Co-Based Brazed Alloy Coatings. *Crystals* **2022**, 12, 762. <https://doi.org/10.3390/cryst12060762>
93. Spunei, E.; Frumușanu, N.-M.; Muntean, R.; Mărginean, G. Impact of COVID-19 Pandemic on the Educational-Instructional Process of the Students from Technical Faculties. *Sustainability* 2022, 14, 8586. [doi.org/10.3390/su14148586](https://doi.org/10.3390/su14148586)

- 
94. Julian Eßler, Dino Woelk, Dragos Utu, Gabriela Marginean, Influence of the powder feed rate on the properties of HVOF sprayed WC-based cermet coatings, *Materials Today: Proceedings*, 2022, <https://doi.org/10.1016/j.matpr.2022.11.120>
95. Marco Brand, Ghazal Moeini, Gabriela Mărginean, Corrosion behavior of 316L additively produced by Directed Energy Deposition-Arc, *Materials Today: Proceedings*, 2022, <https://doi.org/10.1016/j.matpr.2022.11.194>
96. Markus Kiryc, Deniz Kurumlu, Gunther Eggeler, Robert Vaßen, Gabriela Marginean, On the sliding wear and solid particle erosion behaviour of HVOF-sprayed CoNiCrAlY coatings and NiCrCoTi substrates in dependence of the oxidation dwell time at 900 °C, *Surface and Coatings Technology*, 2022, 129137, ISSN 0257-8972, <https://doi.org/10.1016/j.surfcoat.2022.129137>
97. Frunzaverde, D.; Cojocar, V.; Bacescu, N.; Ciubotariu, C.-R.; Miclosina, C.-O.; Turiac, R.R.; Marginean, G., The Influence of the Layer Height and the Filament Color on the Dimensional Accuracy and the Tensile Strength of FDM-Printed PLA Specimens. *Polymers* **2023**, *15*, 2377. <https://doi.org/10.3390/polym15102377>
98. N. Kazamer, R. Muntean, I.-D. Utu, G. Marginean, Considerations on the Wear Behavior of Vacuum-Remelted ZrO<sub>2</sub>-Reinforced Self-Fluxing Ni-Based Thermally Sprayed Alloys, *Materials* **2023**, *16*, 5183. <https://doi.org/10.3390/ma16145183>