

# Vitalii Smelov

## List of Publications by Year in descending order

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37  
papers

326  
citations

840776

11  
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996975

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times ranked

229  
citing authors

#	ARTICLE	IF	CITATIONS
1	Determining Rational Technological Parameters for Selective Laser Melting of AlSi10Mg Aluminum Alloy Powder. <i>Inorganic Materials: Applied Research</i> , 2022, 13, 543-548.	0.5	1
2	Interface Quality Indices of Al <sup>10</sup> Si <sup>10</sup> Mg Aluminum Alloy and Cr <sup>18</sup> Ni <sup>10</sup> Ti Stainless-Steel Bimetal Fabricated via Selective Laser Melting. <i>Metals</i> , 2021, 11, 172.	2.3	11
3	Practical Approbation of Thermodynamic Criteria for the Consolidation of Bimetallic and Functionally Gradient Materials. <i>Metals</i> , 2021, 11, 1960.	2.3	3
4	Investigation of the IN-738 superalloy microstructure and mechanical properties for the manufacturing of gas turbine engine nozzle guide vane by selective laser melting. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 107, 2525-2535.	3.0	35
5	Research study of residual stress during Ni-Co-Cr alloy selective laser melting process. <i>Materials Today: Proceedings</i> , 2019, 19, 2454-2457.	1.8	2
6	Investigation of the Ni-Co-Cr alloy microstructure for the manufacturing of combustion chamber GTE by selective laser melting. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 101, 3047-3053.	3.0	13
7	SLM-built titanium materials: great potential of developing microstructure and properties for biomedical applications: a review. <i>Materials Research Express</i> , 2019, 6, 122006.	1.6	13
8	Possibilities and limitations of titanium alloy additive manufacturing. <i>MATEC Web of Conferences</i> , 2018, 224, 01064.	0.2	26
9	Multi-criteria planning model of engines parts additive manufacturing. <i>MATEC Web of Conferences</i> , 2018, 224, 01119.	0.2	4
10	Structure and mechanical properties of parts obtained by selective laser melting of metal powder based on intermetallic compounds Ni3Al. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 327, 042124.	0.6	1
11	Development Algorithm of the Technological Process of Manufacturing Gas Turbine Parts by Selective Laser Melting. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 302, 012065.	0.6	5
12	Optimization of Selective Laser Melting by Evaluation Method of Multiple Quality Characteristics. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 302, 012067.	0.6	12
13	Design and optimization of the micro-engine turbine rotor manufacturing using the rapid prototyping technology. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 177, 012040.	0.6	13
14	Implementation of the Additive Technology to the Design and Manufacturing of Vibroisolators with Required Filtering. <i>Procedia Engineering</i> , 2017, 176, 540-545.	1.2	13
15	Implementation of the Additive PolyJet Technology to the Development and Fabricating the Samples of the Acoustic Metamaterials. <i>Procedia Engineering</i> , 2017, 176, 595-599.	1.2	19
16	Research of the possibility of using an electrical discharge machining metal powder in selective laser melting. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 177, 012119.	0.6	4
17	Numerical research of influence of laser radiation parameters on the formation of intermetallic phases from metal powders in selective laser melting technology. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	1
18	Experimental implementation of direct laser alloying. <i>MATEC Web of Conferences</i> , 2017, 129, 01060.	0.2	1

#	ARTICLE	IF	CITATIONS
19	STUDY OF THE STRUCTURE AND MECHANICAL CHARACTERISTICS OF SAMPLES OBTAINED BY SELECTIVE LASER MELTING TECHNOLOGY FROM VT6 ALLOY METAL POWDER. Nanoscience and Technology, 2017, 8, 323-330.	1.8	9
20	Research on the possibility of restoring blades while repairing gas turbine engines parts by selective laser melting. IOP Conference Series: Materials Science and Engineering, 2016, 140, 012019.	0.6	15
21	Selective laser melting of titanium alloy: investigation of mechanical properties and microstructure. IOP Conference Series: Materials Science and Engineering, 2016, 156, 012031.	0.6	13
22	Selective Laser Melting of Metal Powder Of Steel 316L. IOP Conference Series: Materials Science and Engineering, 2016, 142, 012071.	0.6	9
23	Paths of Improving the Technological Process of Manufacture of GTE Turbine Blades. IOP Conference Series: Materials Science and Engineering, 2016, 142, 012073.	0.6	3
24	Research and optimization of the technological process of manufacturing a GTE blades using computer-aided design. IOP Conference Series: Materials Science and Engineering, 2016, 156, 012002.	0.6	3
25	Restoration of the face of a GTE blade tip by pulse laser cladding. Journal of Machinery Manufacture and Reliability, 2015, 44, 658-662.	0.5	2
26	Analysis of Results of Computer Simulation of the Casting Process. Applied Mechanics and Materials, 2015, 770, 223-228.	0.2	2
27	Production Processes Management by Simulation in Tecnomatix Plant Simulation. Applied Mechanics and Materials, 2015, 756, 604-609.	0.2	6
28	Production Technology of the Internal Combustion Engine Crankcase Using Additive Technologies. Modern Applied Science, 2014, 9, .	0.6	9
29	Application of Additive Technologies in the Production of Aircraft Engine Parts. Modern Applied Science, 2014, 9, .	0.6	10
30	The Organization of Engineering Shop â€œLeanâ€•Management System. Applied Mechanics and Materials, 2014, 682, 555-560.	0.2	0
31	Repair of a Gas Turbine Blade Tip by Impulse Laser Build-Up Welding. Applied Mechanics and Materials, 0, 682, 96-99.	0.2	8
32	Lean Principles-Based Optimization of the Manufacturing System. Applied Mechanics and Materials, 0, 770, 714-717.	0.2	0
33	Particularly Selective Sintering of Metal Powders by Pulsed Laser Radiation. Key Engineering Materials, 0, 685, 403-407.	0.4	15
34	Recovery Technology Features of Aerospace Parts by Layering Synthesis. Key Engineering Materials, 0, 684, 316-322.	0.4	11
35	The investigation of microstructure and mechanical properties of tool steel produced by selective laser melting technology. IOP Conference Series: Materials Science and Engineering, 0, 441, 012003.	0.6	11
36	Development of SLM quality system for gas turbines engines parts production. IOP Conference Series: Materials Science and Engineering, 0, 441, 012024.	0.6	12

#	ARTICLE	IF	CITATIONS
37	Designing of the digital casting process for the gas turbine engine blades with a single-crystal structure. IOP Conference Series: Materials Science and Engineering, 0, 441, 012058.	0.6	11