Vitalii Smelov

List of Publications by Year in descending order

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840776 996975 37 326 11 15 citations h-index g-index papers 37 37 37 229 citing authors docs citations times ranked all docs

#	Article	IF	CITATIONS
1	Investigation of the IN-738 superalloy microstructure and mechanical properties for the manufacturing of gas turbine engine nozzle guide vane by selective laser melting. International Journal of Advanced Manufacturing Technology, 2020, 107, 2525-2535.	3.0	35
2	Possibilities and limitations of titanium alloy additive manufacturing. MATEC Web of Conferences, 2018, 224, 01064.	0.2	26
3	Implementation of the Additive PolyJet Technology to the Development and Fabricating the Samples of the Acoustic Metamaterials. Procedia Engineering, 2017, 176, 595-599.	1.2	19
4	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
5	Particularly Selective Sintering of Metal Powders by Pulsed Laser Radiation. Key Engineering Materials, 0, 685, 403-407.	0.4	15
6	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
7	Design and optimization of the micro-engine turbine rotor manufacturing using the rapid prototyping technology. IOP Conference Series: Materials Science and Engineering, 2017, 177, 012040.	0.6	13
8	Implementation of the Additive Technology to the Design and Manufacturing of Vibroisolators with Required Filtering. Procedia Engineering, 2017, 176, 540-545.	1.2	13
9	Investigation of the Ni-Co-Cr alloy microstructure for the manufacturing of combustion chamber GTE by selective laser melting. International Journal of Advanced Manufacturing Technology, 2019, 101, 3047-3053.	3.0	13
10	SLM-built titanium materials: great potential of developing microstructure and properties for biomedical applications: a review. Materials Research Express, 2019, 6, 122006.	1.6	13
11	Development of SLM quality system for gas turbines engines parts production. IOP Conference Series: Materials Science and Engineering, 0, 441, 012024.	0.6	12
12	Optimization of Selective Laser Melting by Evaluation Method of Multiple Quality Characteristics. IOP Conference Series: Materials Science and Engineering, 2018, 302, 012067.	0.6	12
13	Recovery Technology Features of Aerospace Parts by Layering Synthesis. Key Engineering Materials, 0, 684, 316-322.	0.4	11
14	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
15	Interface Quality Indices of Al–10Si–Mg Aluminum Alloy and Cr18–Ni10–Ti Stainless-Steel Bimetal Fabricated via Selective Laser Melting. Metals, 2021, 11, 172.	2.3	11
16	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
17	Application of Additive Technologies in the Production of Aircraft Engine Parts. Modern Applied Science, 2014, 9, .	0.6	10
18	Production Technology of the Internal Combustion Engine Crankcase Using Additive Technologies. Modern Applied Science, 2014, 9, .	0.6	9

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19	Selective Laser Melting of Metal Powder Of Steel 3161. IOP Conference Series: Materials Science and Engineering, 2016, 142, 012071.	0.6	9
20	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
21	Repair of a Gas Turbine Blade Tip by Impulse Laser Build-Up Welding. Applied Mechanics and Materials, 0, 682, 96-99.	0.2	8
22	Production Processes Management by Simulation in Tecnomatix Plant Simulation. Applied Mechanics and Materials, 2015, 756, 604-609.	0.2	6
23	Development Algorithm of the Technological Process of Manufacturing Gas Turbine Parts by Selective Laser Melting. IOP Conference Series: Materials Science and Engineering, 2018, 302, 012065.	0.6	5
24	Research of the possibility of using an electrical discharge machining metal powder in selective laser melting. IOP Conference Series: Materials Science and Engineering, 2017, 177, 012119.	0.6	4
25	Multi-criteria planning model of engines parts additive manufacturing. MATEC Web of Conferences, 2018, 224, 01119.	0.2	4
26	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
27	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
28	Practical Approbation of Thermodynamic Criteria for the Consolidation of Bimetallic and Functionally Gradient Materials. Metals, 2021, 11, 1960.	2.3	3
29	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
30	Analysis of Results of Computer Simulation of the Casting Process. Applied Mechanics and Materials, 2015, 770, 223-228.	0.2	2
31	Research study of residual stress during Ni-Co-Cr alloy selective laser melting process. Materials Today: Proceedings, 2019, 19, 2454-2457.	1.8	2
32	Numerical research of influence of laser radiation parameters on the formation of intermetallic phases from metal powders in selective laser melting technology. AIP Conference Proceedings, 2017, , .	0.4	1
33	Experimental implementation of direct laser alloying. MATEC Web of Conferences, 2017, 129, 01060.	0.2	1
34	Structure and mechanical properties of parts obtained by selective laser melting of metal powder based on intermetallic compounds Ni3Al. IOP Conference Series: Materials Science and Engineering, 2018, 327, 042124.	0.6	1
35	Determining Rational Technological Parameters for Selective Laser Melting of AlSi10Mg Aluminum Alloy Powder. Inorganic Materials: Applied Research, 2022, 13, 543-548.	0.5	1
36	The Organization of Engineering Shop "Lean―Management System. Applied Mechanics and Materials, 2014, 682, 555-560.	0.2	0

#	Article	lF	CITATIONS
37	Lean Principles-Based Optimization of the Manufacturing System. Applied Mechanics and Materials, 0, 770, 714-717.	0.2	0