Aleksandr Zinoviev

List of Publications by Year
in descending order

36	562	933264 10	610775 24
papers	citations	h-index	g-index

37	37	37	423
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evolution of grain structure during laser additive manufacturing. Simulation by a cellular automata method. Materials and Design, 2016, 106, 321-329.	3.3	167
2	Three-dimensional modeling of the microstructure evolution during metal additive manufacturing. Computational Materials Science, 2018, 141, 207-220.	1.4	166
3	The computational micromechanics of materials with porous ceramic coatings. Meccanica, 2016, 51, 415-428.	1.2	32
4	A computational study of the microstructural effect on the deformation and fracture of friction stir welded aluminum. Computational Materials Science, 2016, 116, 2-10.	1.4	30
5	Micromechanical simulations of additively manufactured aluminum alloys. Computers and Structures, 2021, 244, 106412.	2.4	23
6	A solution to the problem of the mesh anisotropy in cellular automata simulations of grain growth. Computational Materials Science, 2015, 108, 168-176.	1.4	21
7	MICROSTRUCTURE-BASED SIMULATIONS OF QUASISTATIC DEFORMATION USING AN EXPLICIT DYNAMIC APPROACH. Facta Universitatis, Series: Mechanical Engineering, 2019, 17, 243.	2.3	19
8	Three-dimensional analysis of grain structure and texture of additively manufactured 316L austenitic stainless steel. Additive Manufacturing, 2020, 36, 101521.	1.7	18
9	Formation of Bulk Tensile Regions in Metal Matrix Composites and Coatings under Uniaxial and Multiaxial Compression. Physical Mesomechanics, 2020, 23, 135-146.	1.0	18
10	Strategy of computational predictions for mechanical behaviour of additively manufactured materials. Materials Science and Technology, 2018, 34, 1591-1605.	0.8	17
11	A mesomechanical analysis of the stressâ€“strain localisation in friction stir welds of polycrystalline aluminium alloys. Meccanica, 2016, 51, 319-328.	1.2	10
12	Numerical simulation of deformation and fracture of a material with a polysilazane-based coating. Physical Mesomechanics, 2016, 19, 430-440.	1.0	7
13	A Numerical Study of the Stress-Strain Behavior of Additively Manufactured Aluminum-Silicon Alloy at the Scale of Dendritic Structure. Physical Mesomechanics, 2021, 24, 32-39.	1.0	6
14	Numerical Study of the Influence of Grain Size and Loading Conditions on the Deformation of a Polycrystalline Aluminum Alloy. Journal of Applied Mathematics and Physics, 2014, 02, 425-430.	0.2	6
15	On the numerical simulation of the microstructural evolution induced by laser additive manufacturing of steel products. AIP Conference Proceedings, 2016, , .	0.3	3
16	Modeling of 3D microstructures produced by additive manufacturing. AIP Conference Proceedings, 2018, , .	0.3	3
17	Numerical analysis of the grain morphology and texture in 316L steel produced by selective laser melting. AIP Conference Proceedings, 2019, , .	0.3	3
18	The role of simulation in the industrialization of Additive Manufacturing. Procedia Structural Integrity, 2021, 34, 247-252.	0.3	3

#	Article	IF	Citations
19	Two dimensional cellular automata simulation of grain growth during solidification and recrystallization. IOP Conference Series: Materials Science and Engineering, 2015, 71, 012073.	0.3	2
20	Computational parametric study for plastic strain localization and fracture in a polycrystalline material with a porous ceramic coating. Mechanics of Advanced Materials and Structures, 2022, 29, 2390-2403.	1.5	2
21	Numerical simulation of deformation and fracture in a coated material using curvilinear regular meshes. IOP Conference Series: Materials Science and Engineering, 2015, 71, 012072.	0.3	1
22	A mesomechanical analysis of the deformation and fracture in polycrystalline materials with ceramic porous coatings. AIP Conference Proceedings, 2015, , .	0.3	1
23	Computational study of the mechanical behavior of steel produced by selective laser melting. AIP Conference Proceedings, 2016, , .	0.3	1
24	The influence of material microstructural characteristics on the strength of porous or composite ceramic coatings. International Journal of Solids and Structures, 2022, 236-237, 111339.	1.3	1
25	A computational analysis of the interfacial curvature effect on the strength of a material with a modified surface layer. , 2014, , .		0
26	Mesomechanical numerical modeling of the stress-strain localization and fracture in an aluminum alloy with a composite coating. , 2014, , .		0
27	A numerical simulation of the deformation and fracture of a material with a porous polysilazane coating. , 2014, , .		0
28	Mesoscale plastic strain localization in a titanium alloy with a modified surface layer. AIP Conference Proceedings, 2016, , .	0.3	0
29	The influence of the mechanical properties of a steel substrate on the macroscopic strength of a coated material. AIP Conference Proceedings, 2016, , .	0.3	0
30	Mesomechanical response of microstructure formed on the advancing side of friction stir welded aluminum. AIP Conference Proceedings, 2016, , .	0.3	0
31	Microstructure-based numerical analysis of the dynamic deformation of polycrystalline aluminum. AIP Conference Proceedings, 2018, , .	0.3	0
32	A Micromechanical Model of Additively Manufactured Aluminum Alloys. EPJ Web of Conferences, 2019, 221, 01016.	0.1	0
33	Computational analysis of deformation and fracture in composite materials and coatings. EPJ Web of Conferences, 2019, 221, 01017.	0.1	0
34	The influence of the pore size and distribution on the mechanical properties of a brittle ceramic. AIP Conference Proceedings, 2019, , .	0.3	0
35	Effects of the irregular interfacial geometry and elastic properties of ceramic compounds on the strength of steel with a composite coating. AIP Conference Proceedings, 2019, , .	0.3	0
36	On the importance of three-dimensional analysis of additively manufactured microstructures. AIP Conference Proceedings, 2020, , .	0.3	0