

# Alexey N Solonin

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

825  
citations

759233

12  
h-index

501196

28  
g-index

44  
all docs

44  
docs citations

44  
times ranked

731  
citing authors

#	ARTICLE	IF	CITATIONS
1	Strength of PLA Components Fabricated with Fused Deposition Technology Using a Desktop 3D Printer as a Function of Geometrical Parameters of the Process. <i>Polymers</i> , 2018, 10, 313.	4.5	185
2	Study of work hardening of quenched and naturally aged Al-Mg and Al-Cu alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 502, 111-117.	5.6	151
3	Increasing strength of FFF three-dimensional printed parts by influencing on temperature-related parameters of the process. <i>Rapid Prototyping Journal</i> , 2020, 26, 107-121.	3.2	69
4	Preparation and characterization of hybrid A359/(SiC+Si3N4) composites synthesized by stir/squeeze casting techniques. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 674, 18-24.	5.6	68
5	Study of the structure and mechanical properties of corrosion-resistant steel with a high concentration of boron at elevated temperatures. <i>Physics of Metals and Metallography</i> , 2014, 115, 809-813.	1.0	37
6	Hot deformation behaviour and fracture of 10CrMoWNb ferritic-martensitic steel. <i>Materials &amp; Design</i> , 2015, 74, 44-54.	5.1	34
7	Microstructure and mechanical properties of a novel selective laser melted Al-Mg alloy with low Sc content. <i>Materials Research Express</i> , 2019, 6, 126595.	1.6	31
8	Phase transformations in Zr-based bulk metallic glass cyclically loaded before plastic yielding. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 550, 358-362.	5.6	22
9	Investigation of recrystallization in an Al-0.3 Mg alloy by the method of internal friction. <i>Physics of Metals and Metallography</i> , 2011, 112, 622-632.	1.0	19
10	Microstructure, mechanical properties, and crystallization behavior of Zr-based bulk metallic glasses prepared under a low vacuum. <i>Journal of Alloys and Compounds</i> , 2016, 654, 87-94.	5.5	19
11	Effect of Pulse Laser Welding Parameters and Filler Metal on Microstructure and Mechanical Properties of Al-4.7Mg-0.32Mn-0.21Sc-0.12Zr Alloy. <i>Metals</i> , 2017, 7, 564.	2.3	16
12	Evaluation of the Microstructure and Mechanical Properties of a New Modified Cast and Laser-Melted AA7075 Alloy. <i>Materials</i> , 2019, 12, 3430.	2.9	16
13	Design and Fabrication of Strong Parts from Poly (Lactic Acid) with a Desktop 3D Printer: A Case with Interrupted Shell. <i>Polymers</i> , 2019, 11, 760.	4.5	13
14	Structure and mechanical properties of Ni-Cu-Ti-Zr composite materials with amorphous phase. <i>Physics of Metals and Metallography</i> , 2013, 114, 773-778.	1.0	12
15	Structural evaluation and mechanical properties of AZ31/SiC nano-composite produced by friction stir welding process at various welding speeds. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2019, 233, 831-841.	1.1	12
16	Flow Stress Modelling and 3D Processing Maps of Al4.5Zn4.5Mg1Cu0.12Zr Alloy with Different Scandium Contents. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4587.	2.5	11
17	Structural changes in liquid Fe and Fe-B alloy on cooling. <i>Journal of Molecular Liquids</i> , 2015, 209, 233-238.	4.9	10
18	Glass-formation and crystallization processes in Ag-Y-Cu alloys. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 1759-1763.	3.1	8

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19	Effect of Laser Welding Process Parameters and Filler Metals on the Weldability and the Mechanical Properties of AA7020 Aluminium Alloy. <i>Journal of Manufacturing and Materials Processing</i> , 2018, 2, 33.	2.2	8
20	Desktop Fabrication of Strong Poly (Lactic Acid) Parts: FFF Process Parameters Tuning. <i>Materials</i> , 2019, 12, 2071.	2.9	8
21	Boron-Containing Steel Structure and Properties at Room and Elevated Temperature. <i>Metallurgist</i> , 2015, 58, 992-997.	0.6	7
22	MMC Production Method Using Dynamic Consolidation of Mechanically Alloyed Aluminum and Silicon Carbide Powders. <i>Materials Science Forum</i> , 2002, 396-402, 289-296.	0.3	6
23	Effect of Aluminum, Iron and Chromium Alloying on the Structure and Mechanical Properties of (Ti-Ni)-(Cu-Zr) Crystalline/Amorphous Composite Materials. <i>Metals</i> , 2020, 10, 874.	2.3	6
24	Peculiarities of the Microstructure and Properties of Parts Produced by the Direct Laser Deposition of 316L Steel Powder. <i>Russian Journal of Non-Ferrous Metals</i> , 2019, 60, 87-94.	0.6	5
25	Influence of Adding Modifying Elements and Homogenization Annealing on Laser Melting Process of the Modified AlZnMgCu with 4%Si Alloys. <i>Materials</i> , 2021, 14, 6154.	2.9	5
26	Use of a physical approach and artificial neural networks for the simulation of the relation between the yield strength of quenched Al-Si alloys and their structural characteristics. <i>Russian Metallurgy (Metally)</i> , 2007, 2007, 524-528.	0.5	3
27	Calculation of the yield point of silumins by the characteristics of their structure. <i>Russian Journal of Non-Ferrous Metals</i> , 2009, 50, 234-241.	0.6	2
28	Modeling for the structure evolution of alloys of the Al-Cu-Mg system during natural ageing. <i>Russian Journal of Non-Ferrous Metals</i> , 2011, 52, 44-49.	0.6	2
29	Comparative study of the stress flow models for high-boron corrosion-resistant steel based on an Arrhenius-type equation and artificial neural networks. <i>Russian Metallurgy (Metally)</i> , 2014, 2014, 527-531.	0.5	2
30	Ways of optimization the process of three-dimensional laser cladding using a layer by layer strategy of powder alloying. , 2016, , .		2
31	Development of Heat-Resistant Aluminum Alloys for Electrical Engineering Purposes Based on the Al-Fe-Si System. <i>Metal Science and Heat Treatment</i> , 2018, 60, 360-366.	0.6	2
32	Simulating the yield strength of cast alloys in the Al-Mg system. <i>Metal Science and Heat Treatment</i> , 2007, 49, 526-532.	0.6	1
33	Converting high-boron steel pipe from round to hexagonal cross section. <i>Steel in Translation</i> , 2014, 44, 783-786.	0.3	1
34	Study of the Structural Evolution of a Two-Phase Titanium Alloy during Thermodeformation Treatment. <i>Russian Journal of Non-Ferrous Metals</i> , 2018, 59, 637-642.	0.6	1
35	Features of Structure Formation in an Al-Fe-Mn Alloy upon Crystallization with Various Cooling Rates. <i>Russian Journal of Non-Ferrous Metals</i> , 2021, 62, 72-81.	0.6	1
36	Simulation of flow stress in Al-Mg alloys quenched after casting. <i>Russian Journal of Non-Ferrous Metals</i> , 2007, 48, 208-213.	0.6	0

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37	Simulation of the flow stress of recrystallized single-phase alloys of the Al-Mg and Al-Cu systems. Russian Journal of Non-Ferrous Metals, 2007, 48, 286-290.	0.6	0
38	Modeling the evolution of the structure and properties of alloys for an Al-Zn-Mg system in ageing. Russian Journal of Non-Ferrous Metals, 2010, 51, 471-475.	0.6	0
39	A study of softening processes in heating of cold-deformed sheets of low-alloy aluminum alloys. Metal Science and Heat Treatment, 2012, 54, 253-258.	0.6	0
40	The structure and mechanical properties of parts elaborated by direct laser deposition 316L stainless steel powder obtained in various ways. Journal of Physics: Conference Series, 2017, 941, 012040.	0.4	0