Zhan-Yong Zhao

List of Publications by Year
in descending order

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51 papers	1,426 citations	471509 17 h-index	330143 37 g-index
51 all docs	51 docs citations	51 times ranked	1044 citing authors

#	Article	IF	Citations
1	An overview of graphene and its derivatives reinforced metal matrix composites: Preparation, properties and applications. Carbon, 2020, 170, 302-326.	10.3	169
2	AlSi10Mg alloy nanocomposites reinforced with aluminum-coated graphene: Selective laser melting, interfacial microstructure and property analysis. Journal of Alloys and Compounds, 2019, 792, 203-214.	5.5	147
3	Microstructural evolution and mechanical properties of IN718 alloy fabricated by selective laser melting following different heat treatments. Journal of Alloys and Compounds, 2019, 772, 861-870.	5.5	108
4	Microstructural evolution and mechanical strengthening mechanism of Mg-3Sn-1Mn-1La alloy after heat treatments. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 200-209.	5.6	91
5	Wear resistance of graphene nano-platelets (GNPs) reinforced AlSi10Mg matrix composite prepared by SLM. Applied Surface Science, 2020, 503, 144156.	6.1	87
6	Three-dimensional printing of the copper sulfate hybrid composites for supercapacitor electrodes with ultra-high areal and volumetric capacitances. Advanced Composites and Hybrid Materials, 2022, 5, 1537-1547.	21.1	78
7	Effects of Process Parameters of Semisolid Stirring on Microstructure of Mgâ€“3Snâ€“1Mnâ€“3SiC (wt%) Strip Processed by Rheo-rolling. Acta Metallurgica Sinica (English Letters), 2017, 30, 66-72.	2.9	76
8	Microstructure and Mechanical Properties of TiC-Reinforced 316L Stainless Steel Composites Fabricated Using Selective Laser Melting. Metals, 2019, 9, 267.	2.3	71
9	The Heat Treatment Influence on the Microstructure and Hardness of TC4 Titanium Alloy Manufactured via Selective Laser Melting. Materials, 2018, 11, 1318.	2.9	64
10	Microstructure and properties of Ti/TiBCN coating on 7075 aluminum alloy by laser cladding. Surface and Coatings Technology, 2018, 334, 142-149.	4.8	63
11	The Reaction Thermodynamics during Plating Al on Graphene Process. Materials, 2019, 12, 330.	2.9	43
12	AZ91 alloy nanocomposites reinforced with Mg-coated graphene: Phases distribution, interfacial microstructure, and property analysis. Journal of Alloys and Compounds, 2022, 902, 163484.	5.5	41
13	Tribological Behavior of In Situ TiC/Graphene/Graphite/Ti6Al4V Matrix Composite Through Laser Cladding. Acta Metallurgica Sinica (English Letters), 2021, 34, 1317-1330.	2.9	38
14	In-situ synthesis of TiC/graphene/Ti6Al4V composite coating by laser cladding. Materials Letters, 2020, 270, 127711.	2.6	33
15	Effects of alloying elements X (Cr, Mn, Mo, Ni, Si) on the interface stability of TiC (001)/Î³-Fe (001) in TiC/316L stainless steel composite formed by selective laser melting: first principles and experiments. Advanced Composites and Hybrid Materials, 2021, 4, 195-204.	21.1	30
16	Deformation strengthening mechanism of in situ TiC/TC4 alloy nanocomposites produced by selective laser melting. Composites Part B: Engineering, 2021, 225, 109305.	12.0	29
17	Fabrication of magnesium-coated graphene and its effect on the microstructure of reinforced AZ91 magnesium-matrix composites. Advanced Composites and Hybrid Materials, 2022, 5, 504-512.	21.1	23
18	Interfacial structures and strengthening mechanisms of in situ synthesized TiC reinforced Ti6Al4V composites by selective laser melting. Ceramics International, 2021, 47, 34127-34136.	4.8	21

#	Article	IF	Citations
19	Simulation of Stress Field during the Selective Laser Melting Process of the Nickel-Based Superalloy, GH4169. Materials, 2018, 11, 1525.	2.9	19
20	Microstructure and properties of periodic porous Inconel 718 alloy prepared by selective laser melting. Advanced Composites and Hybrid Materials, 2021, 4, 332-338.	21.1	18
21	Microstructure and tribological behavior of graphene/Al composites produced by selective laser melting. Materials Research Express, 2019, 6, 1065c1.	1.6	17
22	Tribological Behavior of TiC Particles Reinforced 316Lss Composite Fabricated Using Selective Laser Melting. Materials, 2019, 12, 950.	2.9	17
23	Analysis of Geometrical Characteristics and Properties of Laser Cladding 85 wt.% Ti + 15 wt.% TiBCN Powder on 7075 Aluminum Alloy Substrate. Materials, 2018, 11, 1551.	2.9	14
24	The Interfacial Characteristics of Graphene/Al4C3 in Graphene/AlSi10Mg Composites Prepared by Selective Laser Melting: First Principles and Experimental Results. Materials, 2020, 13, 702.	2.9	14
25	Friction and wear behaviour of Inconel 718 alloy fabricated by selective laser melting after heat treatments. Philosophical Magazine Letters, 2018, 98, 547-555.	1.2	10
26	The Compressive Behavior of Porous TC4 Alloy Scaffolds Manufactured by Selective Laser Melting. Transactions of the Indian Institute of Metals, 2020, 73, 2861-2867.	1.5	9
27	Compression properties of porous Inconel 718 alloy formed by selective laser melting. Advanced Composites and Hybrid Materials, 2021, 4, 1309-1321.	21.1	9
28	Microstructure evolution and solidification behaviors of A2017 alloy during cooling/stirring and rolling process. Transactions of Nonferrous Metals Society of China, 2012, 22, 2871-2876.	4.2	8
29	First Principle Study of TiB2 (0001)/Î³-Fe (111) Interfacial Strength and Heterogeneous Nucleation. Materials, 2021, 14, 1573.	2.9	8
30	Interfacial Stability of TiC/Î³-Fe in TiC/316L Stainless Steel Composites Prepared by Selective Laser Melting: First Principles and Experiment. Metals, 2020, 10, 1225.	2.3	7
31	The Evolution of Microstructure, Mechanical Properties and Fracture Behavior with Increasing Lanthanum Content in AZ91 Alloy. Metals, 2020, 10, 1256.	2.3	7
32	EBSD investigation on the microstructure of Ti48Al2Cr2Nb alloy hot isostatic pressing formed by Selective laser melting (SLM). Materials Letters, 2022, 309, 131334.	2.6	7
33	High-Temperature Oxidation Behavior of NiCoCrAlY Coatings Deposited by Laser Cladding on 304 Stainless Steel. Metals and Materials International, 2022, 28, 412-420.	3.4	6
34	Microstructure and Properties of In situ Synthesized TiC/Graphene/Ti6Al4V Composite Coating by Laser Cladding. Transactions of the Indian Institute of Metals, 2021, 74, 891-899.	1.5	6
35	Effect of Solution Temperature on the Microstructure and Properties of 17-4PH High-Strength Steel Samples Formed by Selective Laser Melting. Metals, 2022, 12, 425.	2.3	6
36	Boundary layer distributions and cooling rate of cooling sloping plate process. Journal Wuhan University of Technology, Materials Science Edition, 2013, 28, 701-705.	1.0	5

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37	Effect of Heat Treatment on the Microstructure and Properties of Inconel 718 Alloy Fabricated by Selective Laser Melting. Journal of Materials Engineering and Performance, 2022, 31, 353-364.	2.5	5
38	Failure Analysis of the Tree Column Structures Type AlSi10Mg Alloy Branches Manufactured by Selective Laser Melting. Materials, 2020, 13, 3969.	2.9	3
39	The interfacial structure of Î±-Ti/TiC in graphene-reinforced Ti6Al4V matrix composite coating prepared by laser cladding: first-principles and experimental. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	3
40	First-Principles Study on Graphene/Mg2Si Interface of Selective Laser Melting Graphene/Aluminum Matrix Composites. Metals, 2021, 11, 941.	2.3	3
41	Microstructure and Properties of Porous 17-4PH Stainless Steel Prepared by Selective Laser Melting. Transactions of the Indian Institute of Metals, 2022, 75, 1641-1648.	1.5	3
42	Temperature distribution and its influence on microstructure of Mgâ€“3Snâ€“1Mn alloy during rheo-rolling process. Philosophical Magazine, 2018, 98, 2367-2379.	1.6	2
43	Formability and hardness studies of selective laser melting of GH4169 Ni-based alloy powders. Emerging Materials Research, 2020, 9, 758-769.	0.7	2
44	Microstructure and deformation behavior of Ti-10V-2Fe-3Al alloy during hot forming process. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 1332-1337.	1.0	1
45	Formation of yittrium oxide in cemented carbides. Philosophical Magazine Letters, 2017, 97, 469-475.	1.2	1
46	Microstructure characterisation of in-situ synthesised TiC/Ti6Al4â€…V composite coating by laser cladding. Philosophical Magazine Letters, 2020, 100, 588-595.	1.2	1
47	Influence of rhenium and tungsten on the microstructure and performance of GH4169 alloy through heat treatment. Emerging Materials Research, 2020, 9, 705-715.	0.7	1
48	First Principle Study of MgSnLa Compounds in Mg-3Sn-1Mn-1La Alloy Processed by Rheo-Rolling. Materials, 2022, 15, 1361.	2.9	1
49	Microstructure evolution of Znâ€“0.2Mgâ€“0.8Mn(wt-%) alloys with different initial textures during room-temperature compression. Materials Science and Technology, 2022, 38, 1368-1375.	1.6	1
50	Mathematical model and theoretical research of flow shear constitutive relation during rheo-rolling of semisolid alloy. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 1049-1055.	1.0	0
51	Solidified behavior and microstructure of highÂstrengthÂAlâ€“Mg alloy under electromagnetic field simulated by direct current. Journal of Materials Research, 2022, 37, 1115-1124.	2.6	0