Jian Zhang

List of Publications by Year
in descending order

107 papers	2,409 citations	172457 29 h-index	243625 44 g-index
107 all docs	107 docs citations	107 times ranked	1843 citing authors

#	Article	IF	Citations
1	Additive manufacturing of functionally graded materials: A review. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 764, 138209.	5.6	309
2	An investigation on diffusion bonding of aluminum and magnesium using a Ni interlayer. Materials Letters, 2012, 83, 189-191.	2.6	90
3	Influence of particle size and spatial distribution of B4C reinforcement on the microstructure and mechanical behavior of precipitation strengthened Al alloy matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 675, 421-430.	5.6	89
4	Microstructure and mechanical properties of Al-7075/B4C composites fabricated by plasma activated sintering. Journal of Alloys and Compounds, 2014, 588, 265-270.	5.5	76
5	Thermal and electrical properties of Wâ€“Cu composite produced by activated sintering. Materials & Design, 2013, 46, 101-105.	5.1	67
6	Microstructure and bonding strength of diffusion welding of Mo/Cu joints with Ni interlayer. Materials & Design, 2012, 39, 81-86.	5.1	63
7	Uncovering the influence of common nonmetallic impurities on the stability and strength of a Î£5 (310) grain boundary in Cu. Acta Materialia, 2018, 148, 110-122.	7.9	63
8	Microstructure and mechanical properties of diffusion-bonded Mgâ€“Al joints using silver film as interlayer. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 559, 868-874.	5.6	57
9	Effect of plasma activated sintering parameters on microstructure and mechanical properties of Al-7075/B 4 C composites. Journal of Alloys and Compounds, 2014, 615, 276-282.	5.5	55
10	Low-temperature densification and excellent thermal properties of Wâ€“Cu thermal-management composites prepared from copper-coated tungsten powders. Journal of Alloys and Compounds, 2014, 588, 49-52.	5.5	53
11	Phase transition, microstructure and mechanical properties of TC4 titanium alloy prepared by plasma activated sintering. Journal of Alloys and Compounds, 2018, 741, 918-926.	5.5	53
12	Microstructure evolution, mechanical properties and strengthening mechanism of refractory high-entropy alloy matrix composites with addition of TaC. Journal of Alloys and Compounds, 2019, 777, 1168-1175.	5.5	52
13	The mechanical properties of Wâ€“Cu composite by activated sintering. International Journal of Refractory Metals and Hard Materials, 2013, 36, 220-224.	3.8	48
14	Field assisted sintering of graphene reinforced zirconia ceramics. Ceramics International, 2015, 41, 6113-6116.	4.8	48
15	Microstructure and mechanical behavior of a novel Co20Ni20Fe20Al20Ti20 alloy fabricated by mechanical alloying and spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 644, 10-16.	5.6	46
16	Effects of Zn additions on the solid-state sintering of Wâ€“Cu composites. Materials & Design, 2012, 36, 108-112.	5.1	45
17	Effect of Ni interlayer on strength and microstructure of diffusion-bonded Mo/Cu joints. Materials Letters, 2012, 66, 113-116.	2.6	45
18	Effect of Al thin film and Ni foil interlayer on diffusion bonded Mgâ€“Al dissimilar joints. Journal of Alloys and Compounds, 2013, 556, 139-142.	5.5	45

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19	Microstructure and mechanical behaviors of the ultrafine grained AA7075/B4C composites synthesized via one-step consolidation. Journal of Alloys and Compounds, 2018, 748, 737-744.	5.5	44
20	Effect of silver interlayer on microstructure and mechanical properties of diffusion-bonded Mgâ€“Al joints. Journal of Alloys and Compounds, 2012, 541, 458-461.	5.5	43
21	Synthesis and thermal conductivity improvement of W-Cu composites modified with WC interfacial layer. Materials and Design, 2017, 127, 233-242.	7.0	43
22	Effect of interface modification by Cu-coated W powders on the microstructure evolution and properties improvement for Cuâ€“W composites. Surface and Coatings Technology, 2016, 288, 8-14.	4.8	42
23	Synthesis and compressive behaviors of PMMA microporous foam with multi-layer cell structure. Composites Part B: Engineering, 2019, 165, 272-278.	12.0	42
24	Microstructure and mechanical property of a novel ReMoTaW high-entropy alloy with high density. International Journal of Refractory Metals and Hard Materials, 2018, 77, 8-11.	3.8	41
25	Microstructure and thermal properties of diamond/copper composites with Mo2C in-situ nano-coating. Surface and Coatings Technology, 2019, 360, 376-381.	4.8	38
26	Effects of SiC particle size on CTEs of SiCp/Al composites by pulsed electric current sintering. Materials Chemistry and Physics, 2006, 99, 170-173.	4.0	36
27	Fabrication and mechanical behavior of bulk nanoporous Cu via chemical de-alloying of Cuâ€“Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 660, 241-250.	5.6	36
28	Microstructure and mechanical behavior of AA2024/B4C composites with a network reinforcement architecture. Journal of Alloys and Compounds, 2017, 701, 554-561.	5.5	33
29	Densification and properties investigation of W-Cu composites prepared by electroless-plating and activated sintering. International Journal of Refractory Metals and Hard Materials, 2018, 71, 255-261.	3.8	32
30	Precipitation phenomena in Al-Zn-Mg alloy matrix composites reinforced with B4C particles. Scientific Reports, 2017, 7, 9589.	3.3	31
31	High-temperature ultra-strength of dual-phase Re0.5MoNbW(TaC)0.5 high-entropy alloy matrix composite. Journal of Materials Science and Technology, 2021, 84, 1-9.	10.7	30
32	Designing high entropy alloy-ceramic eutectic composites of MoNbRe0.5TaW(TiC)x with high compressive strength. Journal of Alloys and Compounds, 2020, 818, 152846.	5.5	28
33	Fabrication and microstructure of W-Cu composites prepared from Ag-coated Cu powders by electroless plating. Surface and Coatings Technology, 2019, 361, 302-307.	4.8	23
34	Influence of particulate B4C with high weight fraction on microstructure and mechanical behavior of an Al-based metal matrix composite. Journal of Alloys and Compounds, 2019, 789, 825-833.	5.5	21
35	Numerical simulation of static mechanical properties of PMMA microcellular foams. Composites Science and Technology, 2020, 192, 108110.	7.8	20
36	Microstructural evolution and mechanical behavior of W-Si-C multi-phase composite prepared by arc-melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 712, 28-36.	5.6	19

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37	Synthesis of functionally graded AA7075-B4C composite with multi-level gradient structure. Ceramics International, 2019, 45, 7761-7766.	4.8	19
38	Low-temperature densification and microstructure of Wâ€“Cu composites with Sn additives. Journal of Materials Research and Technology, 2021, 10, 121-131.	5.8	19
39	Accelerated Bonding of Magnesium and Aluminum with a CuNi/Ag/CuNi Sandwich Interlayer by Plasma-Activated Sintering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 631-636.	2.2	18
40	Microstructure and Compression Strength of W/HfC Composites Synthesized by Plasma Activated Sintering. Metals and Materials International, 2019, 25, 416-424.	3.4	17
41	Metal-carbide eutectics with multiprincipal elements make superrefractory alloys. Science Advances, 2022, 8, .	10.3	17
42	Interfacial segregation and precipitates behavior in the ultrafine grained Al-based metal matrix composites. Journal of Alloys and Compounds, 2019, 770, 625-630.	5.5	16
43	Correlation Between the Structure and Compressive Property of PMMA Microcellular Foams Fabricated by Supercritical CO2 Foaming Method. Polymers, 2020, 12, 315.	4.5	16
44	Characterization of diffusion-bonded joint between Al and Mg using a Ni interlayer. Rare Metals, 2016, 35, 537-542.	7.1	15
45	Fabrication and mechanical behavior of porous Cu via chemical de-alloying of Cu25Fe75 alloys. Journal of Alloys and Compounds, 2016, 689, 6-14.	5.5	15
46	Low-temperature diffusion bonding of W/Mo joints with a thin Cu interlayer. Journal of Materials Processing Technology, 2018, 262, 422-429.	6.3	15
47	Synthesis of AA7075-AA7075/B4C bilayer composite with enhanced mechanical strength via plasma activated sintering. Journal of Alloys and Compounds, 2017, 701, 416-424.	5.5	14
48	Effect of TMAH on the rheological behavior of alumina slurries for gelcasting. Journal of Asian Ceramic Societies, 2017, 5, 261-265.	2.3	14
49	Microstructure and Mechanical Behaviors of Titanium Matrix Composites Containing In Situ Whiskers Synthesized via Plasma Activated Sintering. Materials, 2018, 11, 544.	2.9	14
50	Microstructural, mechanical, and thermalâ€insulation properties of poly(methyl methacrylate)/silica aerogel bimodal cellular foams. Journal of Applied Polymer Science, 2017, 134, .	2.6	13
51	Improved parallelism of graded Wâ€“Cuâ€“SiC materials by adjusting the coefficient of thermal expansion. Ceramics International, 2020, 46, 9714-9721.	4.8	13
52	Influence of in-situ synthesized Zr-Al-C on microstructure and toughening of ZrB2-SiC composite ceramics fabricated by spark plasma sintering. Ceramics International, 2017, 43, 13047-13054.	4.8	12
53	Influence of length-scale on stabilization of boron carbide in Al-based metal matrix composites during plasma activated sintering. Powder Technology, 2018, 339, 809-816.	4.2	12
54	Microstructure and strengthening mechanism of boride in-situ reinforced titanium matrix composites prepared by plasma activated sintering. Ceramics International, 2021, 47, 15910-15922.	4.8	12

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55	Microstructure and mechanical properties of MoNbW(TaC)x composites. International Journal of Refractory Metals and Hard Materials, 2021, 99, 105574.	3.8	12
56	Interfacial Microstructure and Mechanical Strength of 93W/Ta Diffusion-Bonded Joints with Ni Interlayer. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 602-605.	2.2	10
57	Study on preparation and property of porous tungsten via tape-casting. International Journal of Refractory Metals and Hard Materials, 2017, 69, 27-30.	3.8	9
58	Microstructure, mechanical properties and reinforcement mechanism of dual-scale TC4 titanium alloy prepared by cryomilling and plasma activated sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 736, 120-129.	5.6	9
59	Synergetic effect of Re alloying and SiC addition on strength and toughness of tungsten. Journal of Alloys and Compounds, 2018, 767, 1064-1071.	5.5	9
60	Microstructure and mechanical properties investigation of W Cu composites prepared from dual-layer coated powders. Applied Surface Science, 2020, 516, 146098.	6.1	9
61	Achieving porous tungsten with high porosity by selective dissolution of W-Fe alloy. Scripta Materialia, 2021, 198, 113830.	5.2	9
62	Experimental and atomic observations of phase transformations in shock-compressed single-crystal Fe. Materialia, 2021, 20, 101200.	2.7	9
63	Influence of Cr removal on the microstructure and mechanical behaviour of a high-entropy Al_{0.8}Ti_{0.2}CoNiFeCr alloy fabricated by powder metallurgy. Powder Metallurgy, 2018, 61, 106-114.	1.7	8
64	Compressive response of <scp>PMMA</scp> microcellular foams at low and high strain rates. Journal of Applied Polymer Science, 2018, 135, 46044.	2.6	8
65	Design and Synthesis of C-O Grain Boundary Strengthening of Al Composites. Nanomaterials, 2020, 10, 438.	4.1	8
66	Effect of Ni content in Cu1-Ni coating on microstructure evolution and mechanical properties of W/Mo joint via low-temperature diffusion bonding. Journal of Materials Science and Technology, 2020, 54, 171-180.	10.7	8
67	Study on Rheological Behavior of Micro/Nano-Silicon Carbide Particles in Ethanol by Selecting Efficient Dispersants. Materials, 2020, 13, 1496.	2.9	8
68	Microstructural evolution and mechanical behavior of porous W reinforced by in-situ W2C. Journal of Alloys and Compounds, 2019, 797, 1106-1114.	5.5	7
69	Microstructure and mechanical properties of HfC reinforced W matrix composites regulated by trace Zr. International Journal of Refractory Metals and Hard Materials, 2020, 86, 105096.	3.8	7
70	Towards homogeneous distribution of coarse grain in a tri-modal Al-based composites utilizing localized grain growth. Powder Technology, 2020, 366, 107-111.	4.2	7
71	Effect of Cu interlayer on joining 93W and Mo1 alloys by plasma activated sintering. Materials Letters, 2017, 201, 89-92.	2.6	6
72	Preparation and properties of W-SiC/Cu composites by tape casting and hot-pressing sintering. Materials Science and Technology, 2018, 34, 1353-1361.	1.6	6

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73	A Review on Mechanical Models for Cellular Media: Investigation on Material Characterization and Numerical Simulation. Polymers, 2021, 13, 3283.	4.5	6
74	Corrosion behaviour of AlN ceramics in LiF-LiCl-LiBr-Li molten salt at 500â€‰Â°C. Corrosion Science, 2021, 190, 109672.	6.6	6
75	Microstructure evolution and interfacial bonding mechanisms of ultrasonically soldered sapphire/Al dissimilar joints using Sn-based solders. Ceramics International, 2022, 48, 20070-20077.	4.8	6
76	Preparation and microstructure of porous ZrB2 ceramics using reactive spark plasma sintering method. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 512-515.	1.0	5
77	Microstructure and Thermal Conductivity of Carbon Nanotube Reinforced Cu Composites. Journal of Nanoscience and Nanotechnology, 2017, 17, 2447-2452.	0.9	5
78	Mechanical, electrical and thermal properties at elevated temperature of W-Si-C multi-phase composite prepared by arc-melting. International Journal of Refractory Metals and Hard Materials, 2018, 75, 101-106.	3.8	5
79	Enhanced electrical and magnetic properties of post-annealed plasma-activated-sintered La2CoMnO6 ceramics. Ceramics International, 2019, 45, 20855-20859.	4.8	5
80	Eutectic-like composite of MoNbWTaC with outstanding strength and plasticity at elevated temperature. Materials Letters, 2021, 304, 130739.	2.6	5
81	Interfacial microstructure and strengthening mechanism in Tiâ€“6Alâ€“4V reinforced Al-7075 alloy. Materials Science and Technology, 2018, 34, 199-208.	1.6	4
82	In Situ Preparation and Corrosion Resistance of a ZrO2 Film on a ZrB2 Ceramic. Coatings, 2019, 9, 455.	2.6	4
83	Investigation of the Constitutive Model of W/PMMA Composite Microcellular Foams. Polymers, 2019, 11, 1136.	4.5	4
84	Effects of silica aerogel content on microstructural and mechanical properties of poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Journal Wuhan University of Technology, Materials Science Edition, 2016, 31, 750-756.	1.0	3
85	In-situ passivation reaction for synthesis of a uniform ZrO2-coated ZrB2 powder in alkaline hydrothermal solution. Surface and Coatings Technology, 2020, 385, 125385.	4.8	3
86	Structure Characterization and Impact Effect of Al-Cu Graded Materials Prepared by Tape Casting. Materials, 2022, 15, 4834.	2.9	3
87	Microstructural characterization of the Mg/Cu/Al diffusion bonded joint. Journal of Physics: Conference Series, 2013, 419, 012021.	0.4	2
88	Microstructure of Diffusion-Bonded Mg-Ag-Al Multilayer Composite Materials. Journal of Physics: Conference Series, 2013, 419, 012023.	0.4	2
89	Influence of Effective Physical Contact Area on Microstructure and Mechanical Properties of Diffusion-Bonded TC4/1060Al Joints. Journal of Materials Engineering and Performance, 2019, 28, 1226-1234.	2.5	2
90	Densification and Structure Evolution of ZrB2-ZrO2 Composites Prepared by Plasma Activated Sintering using ZrB2@ZrO2 Powder. Journal Wuhan University of Technology, Materials Science Edition, 2021, 36, 215-222.	1.0	2

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91	Effect of Ni foam addition on the microstructure and mechanical properties of Inâ€“48Sn eutectic alloy. Journal of Materials Science: Materials in Electronics, 2022, 33, 12594-12603.	2.2	2
92	Effect of initial temperature on impact-induced spalling behavior in single-crystal aluminum studied by molecular dynamics simulations. AIP Advances, 2022, 12, 055123.	1.3	2
93	Hierarchical Fe6W6C enabling ultra-strong porous tungsten. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 849, 143466.	5.6	2
94	The microanalysis of copper-coated diamond composite powders prepared by electroless plating. , 2016, , .		1
95	Activated sintering and thermal properties of 1 wt. %Ag-W/Cu thermal-management composites. , 2016, , .		1
96	Hot-Press Sintering of the W-40wt.%Cu Composite Tape-Casting Film. Key Engineering Materials, 2017, 727, 966-971.	0.4	1
97	<i>In Situ</i> Synthesis of Size-Controlled Silver/Poly(Methyl Methacrylate) Nanocomposite. Key Engineering Materials, 0, 727, 514-518.	0.4	1
98	Role of Liquid-Phase Amount in Ceramization of Silicone Rubber Composites and Its Controlling. Materials, 2022, 15, 3675.	2.9	1
99	Study on Microstructure and Property of Diffusion-Bonded Mo-Cu Joints. Key Engineering Materials, 2012, 508, 178-182.	0.4	0
100	Diffusion Mechanism and Kinetics of Diffusion Bonded Mg/Ni/Al Joint. Key Engineering Materials, 0, 616, 286-290.	0.4	0
101	Facile Fabrication and Enhanced Performances of Epoxy Resin-modified MTMS System Multifunctional Graded Coating. Chemistry Letters, 2016, 45, 1000-1002.	1.3	0
102	Effect of Diffusion-Temperature on Microstructure and Mechanical Properties of Diffusion-Bonded TC4/Al Thin Film/1060 Al Joints. Key Engineering Materials, 2017, 727, 972-976.	0.4	0
103	Resistance Spot Welding Process and Properties of Hot Dip Galvanized DP590 High Strength Steel. Lecture Notes in Mechanical Engineering, 2018, , 743-749.	0.4	0
104	Effect of SiC Additions on Microstructure Evolution and Mechanical Properties of W-Based Composite Prepared by Arc-Melting. Materials Science Forum, 0, 944, 531-536.	0.3	0
105	Effect of Ni interlayer on diffusion bonding of a W alloy and a Ta alloy. Materialpruefung/Materials Testing, 2017, 59, 744-748.	2.2	0
106	Numerical Simulation and Experimental Investigation of SiC/Ti-6Al-4V Metal Matrix Composites Produced by Laser Melt Injection. Coatings, 2022, 12, 808.	2.6	0
107	Numerical simulation of polymethylâ€methacrylate supercritical fluid foaming process: Bubble growth dynamics. Journal of Applied Polymer Science, 0, , .	2.6	0