Ji Zou

List of Publications by Year
in descending order

64	3,125	30	55
papers	citations	h-index	g-index
		159585	155660

65	65	65	1968
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dislocation network in additive manufactured steel breaks strengthâ€“ductility trade-off. Materials Today, 2018, 21, 354-361.	14.2	640
2	Advances in ultra-high temperature ceramics, composites, and coatings. Journal of Advanced Ceramics, 2022, 11, 1-56.	17.4	256
3	Selection, processing, properties and applications of ultra-high temperature ceramic matrix composites, UHTCMCs â€“ a review. International Materials Reviews, 2020, 65, 389-444.	19.3	168
4	High-temperature bending strength, internal friction and stiffness of ZrB2â€“20vol% SiC ceramics. Journal of the European Ceramic Society, 2012, 32, 2519-2527.	5.7	112
5	Chemical Reactions, Anisotropic Grain Growth and Sintering Mechanisms of Self-Reinforced ZrB2-SiC Doped with WC. Journal of the American Ceramic Society, 2011, 94, 1575-1583.	3.8	91
6	Inherent anisotropy in transition metal diborides and microstructure/property tailoring in ultra-high temperature ceramicsâ€"A review. Journal of the European Ceramic Society, 2018, 38, 371-389.	5.7	89
7	Dense and pure high-entropy metal diboride ceramics sintered from self-synthesized powders via boro/carbothermal reduction approach. Science China Materials, 2019, 62, 1898-1909.	6.3	89
8	Pressureless densification of ZrB2â€“SiC composites with vanadium carbide. Scripta Materialia, 2008, 59, 309-312.	5.2	80
9	Formation of tough interlocking microstructure in ZrB₂â€“SiC-based ultrahigh-temperature ceramics by pressureless sintering. Journal of Materials Research, 2009, 24, 2428-2434.	2.6	79
10	ZrB2 powders prepared by boro/carbothermal reduction of ZrO2: The effects of carbon source and reaction atmosphere. Powder Technology, 2012, 217, 462-466.	4.2	72
11	High temperature strength of hot pressed ZrB2â€“20vol% SiC ceramics based on ZrB2 starting powders prepared by different carbo/boro-thermal reduction routes. Journal of the European Ceramic Society, 2013, 33, 1609-1614.	5.7	67
12	Synthesis of ultra-refractory transition metal diboride compounds. Journal of Materials Research, 2016, 31, 2757-2772.	2.6	63
13	Thermoablative resistance of ZrB2-SiC-WC ceramics at 2400ÂÂ°C. Acta Materialia, 2017, 133, 293-302.	7.9	60
14	Oxide dispersion strengthened stainless steel 316L with superior strength and ductility by selective laser melting. Journal of Materials Science and Technology, 2020, 42, 97-105.	10.7	60
15	Strong <scp><scp>ZrB</scp></scp>₂â€“<scp><scp>SiC</scp></scp>â€“<scp><scp>WC</scp></scp> Ceramics at 1600Â°C. Journal of the American Ceramic Society, 2012, 95, 874-878.	3.8	50
16	Spark Plasma Sintering of Superhard <scp><scp>B</scp></scp>₄<scp><scp>C</scp></scp>â€“<scp><scp>ZrB</scp></scp><sub>2</sub Ceramics by Carbide Boronizing. Journal of the American Ceramic Society, 2013, 96, 1055-1059.	3.8	49
17	Controlling the grain orientation during laser powder bed fusion to tailor the magnetic characteristics in a Ni-Fe based soft magnet. Acta Materialia, 2018, 158, 230-238.	7.9	49
18	Porosity control in 316L stainless steel using cold and hot isostatic pressing. Materials and Design, 2018, 138, 21-29.	7.0	47

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19	ZrO2 removing reactions of Groups IVâ€"VI transition metal carbides in ZrB2 based composites. Journal of the European Ceramic Society, 2011, 31, 421-427.	5.7	45
20	Improving high temperature properties of hot pressed ZrB2â€"20vol% SiC ceramic using high purity powders. Ceramics International, 2013, 39, 871-876.	4.8	45
21	Hotâ€Pressed ZrB₂â€"SiC Ceramics with VC Addition: Chemical Reactions, Microstructures, and Mechanical Properties. Journal of the American Ceramic Society, 2009, 92, 2838-2846.	3.8	41
22	Pressureless sintering mechanisms and mechanical properties of hafnium diboride ceramics with pre-sintering heat treatment. Scripta Materialia, 2010, 62, 159-162.	5.2	39
23	Pressureless densification and mechanical properties of hafnium diboride doped with B4C: From solid state sintering to liquid phase sintering. Journal of the European Ceramic Society, 2010, 30, 2699-2705.	5.7	39
24	Textured and platelet-reinforced ZrB2-based ultra-high-temperature ceramics. Scripta Materialia, 2011, 65, 37-40.	5.2	37
25	Densification, microstructure evolution and mechanical properties of WC doped HfB2â€"SiC ceramics. Journal of the European Ceramic Society, 2015, 35, 2707-2714.	5.7	37
26	Segregation of tungsten atoms at ZrB2 grain boundaries in strong ZrB2-SiC-WC ceramics. Scripta Materialia, 2018, 157, 76-80.	5.2	36
27	Tungsten carbide: A versatile additive to get trace alkaline-earth oxide impurities out of ZrB2 based ceramics. Scripta Materialia, 2018, 147, 40-44.	5.2	33
28	A top-down approach to densify ZrB2â€"SiCâ€"BN composites with deeper homogeneity and improved reliability. Chemical Engineering Journal, 2014, 249, 93-101.	12.7	32
29	Fabrication and thermal aging behavior of skutterudites with silica-based composite protective coatings. Journal of Alloys and Compounds, 2012, 527, 247-251.	5.5	31
30	Ultra-low temperature reactive spark plasma sintering of ZrB2-hBN ceramics. Journal of the European Ceramic Society, 2016, 36, 3637-3645.	5.7	31
31	Thermal and electrical transport in ZrB2-SiC-WC ceramics up to 1800ÂÂ°C. Acta Materialia, 2017, 129, 159-169.	7.9	31
32	Synthesis of Plateâ€Like <scp><scp>ZrB₂</scp></scp> Grains. Journal of the American Ceramic Society, 2012, 95, 85-88.	3.8	30
33	In situ synthesis of ZrB2â€"MoSi2 platelet composites: Reactive hot pressing process, microstructure and mechanical properties. Ceramics International, 2012, 38, 4751-4760.	4.8	30
34	Hexagonal BN-encapsulated ZrB2 particle by nitride boronizing. Acta Materialia, 2014, 72, 167-177.	7.9	30
35	Oxygen contamination on the surface of ZrB 2 powders and its removal. Scripta Materialia, 2017, 127, 160-164.	5.2	30
36	Reactive spark plasma sintering of binderless WC ceramics at 1500Â°C. International Journal of Refractory Metals and Hard Materials, 2014, 43, 42-45.	3.8	27

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37	Anisotropy oxidation of textured ZrB2â€“MoSi2 ceramics. Journal of the European Ceramic Society, 2012, 32, 3469-3476.	5.7	25
38	Additive manufacturing of magnetic shielding and ultra-high vacuum flange for cold atom sensors. Scientific Reports, 2018, 8, 2023.	3.3	24
39	Reactive sintering of B4C-TaB2 ceramics via carbide boronizing: Reaction process, microstructure and mechanical properties. Journal of Materials Science and Technology, 2019, 35, 2840-2850.	10.7	24
40	Boride Ceramics: Densification, Microstructure Tailoring and Properties Improvement. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2012, 27, 225-233.	1.3	24
41	Volatility diagram of ZrB₂â€SiCâ€ZrC system and experimental validation. Journal of the American Ceramic Society, 2018, 101, 3627-3635.	3.8	23
42	Sintering highly dense ultra-high temperature ceramics with suppressed grain growth. Journal of the European Ceramic Society, 2020, 40, 1086-1092.	5.7	22
43	Reaction Sintering of <scp><scp>HfC</scp></scp>/<scp><scp>W</scp></scp> Cermets with High Strength and Toughness. Journal of the American Ceramic Society, 2013, 96, 867-872.	3.8	19
44	In-situ ZrB2- hBN ceramics with high strength and low elasticity. Journal of Materials Science and Technology, 2020, 48, 186-193.	10.7	19
45	Nanoceramic composites with duplex microstructure break the strength-toughness tradeoff. Journal of Materials Science and Technology, 2020, 58, 1-9.	10.7	19
46	Rapid sintering of silicon nitride foams decorated with one-dimensional nanostructures by intense thermal radiation. Science and Technology of Advanced Materials, 2014, 15, 045003.	6.1	17
47	Key issues on the reactive sintering of ZrB2 ceramics from elementary raw materials. Scripta Materialia, 2019, 164, 105-109.	5.2	16
48	Flash spark plasma sintering of HfB2 ceramics without pre-sintering. Scripta Materialia, 2018, 156, 115-119.	5.2	15
49	Reactive sintering of 2.5D Cf/ZrC-SiC ceramic matrix composite. Journal of the European Ceramic Society, 2021, 41, 6189-6195.	5.7	14
50	Synthesis mechanism and sintering behavior of tungsten carbide powder produced by a novel solid state reaction of W2N. International Journal of Refractory Metals and Hard Materials, 2012, 35, 202-206.	3.8	13
51	Phase field simulation study of the dissolution behavior of Al2O3 into CaOâ€“Al2O3â€“SiO2 slags. Computational Materials Science, 2016, 119, 9-18.	3.0	13
52	Coreâ€'rim structure, bi-solubility and a hierarchical phase relationship in hot-pressed ZrB2â€'SiCâ€'MC ceramics (M=Nb, Hf, Ta, W). Journal of Materiomics, 2021, 7, 69-79.	5.7	12
53	Effect of Yb₂O₃ Addition on Hotâ€Pressed ZrB₂â€SiC Ceramics. Advanced Engineering Materials, 2008, 10, 759-762.	3.5	11
54	Processing and mechanical properties of B4C-SiCw ceramics densified by spark plasma sintering. Journal of the European Ceramic Society, 2022, 42, 2004-2014.	5.7	11

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55	Tuning the combustion process during reactive sintering of high-performance ceramics by employing solid solutions as reactants. Journal of the European Ceramic Society, 2021, 41, 101-113.	5.7	10
56	Enhanced Mechanical Properties and Oxidation Resistance of Zirconium Diboride Ceramics via Grainâ€Refining and Dislocation Regulation. Advanced Science, 2022, 9, e2104532.	11.2	10
57	Magnetic shielding promotion via the control of magnetic anisotropy and thermal Post processing in laser powder bed fusion processed NiFeMo-based soft magnet. Additive Manufacturing, 2020, 32, 101079.	3.0	9
58	Tougher zirconia nanoceramics with less yttria. Advances in Applied Ceramics, 2019, 118, 9-15.	1.1	8
59	Phase-field simulation and analytical modelling of CaSiO3 growth in CaO-Al2O3-SiO2 melts. Computational Materials Science, 2018, 144, 126-132.	3.0	7
60	Role of rare earth oxide particles on the oxidation behaviour of silicon carbide coated 2.5D carbon fibre preforms. Open Ceramics, 2020, 2, 100018.	2.0	4
61	Ablation behaviour of Cfâ€"ZrC-SiC with and without rare earth metal oxide dopants. Open Ceramics, 2022, 10, 100270.	2.0	3
62	Assembled nano-structures from micron-sized precursors. RSC Advances, 2014, 4, 30754-30757.	3.6	2
63	Structural study of disordered SiC nanowires by three-dimensional rotation electron diffraction. Materials Research Express, 2014, 1, 045023.	1.6	1
64	Integrating thin wall into block: A new scanning strategy for laser powder bed fusion of dense tungsten. Journal of Materials Science and Technology, 2022, 120, 167-171.	10.7	1