Ji Zou

List of Publications by Year
in descending order

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64 papers	3,125 citations	159585 30 h-index	155660 55 g-index
65 all docs	65 docs citations	65 times ranked	1968 citing authors

#	Article	IF	Citations
1	Enhanced Mechanical Properties and Oxidation Resistance of Zirconium Diboride Ceramics via Grainâ€Refining and Dislocation Regulation. Advanced Science, 2022, 9, e2104532.	11.2	10
2	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
3	Advances in ultra-high temperature ceramics, composites, and coatings. Journal of Advanced Ceramics, 2022, 11, 1-56.	17.4	256
4	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
5	Ablation behaviour of Cfâ€“ZrC-SiC with and without rare earth metal oxide dopants. Open Ceramics, 2022, 10, 100270.	2.0	3
6	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
7	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
8	Reactive sintering of 2.5D Cf/ZrC-SiC ceramic matrix composite. Journal of the European Ceramic Society, 2021, 41, 6189-6195.	5.7	14
9	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
10	Sintering highly dense ultra-high temperature ceramics with suppressed grain growth. Journal of the European Ceramic Society, 2020, 40, 1086-1092.	5.7	22
11	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
12	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
13	In-situ ZrB2- hBN ceramics with high strength and low elasticity. Journal of Materials Science and Technology, 2020, 48, 186-193.	10.7	19
14	Nanoceramic composites with duplex microstructure break the strength-toughness tradeoff. Journal of Materials Science and Technology, 2020, 58, 1-9.	10.7	19
15	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
16	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
17	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
18	Key issues on the reactive sintering of ZrB2 ceramics from elementary raw materials. Scripta Materialia, 2019, 164, 105-109.	5.2	16

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19	Tougher zirconia nanoceramics with less yttria. Advances in Applied Ceramics, 2019, 118, 9-15.	1.1	8
20	Volatility diagram of ZrB₂â€SiCâ€ZrC system and experimental validation. Journal of the American Ceramic Society, 2018, 101, 3627-3635.	3.8	23
21	Additive manufacturing of magnetic shielding and ultra-high vacuum flange for cold atom sensors. Scientific Reports, 2018, 8, 2023.	3.3	24
22	Phase-field simulation and analytical modelling of CaSiO3 growth in CaO-Al2O3-SiO2 melts. Computational Materials Science, 2018, 144, 126-132.	3.0	7
23	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
24	Porosity control in 316L stainless steel using cold and hot isostatic pressing. Materials and Design, 2018, 138, 21-29.	7.0	47
25	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
26	Dislocation network in additive manufactured steel breaks strengthâ€"ductility trade-off. Materials Today, 2018, 21, 354-361.	14.2	640
27	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
28	Segregation of tungsten atoms at ZrB2 grain boundaries in strong ZrB2-SiC-WC ceramics. Scripta Materialia, 2018, 157, 76-80.	5.2	36
29	Flash spark plasma sintering of HfB2 ceramics without pre-sintering. Scripta Materialia, 2018, 156, 115-119.	5.2	15
30	Thermal and electrical transport in ZrB2-SiC-WC ceramics up to 1800ÂÂ°C. Acta Materialia, 2017, 129, 159-169.	7.9	31
31	Thermoablative resistance of ZrB2-SiC-WC ceramics at 2400ÂÂ°C. Acta Materialia, 2017, 133, 293-302.	7.9	60
32	Oxygen contamination on the surface of ZrB 2 powders and its removal. Scripta Materialia, 2017, 127, 160-164.	5.2	30
33	Ultra-low temperature reactive spark plasma sintering of ZrB2-hBN ceramics. Journal of the European Ceramic Society, 2016, 36, 3637-3645.	5.7	31
34	Synthesis of ultra-refractory transition metal diboride compounds. Journal of Materials Research, 2016, 31, 2757-2772.	2.6	63
35	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
36	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

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37	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
38	Structural study of disordered SiC nanowires by three-dimensional rotation electron diffraction. Materials Research Express, 2014, 1, 045023.	1.6	1
39	Hexagonal BN-encapsulated ZrB2 particle by nitride boronizing. Acta Materialia, 2014, 72, 167-177.	7.9	30
40	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
41	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
42	Assembled nano-structures from micron-sized precursors. RSC Advances, 2014, 4, 30754-30757.	3.6	2
43	Spark Plasma Sintering of Superhard <scp><scp>B</scp></scp>₄<scp><scp>C</scp></scp>â€“<scp><scp>ZrB</scp></scp>₂ Ceramics by Carbide Boronizing. Journal of the American Ceramic Society, 2013, 96, 1055-1059.	3.8	49
44	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
45	Improving high temperature properties of hot pressed ZrB2â€“20vol% SiC ceramic using high purity powders. Ceramics International, 2013, 39, 871-876.	4.8	45
46	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
47	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
48	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
49	Synthesis of Plateâ€Like <scp><scp>ZrB₂</scp></scp> Grains. Journal of the American Ceramic Society, 2012, 95, 85-88.	3.8	30
50	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
51	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
52	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
53	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
54	Anisotropy oxidation of textured ZrB2â€“MoSi2 ceramics. Journal of the European Ceramic Society, 2012, 32, 3469-3476.	5.7	25

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55	Boride Ceramics: Densification, Microstructure Tailoring and Properties Improvement. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2012, 27, 225-233.	1.3	24
56	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
57	Textured and platelet-reinforced ZrB2-based ultra-high-temperature ceramics. Scripta Materialia, 2011, 65, 37-40.	5.2	37
58	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
59	Pressureless sintering mechanisms and mechanical properties of hafnium diboride ceramics with pre-sintering heat treatment. Scripta Materialia, 2010, 62, 159-162.	5.2	39
60	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
61	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
62	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
63	Effect of Yb₂O₃ Addition on Hotâ€Pressed ZrB₂â€SiC Ceramics. Advanced Engineering Materials, 2008, 10, 759-762.	3.5	11
64	Pressureless densification of ZrB2â€“SiC composites with vanadium carbide. Scripta Materialia, 2008, 59, 309-312.	5.2	80