Wei-Ming Guo

List of Publications by Year
in descending order

63 papers	1,493 citations	361413 20 h-index	361022 35 g-index
64 all docs	64 docs citations	64 times ranked	778 citing authors

#	Article	IF	Citations
1	Dense high-entropy boride ceramics with ultra-high hardness. Scripta Materialia, 2019, 164, 135-139.	5.2	177
2	Microstructure and mechanical properties of high-entropy borides derived from boro/carbothermal reduction. Journal of the European Ceramic Society, 2019, 39, 3920-3924.	5.7	127
3	Reaction Processes and Characterization of ZrB₂ Powder Prepared by Boro/Carbothermal Reduction of ZrO₂ in Vacuum. Journal of the American Ceramic Society, 2009, 92, 264-267.	3.8	114
4	Cutting performance and wear mechanism of TiB2-B4C ceramic cutting tools in high speed turning of Ti6Al4V alloy. Ceramics International, 2018, 44, 15495-15502.	4.8	56
5	Optimal preparation of high-entropy boride-silicon carbide ceramics. Journal of Advanced Ceramics, 2021, 10, 173-180.	17.4	52
6	New Borothermal Reduction Route to Synthesize Submicrometric <scp><scp>ZrB₂</scp></scp> Powders with Low Oxygen Content. Journal of the American Ceramic Society, 2011, 94, 3702-3705.	3.8	49
7	Improved densification and hardness of high-entropy diboride ceramics from fine powders synthesized via borothermal reduction process. Ceramics International, 2020, 46, 14299-14303.	4.8	49
8	Synthesis of submicrometer HfB2 powder and its densification. Materials Letters, 2012, 83, 52-55.	2.6	42
9	Rapid fabrication of Si3N4 ceramics by reaction-bonding and pressureless sintering. Journal of the European Ceramic Society, 2016, 36, 3919-3924.	5.7	41
10	Fabrication of textured (Hf0.2Zr0.2Ta0.2Cr0.2Ti0.2)B2 high-entropy ceramics. Journal of the European Ceramic Society, 2021, 41, 1015-1019.	5.7	40
11	Fabrication and wear behaviors of graded Si3N4 ceramics by the combination of two-step sintering and Î²-Si3N4 seeds. Journal of the European Ceramic Society, 2018, 38, 3457-3462.	5.7	35
12	<scp><scp>TiB</scp></scp>₂ Powders Synthesis by Borothermal Reduction in TiO₂ Under Vacuum. Journal of the American Ceramic Society, 2014, 97, 1359-1362.	3.8	31
13	Effect of carbon content on the microstructure and mechanical properties of high-entropy (Ti0.2Zr0.2Nb0.2Ta0.2Mo0.2)Cx ceramics. Journal of the European Ceramic Society, 2022, 42, 336-343.	5.7	31
14	Fine-grained dual-phase high-entropy ceramics derived from boro/carbothermal reduction. Journal of the European Ceramic Society, 2021, 41, 3189-3195.	5.7	30
15	Microstructural Evolution and Grain Growth Kinetics in ZrB₂â€“SiC Composites During Heat Treatment. Journal of the American Ceramic Society, 2009, 92, 2780-2783.	3.8	29
16	Low-temperature densification of high-entropy (Ti,Zr,Nb,Ta,Mo)Câ€”Co composites with high hardness and high toughness. Journal of Advanced Ceramics, 2022, 11, 805-813.	17.4	29
17	Chemical reactivity of hot-pressed Si3N4â€“ZrB2 ceramics at 1500â€“1700 Â°C. Journal of the European Ceramic Society, 2015, 35, 2973-2979.	5.7	26
18	Influence of whisker-aspect-ratio on densification, microstructure and mechanical properties of Al2O3 whiskers-reinforced CeO2-stabilized ZrO2 composites. Journal of the European Ceramic Society, 2018, 38, 1796-1801.	5.7	26

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19	Performance improvement of Si3N4 ceramic cutting tools by tailoring of phase composition and microstructure. Ceramics International, 2020, 46, 26182-26189.	4.8	24
20	Texture, microstructures, and mechanical properties of AlNâ€based ceramics with Si₃N₄â€“Y₂O₃ additives. Journal of the American Ceramic Society, 2017, 100, 3380-3384.	3.8	23
21	Synthesis of fine ZrB2 powders by solid solution of TaB2 and their densification and mechanical properties. Ceramics International, 2018, 44, 4473-4477.	4.8	22
22	Effect of Carbon Impurities on Hotâ€Pressed <scp><scp>ZrB₂â€“SiC</scp></scp> Ceramics. Journal of the American Ceramic Society, 2011, 94, 3241-3244.	3.8	21
23	Textured and toughened high-entropy (Ti0.2Zr0.2Hf0.2Nb0.2Ta0.2)C-SiCw ceramics. Journal of Materials Science and Technology, 2021, 94, 99-103.	10.7	21
24	Synthesis of fine ZrB 2 powders by new borothermal reduction of coarse ZrO 2 powders. Ceramics International, 2016, 42, 15087-15090.	4.8	20
25	High-toughness Lu2O3-doped Si3N4 ceramics by seeding. Ceramics International, 2016, 42, 6495-6499.	4.8	18
26	Effect of ZrB2 powders on densification, microstructure, mechanical properties and thermal conductivity of ZrB2-SiC ceramics. Ceramics International, 2021, 47, 15843-15848.	4.8	18
27	Synthesis of TaB₂ powders by borothermal reduction. Journal of the American Ceramic Society, 2017, 100, 2368-2372.	3.8	17
28	Continuous and symmetric graded Si3N4 ceramics designed by spark plasma sintering at 15â€¯MPa. Ceramics International, 2019, 45, 16703-16706.	4.8	16
29	Improvement of densification and microstructure of HfB₂ ceramics by Ta/Ti substitution for Hf. Journal of the American Ceramic Society, 2020, 103, 103-111.	3.8	16
30	Pressureless Sintering of Zirconium Diboride Ceramics with Boron Additive. Journal of the American Ceramic Society, 2012, 95, 2470-2473.	3.8	15
31	Particle refinement of ZrB₂ by the combination of borothermal reduction and solid solution. Journal of the American Ceramic Society, 2017, 100, 524-528.	3.8	13
32	Effect of ZrB₂ content on phase assemblage and mechanical properties of Si₃N₄â€“ZrB₂ ceramics prepared at low temperature. Journal of the American Ceramic Society, 2018, 101, 4870-4875.	3.8	13
33	Selection principle of the synthetic route for fabrication of HfB₂ and HfB₂â€SiC ceramics. Journal of the American Ceramic Society, 2019, 102, 6427-6432.	3.8	13
34	Wear behavior and mechanism of TiB2-based ceramic inserts in high-speed cutting of Ti6Al4V alloy. Ceramics International, 2020, 46, 8135-8144.	4.8	13
35	Powder synthesis, densification, microstructure and mechanical properties of Hf-based ternary boride ceramics. Journal of the European Ceramic Society, 2021, 41, 3922-3928.	5.7	13
36	A Novel Hot Pressing Flowing Sintering for Preparation of Texturing Ceramics. Journal of the American Ceramic Society, 2015, 98, 2696-2699.	3.8	12

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37	Powder characteristics, sinterability, and mechanical properties of TiB₂ prepared by three reduction methods. Journal of the American Ceramic Society, 2019, 102, 4511-4519.	3.8	12
38	Improved toughness of spark-plasma-sintered Si3N4 ceramics by adding HfB2. Ceramics International, 2021, 47, 8717-8721.	4.8	11
39	Effect of TiO2 additives on nitridation of Si powders. Materials Letters, 2016, 177, 61-63.	2.6	10
40	Graded Si3N4 ceramics with hard surface and tough core by two-step hot pressing. Ceramics International, 2017, 43, 7948-7950.	4.8	10
41	Lowâ€temperature joining of SiC ceramics using NITE phase with Al 2 O 3 â€Ho 2 O 3 additive. Journal of the American Ceramic Society, 2020, 103, 731-736.	3.8	10
42	Effect of ZrB2 and its oxide impurities (ZrO2 and B2O3) on hot-pressed Si3N4 ceramics at low temperature. Journal of the European Ceramic Society, 2021, 41, 6763-6766.	5.7	10
43	Enhanced Mechanical Properties and Oxidation Resistance of Zirconium Diboride Ceramics via Grainâ€Refining and Dislocation Regulation. Advanced Science, 2022, 9, e2104532.	11.2	10
44	Si3N4-ZrB2 ceramics prepared at low temperature with improved mechanical properties. Journal of the European Ceramic Society, 2017, 37, 4217-4221.	5.7	9
45	Enhanced mechanical properties of Si3N4 ceramics with ZrB2-B binary additives prepared at low temperature. Journal of the European Ceramic Society, 2019, 39, 5102-5105.	5.7	9
46	Preparation and oxidation behaviour of SiC-based ceramics with TaB2 addition. Ceramics International, 2019, 45, 23836-23840.	4.8	9
47	A novel strategy for c-axis textured silicon nitride ceramics by hot extrusion. Journal of the European Ceramic Society, 2021, 41, 6059-6063.	5.7	9
48	Influence of powder characteristics on hot-pressed Si3N4 ceramics. Science of Sintering, 2017, 49, 81-89.	1.4	9
49	Pressureless densification of HfB2-based ceramics using HfB2 powders by borothermal reduction. Ceramics International, 2021, 47, 33922-33925.	4.8	8
50	Fabrication and modelling of Si3N4 ceramics with radial grain alignment generated through centripetal sinter-forging. Journal of Materials Science and Technology, 2022, 126, 1-14.	10.7	8
51	Densification and Thermal Stability of Hotâ€Pressed Si₃N₄â€“ZrB₂ Ceramics. Journal of the American Ceramic Society, 2015, 98, 3651-3654.	3.8	7
52	Equiaxed Î²â€“Si₃N₄ ceramics prepared by rapid reactionâ€bonding and postâ€sintering using TiO₂â€“Y₂O₃â€“Al₂O₃ additives. Journal of the American Ceramic Society, 2017, 100, 5353-5357.	3.8	7
53	Effects of TaB 2 and TiB 2 on the grain growth behavior and kinetics of HfB 2 ceramics during pressureless sintering. Journal of the American Ceramic Society, 2020, 103, 3330-3337.	3.8	7
54	Improvement of sinterability and mechanical properties of ZrB2 ceramics by the modified borothermal reduction methods. Journal of the European Ceramic Society, 2020, 40, 3844-3850.	5.7	7

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55	Dense and coreâ€rim structured B 4 Câ€TiB 2 ceramics with Moâ€Coâ€WC additive. Journal of the American Ceramic Society, 2021, 104, 2860-2867.	3.8	7
56	Hardness and toughness improvement of SiCâ€based ceramics with the addition of (Hf_{0.2}Mo_{0.2}Ta_{0.2}Nb_{0.2}Ti_{0.2})B₂. Journal of the American Ceramic Society, 2022, 105, 1629-1634.	3.8	7
57	Densification, microstructure, and mechanical properties of V-substituted HfB2-based ceramics. Ceramics International, 2021, 47, 2255-2260.	4.8	6
58	Effect of CeO₂ and Al₂O₃ contents on Ceâ€ZrO₂/Al₂O₃ composites. Journal of the American Ceramic Society, 2018, 101, 2066-2073.	3.8	5
59	Alumina ceramics joined with screen-printed B2O3 by spark plasma sintering. Ceramics International, 2021, 47, 30838-30843.	4.8	4
60	Effects of ZrB2 powders on microstructure and mechanical properties of ZrB2-SiCw ceramics. Ceramics International, 2022, 48, 31060-31064.	4.8	3
61	Fully dense ZrB 2 ceramics by borothermal reduction with ultraâ€fine ZrO 2 and solid solution. Journal of the American Ceramic Society, 0, , .	3.8	2
62	Effect of SiO2 addition on Si3N4 ceramics prepared by rapid nitridation and post-sintering route. Ceramics International, 2017, 43, 13901-13906.	4.8	1
63	(Hf0.99Ta0.01)B2-based ceramics prepared by pressureless sintering with boron additive. Ceramics International, 2022, 48, 8605-8611.	4.8	0