

Xiao-Ming Duan

List of Publications by Year in descending order

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57
papers

1,470
citations

331670

21
h-index

345221

36
g-index

60
all docs

60
docs citations

60
times ranked

947
citing authors

#	ARTICLE	IF	CITATIONS
1	Review on the properties of hexagonal boron nitride matrix composite ceramics. Journal of the European Ceramic Society, 2016, 36, 3725-3737.	5.7	107
2	Preparation and anisotropic properties of textured structural ceramics: A review. Journal of Advanced Ceramics, 2019, 8, 289-332.	17.4	107
3	On the formation mechanisms and properties of MAX phases: A review. Journal of the European Ceramic Society, 2021, 41, 3851-3878.	5.7	97
4	Progress of a novel non-oxide Si-B-C-N ceramic and its matrix composites. Journal of Advanced Ceramics, 2012, 1, 157-178.	17.4	81
5	Effect of sintering pressure on the texture of hot-press sintered hexagonal boron nitride composite ceramics. Scripta Materialia, 2013, 68, 104-107.	5.2	68
6	Synthesis of high-purity, isotropic or textured Cr ₂ AlC bulk ceramics by spark plasma sintering of pressure-less sintered powders. Journal of the European Ceramic Society, 2015, 35, 1393-1400.	5.7	64
7	Anisotropic mechanical properties and fracture mechanisms of textured h-BN composite ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 607, 38-43.	5.6	63
8	3D-printing of architected short carbon fiber-geopolymer composite. Composites Part B: Engineering, 2021, 226, 109348.	12.0	57
9	Effect of Preforming Process and Starting Fused SiO ₂ Particle Size on Microstructure and Mechanical Properties of Pressurelessly Sintered BN _p /SiO ₂ Ceramic Composites. Journal of the American Ceramic Society, 2011, 94, 3552-3560.	3.8	56
10	A novel BN-MAS system composite ceramics with greatly improved mechanical properties prepared by low temperature hot-pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 633, 194-199.	5.6	44
11	SiC fiber reinforced geopolymer composites, part 1: Short SiC fiber. Ceramics International, 2016, 42, 5345-5352.	4.8	43
12	Safe trapping of cesium into doping-enhanced pollucite structure by geopolymer precursor technique. Journal of Hazardous Materials, 2019, 367, 577-588.	12.4	43
13	In situ processing of MWCNTs/leucite composites through geopolymer precursor. Journal of the European Ceramic Society, 2017, 37, 2219-2226.	5.7	41
14	Anisotropies in structure and properties of hot-press sintered h-BN-MAS composite ceramics: Effects of raw h-BN particle size. Journal of the European Ceramic Society, 2019, 39, 539-546.	5.7	34
15	Effects of boron addition on the high temperature oxidation resistance of dense sSiBCN monoliths at 1500 Å°C. Corrosion Science, 2017, 126, 10-25.	6.6	33
16	Influence of hot-press sintering parameters on microstructures and mechanical properties of h-BN ceramics. Journal of Alloys and Compounds, 2016, 684, 474-480.	5.5	31
17	High-temperature oxidation behavior of dense SiBCN monoliths: Carbon-content dependent oxidation structure, kinetics and mechanisms. Corrosion Science, 2017, 124, 103-120.	6.6	30
18	Thermal properties and thermal shock resistance of BAS-BN composite ceramics. Ceramics International, 2019, 45, 8181-8187.	4.8	27

#	ARTICLE	IF	CITATIONS
19	Crystallization kinetics and microstructure evolution of reduced graphene oxide/geopolymer composites. <i>Journal of the European Ceramic Society</i> , 2016, 36, 2601-2609.	5.7	24
20	Immobilization behavior of Sr in geopolymer and its ceramic product. <i>Journal of the American Ceramic Society</i> , 2020, 103, 1372-1384.	3.8	24
21	Inhibiting crystallization mechanism of h-BN on $\hat{\pm}$ -cordierite in BN-MAS composites. <i>Journal of the European Ceramic Society</i> , 2016, 36, 905-909.	5.7	22
22	Microstructural evolution of h-BN matrix composite ceramics with La-Al-Si-O glass phase during hot-pressed sintering. <i>Journal of Advanced Ceramics</i> , 2021, 10, 493-501.	17.4	22
23	Preparation of fully stabilized cubic-leucite composite through heat-treating Cs-substituted K-geopolymer composite at high temperatures. <i>Composites Science and Technology</i> , 2015, 107, 44-53.	7.8	21
24	Microstructure evolution and grain growth mechanisms of h-BN ceramics during hot-pressing. <i>Journal of the European Ceramic Society</i> , 2020, 40, 2268-2278.	5.7	21
25	Influence of sintering pressure on the crystallization and mechanical properties of BN-MAS composite ceramics. <i>Journal of Materials Science</i> , 2016, 51, 2292-2298.	3.7	20
26	Effect of the BN content on the thermal shock resistance and properties of BN/SiO ₂ composites fabricated from mechanically alloyed SiBON powders. <i>RSC Advances</i> , 2017, 7, 48994-49003.	3.6	18
27	Texture and anisotropy of hot-pressed h-BN matrix composite ceramics with in situ formed YAG. <i>Journal of Advanced Ceramics</i> , 2022, 11, 532-544.	17.4	17
28	Ion sputtering erosion mechanisms of h-BN composite ceramics with textured microstructures. <i>Journal of Alloys and Compounds</i> , 2014, 613, 1-7.	5.5	14
29	Anisotropic properties of textured h-BN matrix ceramics prepared using 3Y ₂ O ₃ -5Al ₂ O ₃ (-4MgO) as sintering additives. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1788-1795.	5.7	14
30	Ablation mechanism and properties of in-situ SiAlON reinforced BN-SiO ₂ ceramic composite under an oxyacetylene torch environment. <i>Ceramics International</i> , 2014, 40, 11149-11155.	4.8	13
31	Role of boron addition on phase composition, microstructural evolution and mechanical properties of nanocrystalline SiBCN monoliths. <i>Journal of the European Ceramic Society</i> , 2018, 38, 1179-1189.	5.7	13
32	Microstructural evolution and mechanical properties of h-BN composite ceramics with Y ₂ O ₃ -AlN addition by liquid-phase sintering. <i>Rare Metals</i> , 2020, 39, 555-561.	7.1	12
33	Insight into hexacelsian-to-celsian transformation in hot-pressed BN/BAS composites. <i>Journal of the European Ceramic Society</i> , 2020, 40, 1773-1778.	5.7	12
34	The effects of holding time on grain size, orientation degree and properties of h-BN matrix textured ceramics. <i>Materials Chemistry and Physics</i> , 2020, 248, 122916.	4.0	12
35	Study on the plasma erosion resistance of ZrO ₂ (3Y)/BN-SiO ₂ composite ceramics. <i>Composites Part B: Engineering</i> , 2013, 46, 130-134.	12.0	11
36	SnO ₂ nanoparticles anchored on chlorinated graphene formed directly on Cu foil as binder-free anode materials for lithium-ion batteries. <i>Applied Surface Science</i> , 2020, 519, 146190.	6.1	11

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37	Effect of Re ₂ O ₃ –MgO additives on the microstructure evolution and properties of β -Si ₃ N ₄ ceramics. <i>Ceramics International</i> , 2021, 47, 22073-22079.	4.8	11
38	Mechanical properties and plasma erosion resistance of BNp/Al ₂ O ₃ -SiO ₂ composite ceramics. <i>Journal of Central South University</i> , 2013, 20, 1462-1468.	3.0	10
39	From bulk to porous structures: Tailoring monoclinic SrAl ₂ Si ₂ O ₈ ceramic by geopolymer precursor technique. <i>Journal of the American Ceramic Society</i> , 2020, 103, 4957-4968.	3.8	10
40	Cyclic thermal shock resistance of h-BN composite ceramics with La ₂ O ₃ –Al ₂ O ₃ –SiO ₂ addition. <i>Ceramics International</i> , 2021, 47, 73-79.	4.8	10
41	Formation of SiC whiskers/leucite-based ceramic composites from low temperature hardening geopolymer. <i>Ceramics International</i> , 2021, 47, 17930-17938.	4.8	10
42	Effect of ball milling treatment on the microstructures and properties of Cr ₂ AlC powders and hot pressed bulk ceramics. <i>Journal of the European Ceramic Society</i> , 2019, 39, 5140-5148.	5.7	9
43	Effect of the starting AlN content on the phase formation and property of the novel in-situ fabricated X-SiAlON/BN composites. <i>Journal of the European Ceramic Society</i> , 2019, 39, 934-943.	5.7	9
44	Grain-orientation dependence of the anisotropic thermal shock performance of hexagonal boron nitride ceramics. <i>Scripta Materialia</i> , 2020, 178, 402-407.	5.2	9
45	Microstructure and erosion resistance of in-situ SiAlON reinforced BN-SiO ₂ composite ceramics. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2016, 31, 315-320.	1.0	7
46	Effects of sintering temperature on the microstructure and properties of h-BN ceramics with MAS as liquid sintering aid. <i>Ceramics International</i> , 2020, 46, 1076-1082.	4.8	7
47	Improvement of grain size and crystallization degree of LPSed h-BN composite ceramics by amorphization/nanocrystallization of raw h-BN powders. <i>Journal of Alloys and Compounds</i> , 2021, 852, 156765.	5.5	7
48	3D Printing of Damage-tolerant Martian Regolith Simulant-based Geopolymer Composites. <i>Additive Manufacturing</i> , 2022, 58, 103025.	3.0	6
49	Preparation of highly oriented h-BN based textured ceramics via grain rearrangement under DLP printing and low-pressure sintering. <i>Materials Letters</i> , 2020, 268, 127584.	2.6	5
50	Microstructure and room/elevated-temperature mechanical properties of hot-pressed h-BN composite ceramics with La ₂ O ₃ -Al ₂ O ₃ -SiO ₂ addition. <i>Journal of the European Ceramic Society</i> , 2020, 40, 2260-2267.	5.7	5
51	Preparation and mechanical performance of SiC w /geopolymer composites through direct ink writing. <i>Journal of the American Ceramic Society</i> , 0, , .	3.8	5
52	Influence of sintering temperature on the crystallization and mechanical properties of BN–MAS composites. <i>Journal of the American Ceramic Society</i> , 2022, 105, 3590-3600.	3.8	5
53	Manufacturing of high volume fraction of Ti ₃ AlC ₂ -Ti ₂ AlC metallic ceramics as nano-multilayered structures through high energy milling, hot pressing and liquid phase sintering. <i>Materials Characterization</i> , 2017, 128, 176-183.	4.4	4
54	Ablation behavior and mechanism of boron nitride - magnesium aluminum silicate ceramic composites in an oxyacetylene combustion flame. <i>Ceramics International</i> , 2018, 44, 1518-1525.	4.8	4

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55	MAS-content dependence of the texture and fracture behavior of h-BN-MAS composite ceramics. <i>Ceramics International</i> , 2019, 45, 18536-18542.	4.8	4
56	In situ ZrC/Si-B-C-N monoliths prepared by sol-gel and reactive hot-pressing: Processing, microstructure, mechanical properties and oxidation behavior. <i>Journal of Alloys and Compounds</i> , 2019, 811, 151687.	5.5	3
57	Improved mechanical properties and directional heat transfer performance of h-BN matrix multilayer composites with alternately stacked untextured/textured layers. <i>Ceramics International</i> , 2022, 48, 13563-13571.	4.8	3