

# Ruoyu Chen

## List of Publications by Year in descending order

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45  
papers

896  
citations

430874

18  
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501196

28  
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45  
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45  
docs citations

45  
times ranked

558  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of pore structure on thermal conductivity and strength of alumina porous ceramics using carbon black as pore-forming agent. <i>Ceramics International</i> , 2016, 42, 8221-8228.	4.8	151
2	Effect of particle size of fly ash on the properties of lightweight insulation materials. <i>Construction and Building Materials</i> , 2016, 123, 120-126.	7.2	82
3	Fabrication of mullite-corundum foamed ceramics for thermal insulation and effect of micro-pore-foaming agent on their properties. <i>Journal of Alloys and Compounds</i> , 2019, 785, 1030-1037.	5.5	57
4	Low thermal expansion coefficient and high thermal conductivity epoxy/Al <sub>2</sub> O <sub>3</sub> /T-ZnOw composites with dual-scale interpenetrating network structure. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 137, 105993.	7.6	40
5	A novel design of Al <sub>2</sub> O <sub>3</sub> -ZrO <sub>2</sub> reticulated porous ceramics with hierarchical pore structures and excellent properties. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1877-1886.	5.7	39
6	Toward excellent performance of Al <sub>2</sub> O <sub>3</sub> -ZrO <sub>2</sub> reticulated porous ceramics: New insights based on residual stress. <i>Ceramics International</i> , 2018, 44, 21478-21485.	4.8	33
7	Novel aluminum borate foams with controllable structures as exquisite high-temperature thermal insulators. <i>Journal of the European Ceramic Society</i> , 2020, 40, 173-180.	5.7	30
8	Preparation and properties of porous ceramic aggregates using electrical insulators waste. <i>Ceramics International</i> , 2015, 41, 5807-5811.	4.8	29
9	Effects of alumina bubble addition on the properties of mullite castables. <i>Journal of Alloys and Compounds</i> , 2018, 735, 327-337.	5.5	26
10	Porous alumina ceramics with enhanced mechanical and thermal insulation properties based on sol-treated rice husk. <i>Ceramics International</i> , 2018, 44, 22616-22621.	4.8	25
11	Fabrication and characterization of a mullite-foamed ceramic reinforced by in-situ SiC whiskers. <i>Ceramics International</i> , 2020, 46, 3132-3138.	4.8	25
12	Fabrication, characterization and thermal-insulation modeling of foamed mullite-SiC ceramics. <i>Journal of Alloys and Compounds</i> , 2020, 829, 154523.	5.5	23
13	Optimization of the microstructure and properties of Al <sub>2</sub> O <sub>3</sub> -ZrO <sub>2</sub> reticulated porous ceramics via in-situ synthesis of mullite whiskers and flowing-liquid phase. <i>Materials Letters</i> , 2019, 243, 66-68.	2.6	22
14	Effects of nano-alumina content on the formation of interconnected pores in porous purging plug materials. <i>Ceramics International</i> , 2017, 43, 16722-16726.	4.8	21
15	Preparation of novel reticulated prickly porous ceramics with mullite whiskers. <i>Journal of the European Ceramic Society</i> , 2021, 41, 864-870.	5.7	21
16	Novel applications of waste ceramics on the fabrication of foamed materials for exterior building walls insulation. <i>Construction and Building Materials</i> , 2018, 180, 291-297.	7.2	20
17	Preparation and characterization of eco-friendly and low-cost mullite-corundum foamed ceramics with low thermal conductivity. <i>Ceramics International</i> , 2019, 45, 13203-13209.	4.8	20
18	Effects of microsilica addition on the microstructure and properties of alumina foams. <i>Ceramics International</i> , 2016, 42, 16401-16404.	4.8	19

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19	Effect of inorganic acid on the phase transformation of alumina. Journal of Alloys and Compounds, 2017, 699, 170-175.	5.5	19
20	Synthesizing low-cost, high-corrosion-resistant refractory kiln furniture for the calcination of Li-ion battery cathode materials. Ceramics International, 2021, 47, 4049-4054.	4.8	17
21	Effects of foaming temperature on the preparation and microstructure of alumina foams. Materials Letters, 2016, 165, 19-21.	2.6	14
22	Additive manufacturing of complexly shaped SiC with high density via extrusion-based technique "Effects of slurry thixotropic behavior and 3D printing parameters. Ceramics International, 2022, 48, 28444-28454.	4.8	14
23	A novel design of neutron shielding composite materials with three-dimensionally interwoven structure and excellent properties. Journal of Alloys and Compounds, 2020, 845, 156328.	5.5	13
24	A novel approach to prepare high strength and high porosity reticulated porous ceramics by in-situ synthesis of mullite whiskers. Ceramics International, 2021, 47, 14561-14568.	4.8	12
25	Novel method of fabricating ultra-light aluminum borate foams with hierarchical pore structure. Materials Letters, 2019, 243, 92-95.	2.6	11
26	Preparation of novel reticulated porous ceramics with hierarchical pore structures. Journal of Alloys and Compounds, 2019, 806, 596-602.	5.5	10
27	Effect of the amount of andalusite addition on the properties of lightweight porous reticulated materials. Construction and Building Materials, 2019, 213, 257-264.	7.2	10
28	Recycling of municipal solid waste incineration fly ash in foam ceramic materials for exterior building walls. Journal of Building Engineering, 2021, 44, 103427.	3.4	10
29	The impact of alumina bubble particle size on the microstructure and physical properties of mullite castables. Ceramics International, 2019, 45, 1928-1939.	4.8	9
30	Effect of residual compressive stress on thermal shock resistance and microstructure of Al <sub>2</sub> O <sub>3</sub> -ZrO <sub>2</sub> reticulated porous ceramics. Materials Research Express, 2019, 6, 105209.	1.6	7
31	A novel approach to process high-performance lightweight reticulated porous materials. Construction and Building Materials, 2019, 227, 116653.	7.2	7
32	Micro-Porosity and Properties of Light-Weight Insulation Refractories Based on Calcined Flint Clay. Transactions of the Indian Ceramic Society, 2019, 78, 7-12.	1.0	7
33	Effect of recoating slurry with different particle size on the properties of reticulated porous mullite ceramics. Journal of the Australian Ceramic Society, 2020, 56, 619-629.	1.9	7
34	Environment-oriented low-cost Al <sub>2</sub> O <sub>3</sub> ceramics with hierarchical pore structure fabricated from SiC solid waste. International Journal of Applied Ceramic Technology, 2020, 17, 184-189.	2.1	7
35	Effects of mechanically alloying Al <sub>2</sub> O <sub>3</sub> and Y <sub>2</sub> O <sub>3</sub> additives on the liquid phase sintering behavior and properties of SiC. Ceramics International, 2022, 48, 31679-31685.	4.8	7
36	Preparation of aggregates based on waste foundry sand: Reuse of calcined clay. Applied Clay Science, 2017, 143, 101-106.	5.2	6

#	ARTICLE	IF	CITATIONS
37	Optimization of the corrosion behavior of mullite-SiC castable against alkali vapor via coating high temperature glaze. <i>Journal of Alloys and Compounds</i> , 2019, 770, 945-951.	5.5	6
38	Enhanced mechanical strength of SiC reticulated porous ceramics via addition of in-situ chopped carbon fibers. <i>Journal of Alloys and Compounds</i> , 2021, 888, 161638.	5.5	6
39	Preparation of high-strength lightweight alumina with plant-derived pore using corn stalk as pore-forming agent. <i>International Journal of Applied Ceramic Technology</i> , 2020, 17, 2465-2472.	2.1	3
40	Dual-functional application of Al <sub>2</sub> O <sub>3</sub> -B <sub>2</sub> O <sub>3</sub> composite bubble in Al <sub>2</sub> O <sub>3</sub> -SiC-C castables as antioxidant and mechanical reinforcement agents. <i>Ceramics International</i> , 2021, 47, 23686-23690.	4.8	3
41	Effects of different kinds of sillimanite minerals on the properties of mullite ceramic foams. <i>Materials Research Express</i> , 2019, 6, 125203.	1.6	2
42	Microstructures and Properties of Carbon Fibers and in-situ Whiskers Reinforced Mullite-Based Castable Composites. <i>Transactions of the Indian Ceramic Society</i> , 2020, 79, 182-187.	1.0	2
43	Preparation of castable foam with regular micro-spherical pore structure as a substitute for diatomite brick. <i>Ceramics International</i> , 2022, 48, 21589-21599.	4.8	2
44	Improvement of the alkali corrosion resistance and mechanical properties of corundum castables by coating of Li <sub>2</sub> O-Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> glaze. <i>Journal of the Australian Ceramic Society</i> , 2019, 55, 703-710.	1.9	1
45	Improved additive manufacturing of silicon carbide parts via pressureless electric field-assisted sintering. <i>International Journal of Applied Ceramic Technology</i> , 0, , .	2.1	1