Zhangyi Huang

List of Publications by Year
in descending order

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51	788	430874	610901
papers	citations	18 h-index	24 g-index

51	51	51	502
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermal-Driven Fluoriteâ€“Pyrochloreâ€“Fluorite Phase Transitions of Gd2Zr2O7 Ceramics Probed in Large Range of Sintering Temperature. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 623-630.	2.2	44
2	Densification and grain growth of Gd2Zr2O7 nanoceramics during pressureless sintering. Journal of the European Ceramic Society, 2017, 37, 1059-1065.	5.7	39
3	Fabrication of Li4SiO4 ceramic pebbles with uniform grain size and high mechanical strength by gel-casting. Ceramics International, 2016, 42, 2180-2185.	4.8	29
4	The effects of precipitants on co-precipitation synthesis of yttria-stabilized zirconia nanocrystalline powders. Journal of Sol-Gel Science and Technology, 2019, 90, 359-368.	2.4	29
5	Uranium-Incorporated Pyrochlore La₂(U_xMg_xZr_{1â€“2x})₂O₇ as a Nuclear Waste Form: Structure and Phase Stability. Inorganic Chemistry, 2020, 59, 9919-9926.	4.6	27
6	A facile solvothermal method for high-quality Gd2Zr2O7 nanopowder preparation. Ceramics International, 2018, 44, 1334-1342.	4.8	25
7	Fabrication and tritium release property of Li2TiO3-Li4SiO4 biphasic ceramics. Journal of Nuclear Materials, 2018, 503, 151-156.	2.7	24
8	Defectâ€fluorite Gd 2 Zr 2 O 7 ceramics under helium irradiation: Amorphization, cell volume expansion, and multiâ€stage bubble formation. Journal of the American Ceramic Society, 2019, 102, 4911-4918.	3.8	24
9	Fabrication of Li4SiO4 pebbles by wet method with modified powders synthesized via solâ€“gel process. Journal of Nuclear Materials, 2015, 456, 455-460.	2.7	23
10	Transparent sub-mircon Gd2Zr2O7 ceramic prepared by spark plasma sintering using nanocrystalline powders. Journal of the European Ceramic Society, 2018, 38, 2256-2258.	5.7	23
11	Optimization of ball-to-powder weight ratio toward to highly transparent LaGdZr2O7 ceramics processing by solid reactive sintering. Journal of Alloys and Compounds, 2019, 771, 944-950.	5.5	23
12	Fast low-temperature densification of translucent bulk nanograin Gd2Zr2O7 ceramics with average grain size below 10Ânm. Journal of Alloys and Compounds, 2020, 830, 154617.	5.5	22
13	Microwave-assisted synthesis of uranium doped Y2Zr2O7 transparent ceramics as potential near-infrared optical lens. Scripta Materialia, 2020, 178, 90-93.	5.2	21
14	He irradiationâ€induced lattice distortion and surface blistering of Gd₂Zr₂O₇ defectâ€fluorite ceramics. Journal of the American Ceramic Society, 2020, 103, 3425-3435.	3.8	20
15	Comparison of the microwave and conventional sintering of Li2TiO3 ceramic pebbles. Ceramics International, 2018, 44, 19672-19677.	4.8	19
16	Fabrication of attractive Li 4 SiO 4 pebbles with modified powders synthesized via surfactant-assisted hydrothermal method. Ceramics International, 2016, 42, 10014-10020.	4.8	18
17	Transmittance enhancement of AlON transparent ceramic by aqueous gel-casting with phosphoric acid-treated powder. Journal of the European Ceramic Society, 2016, 36, 4197-4203.	5.7	18
18	Synthesis and densification of Gd 2 Zr 2 O 7 nanograin ceramics prepared by field assisted sintering technique. Journal of Nuclear Materials, 2017, 495, 164-171.	2.7	18

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19	Bi³⁺-Sensitized La₂Zr₂O₇:Er³⁺ Transparent Ceramics with Efficient Up/Down-Conversion Luminescence Properties for Photonic Applications. Journal of Physical Chemistry C, 2020, 124, 913-920.	3.1	18
20	Densifications and mechanical properties of single-phase Gd2Zr2O7 ceramic waste forms with improved TRPO waste load. Journal of the European Ceramic Society, 2020, 40, 4613-4622.	5.7	18
21	A facile approach to fabricate Li4SiO4 ceramic pebbles as tritium breeding materials. Materials Letters, 2015, 159, 245-248.	2.6	17
22	Synthesis of pure-phase uranium-doped YAG powder via co-precipitation method. Materials Letters, 2017, 188, 396-398.	2.6	17
23	Fast fabrication of high quality Li2TiO3â€“Li4SiO4 biphasic ceramic pebbles by microwave sintering: In comparison with conventional sintering. Ceramics International, 2019, 45, 19022-19026.	4.8	17
24	Rapid fabrication of fine-grained Gd2-xNdxZr2-5xCe5xO7 ceramics by microwave sintering. Journal of Alloys and Compounds, 2019, 781, 710-715.	5.5	17
25	Near-infrared luminescent properties of Ln:LaGdZr2O7 (LnÂ=ÂNd, Yb) transparent ceramics for solid-state laser applications. Ceramics International, 2020, 46, 22270-22275.	4.8	17
26	Synthesis and characterization of Gd₂Zr₂O₇ defect-fluorite oxide nanoparticles via a homogeneous precipitation-solvothermal method. RSC Advances, 2017, 7, 54980-54985.	3.6	16
27	Fast crystallization of amorphous Gd2Zr2O7 induced by thermally activated electron-beam irradiation. Journal of Applied Physics, 2015, 118, 214901.	2.5	15
28	A new method for the preparation of transparent Y2O3 nanocrystalline ceramic with an average grain size of 20Ânm. Scripta Materialia, 2020, 182, 57-61.	5.2	15
29	Fabrication of Li2TiO3 ceramic pebbles with fine microstructure by microwave sintering. Journal of Nuclear Materials, 2018, 509, 330-334.	2.7	14
30	Photoluminescence enhancement of Gd2Zr2O7:Eu3+ red phosphor sensitized by co-doped Al3+ ions. Ceramics International, 2021, 47, 13071-13077.	4.8	12
31	Rapid preparation of dense Gd2Zr2O7 nano-grain ceramics by microwave sintering in air. Ceramics International, 2019, 45, 10930-10935.	4.8	11
32	Synthesis, characterization and sintering of Li2TiO3 nanoparticles via low temperature solid-state reaction. Ceramics International, 2020, 46, 1816-1823.	4.8	11
33	Influence of helium ion radiation on the nano-grained Li2TiO3 ceramic for tritium breeding. Ceramics International, 2021, 47, 28357-28366.	4.8	11
34	Preparation of a B4C hollow microsphere through gel-casting for an inertial confinement fusion (ICF) target. Ceramics International, 2017, 43, 571-577.	4.8	10
35	Tritium release behavior of Li4SiO4 and Li4SiO4Â+ 5Âmol% TiO2 ceramic pebbles with small grain size. Journal of Nuclear Materials, 2019, 514, 284-289.	2.7	10
36	Novel multicolor-tunable Eu3+/Bi3+ co-doped Y2Zr2O7 transparent ceramics as potential white-light-emitting materials. Ceramics International, 2022, 48, 4216-4222.	4.8	10

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37	Geometrical morphology optimisation of laser drilling in B4C ceramic: From plate to hollow microsphere. Ceramics International, 2018, 44, 1370-1375.	4.8	9
38	Fabrication and luminescence properties of U:YAG transparent ceramic. Optical Materials, 2018, 82, 56-59.	3.6	9
39	Effect of calcium oxide doping on the microstructure and optical properties of YAG transparent ceramics. Materials Research Express, 2019, 6, 036203.	1.6	9
40	Fast densification of dense nano-grained Gd2Zr2O7 ceramic prepared by two-step microwave sintering. Journal of Nuclear Materials, 2022, 558, 153353.	2.7	8
41	Liquidâ€“solidâ€“solution synthesis of ultrafine Gd2Zr2O7 nanoparticles with yield enhancement. Ceramics International, 2020, 46, 1216-1219.	4.8	7
42	Irradiation-induced large bubble formation and grain growth in super nano-grained ceramic. Journal of the European Ceramic Society, 2021, 41, 7868-7877.	5.7	7
43	Grain-size dependent thermal conductivity of Gd2Zr2O7 ceramics. Ceramics International, 2022, 48, 16444-16448.	4.8	7
44	Effect of MgO doping on densification and grain growth behavior of Gd2Zr2O7 ceramics by microwave sintering process. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	6
45	Fine-grained ZnO ceramic fabricated by high-pressure cold sintering. Ceramics International, 2022, 48, 30517-30523.	4.8	6
46	Stress-strain relationship of translucent nanocrystalline Gadolinium Zirconate ceramic with grain size below 10Ânm using nanoindentation. Ceramics International, 2020, 46, 8490-8494.	4.8	5
47	Fabrication and mechanical behavior of nano-grained LaGdZr2O7 transparent ceramic. Ceramics International, 2021, 47, 32471-32475.	4.8	5
48	High density nano-grained Gd2Zr2O7 ceramic prepared by combined cold and microwave sintering. Ceramics International, 2022, 48, 26387-26392.	4.8	4
49	Room temperature creep behavior of nanocrystalline Gd2Zr2O7 ceramic with grain size below 10Ânm. Ceramics International, 2020, 46, 29321-29325.	4.8	2
50	Aqueous alkaline suitable gel system and related mechanism for highly transparent La 0.4 Gd 1.6 Zr 2 O 7 ceramic preparation. Journal of the American Ceramic Society, 2022, 105, 1967.	3.8	2
51	High sphericity and diameter controllable B4C ceramic pellets prepared via simple low-cost PVA assisted planet-type rotation method. Ceramics International, 2021, 47, 836-841.	4.8	0