Xiaoyan Shu

List of Publications by Year
in descending order

31 papers	617 citations	516710 16 h-index	610901 24 g-index
31 all docs	31 docs citations	31 times ranked	266 citing authors

#	Article	IF	Citations
1	Rapid immobilization of simulated radioactive soil waste by microwave sintering. Journal of Hazardous Materials, 2017, 337, 20-26.	12.4	52
2	Phase structure and aqueous stability of TRPO waste incorporation into Gd2Zr2O7 pyrochlore. Ceramics International, 2015, 41, 11741-11747.	4.8	46
3	Rapid vitrification of uranium-contaminated soil: Effect and mechanism. Environmental Pollution, 2020, 263, 114539.	7.5	42
4	Experimental investigation on structural evolution of granite at high temperature induced by microwave irradiation. Mineralogy and Petrology, 2019, 113, 745-754.	1.1	35
5	Phase evolution and chemical durability of Nd-doped zircon ceramics designed to immobilize trivalent actinides. Ceramics International, 2015, 41, 10044-10050.	4.8	34
6	Rapid fabrication and phase transition of Nd and Ce co-doped Gd2Zr2O7 ceramics by SPS. Journal of the European Ceramic Society, 2018, 38, 2863-2870.	5.7	33
7	Rapid solidification of Sr-contaminated soil by consecutive microwave sintering: mechanism and stability evaluation. Journal of Hazardous Materials, 2021, 407, 124761.	12.4	33
8	Rapid synthesis of high densified single phase ceramic Gd2Zr2O7 by spark plasma sintering. Materials Letters, 2017, 196, 403-405.	2.6	31
9	Radiation stability of Gd2Zr2O7 and Nd2Ce2O7 ceramics as nuclear waste forms. Ceramics International, 2018, 44, 760-765.	4.8	30
10	Fabrication and phase transition of Gd2Zr2O7 ceramics immobilized various simulated radionuclides. Journal of Nuclear Materials, 2015, 456, 467-470.	2.7	28
11	Chemical stability of Ce-doped zircon ceramics: Influence of pH, temperature and their coupling effects. Journal of Rare Earths, 2017, 35, 164-171.	4.8	27
12	Rapid synthesis and chemical durability of Gd2Zr2-Ce O7 via SPS for nuclear waste forms. Ceramics International, 2018, 44, 20306-20310.	4.8	24
13	Microwave vitrification of uranium-contaminated soil for nuclear test site and chemical stability. Ceramics International, 2019, 45, 13334-13339.	4.8	23
14	Rapid immobilization of complex simulated radionuclides by as-prepared Gd2Zr2O7 ceramics without structural design. Journal of Nuclear Materials, 2019, 526, 151782.	2.7	22
15	Heavy-ion irradiation effects on Gd2Zr2O7 ceramics bearing complex nuclear waste. Journal of Alloys and Compounds, 2019, 771, 973-979.	5.5	21
16	Heavy-ion irradiation effects on uranium-contaminated soil for nuclear waste. Journal of Hazardous Materials, 2021, 405, 124273.	12.4	21
17	Microstructure evolution of rapidly fabricated Gd2-Nd Zr2O7 (0.0 â‰¤ x â‰¤ 2.0) by spark plasma sintering. Ceramics International, 2018, 44, 2458-2462.	4.8	17
18	Microstructure and performance studies of (Mo, Ru, Pd, Zr) tetra-doped gadolinium zirconate pyrochlore. Advances in Applied Ceramics, 2017, 116, 272-277.	1.1	15

#	Article	IF	Citations
19	Rapid vitrification of simulated Sr2+ radioactive contaminated soil for nuclear emergencies. Journal of Radioanalytical and Nuclear Chemistry, 2019, 319, 115-121.	1.5	13
20	Chemical behavior of uranium contaminated soil solidified by microwave sintering. Journal of Radioanalytical and Nuclear Chemistry, 2019, 322, 2109-2117.	1.5	12
21	Microwave vitrification of simulated radioactively contaminated soil: Mechanism and performance. Journal of Solid State Chemistry, 2021, 293, 121757.	2.9	11
22	Immobilisation of nuclear waste by microwave sintering with a natural magmatic rock. Philosophical Magazine Letters, 2018, 98, 155-160.	1.2	10
23	Rapid synthesis of Gd 2 Zr 2 O 7 glassâ€ceramics using spark plasma sintering. Journal of the American Ceramic Society, 2020, 103, 597-603.	3.8	10
24	Immobilization of simulated An4+ in radioactive contaminated clay via microwave sintering. Materials Chemistry and Physics, 2020, 254, 123534.	4.0	5
25	Simulated self-irradiation effects of Gd2Ce2O7 nuclear waste form. Journal of Radioanalytical and Nuclear Chemistry, 2020, 324, 271-276.	1.5	5
26	Effect of improved trialkyl phosphine oxides waste content on phase composition and density of spark plasma sintered <scp> Gd ₂ Zr ₂ O ₇ </scp> ceramics. International Journal of Energy Research, 2021, 45, 8724-8734.	4.5	5
27	Effective management of trialkyl phosphine oxides waste via Gd2Zr2O7 ceramic. Journal of Cleaner Production, 2022, 348, 131370.	9.3	5
28	Xe20+ irradiation effects on soil holding simulated An4+ waste. Journal of Radioanalytical and Nuclear Chemistry, 2021, 327, 1159-1166.	1.5	3
29	Effects of heavy-ion irradiation on Gd2Zr2O7 bearing simulated TRPO waste. Ceramics International, 2018, 44, 14020-14025.	4.8	2
30	Immobilize CeO2 as simulated nuclear waste in natural magmatic granite: maximum solid solubility. Journal of Radioanalytical and Nuclear Chemistry, 2021, 328, 795-803.	1.5	2
31	Effect of soil particle size and types on the crystallization behavior for nuclear waste disposal. Journal of Radioanalytical and Nuclear Chemistry, 2020, 326, 137-145.	1.5	0