

R Matthew Asmussen

List of Publications by Year in descending order

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Version: 2024-02-01

26
papers

520
citations

687363

13
h-index

677142

22
g-index

39
all docs

39
docs citations

39
times ranked

475
citing authors

#	ARTICLE	IF	CITATIONS
1	Silver-functionalized silica aerogels and their application in the removal of iodine from aqueous environments. <i>Journal of Hazardous Materials</i> , 2019, 379, 119364.	12.4	64
2	Iodine immobilization by materials through sorption and redox-driven processes: A literature review. <i>Science of the Total Environment</i> , 2020, 716, 132820.	8.0	59
3	Removal of TcO ₄ ⁻ from Representative Nuclear Waste Streams with Layered Potassium Metal Sulfide Materials. <i>Chemistry of Materials</i> , 2016, 28, 3976-3983.	6.7	56
4	The dissolution behavior of borosilicate glasses in far-from equilibrium conditions. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 226, 132-148.	3.9	47
5	Technetium Stabilization in Low-Solubility Sulfide Phases: A Review. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 532-547.	2.7	36
6	Getters for improved technetium containment in cementitious waste forms. <i>Journal of Hazardous Materials</i> , 2018, 341, 238-247.	12.4	25
7	Silver-based getters for ¹²⁹ I removal from low-activity waste. <i>Radiochimica Acta</i> , 2016, 104, 905-913.	1.2	21
8	Synthesis and characterization of oxyapatite [Ca ₂ Nd ₈ (SiO ₄) ₆ O ₂] and mixed-alkaline-earth powellite [(Ca,Sr,Ba)MoO ₄] for a glass-ceramic waste form. <i>Journal of Nuclear Materials</i> , 2018, 510, 623-634.	2.7	21
9	Investigating the Durability of Iodine Waste Forms in Dilute Conditions. <i>Materials</i> , 2019, 12, 686.	2.9	21
10	Immobilizing Pertechnetate in Ettringite via Sulfate Substitution. <i>Environmental Science & Technology</i> , 2020, 54, 13610-13618.	10.0	20
11	Technetium immobilization by materials through sorption and redox-driven processes: A literature review. <i>Science of the Total Environment</i> , 2020, 716, 132849.	8.0	19
12	The function of Sn(II)-apatite as a Tc immobilizing agent. <i>Journal of Nuclear Materials</i> , 2016, 480, 393-402.	2.7	18
13	Kinetics of oxyapatite [Ca ₂ Nd ₈ (SiO ₄) ₆ O ₂] and powellite [(Ca,Sr,Ba)MoO ₄] dissolution in glass-ceramic nuclear waste forms in acidic, neutral, and alkaline conditions. <i>Journal of Nuclear Materials</i> , 2019, 515, 227-237.	2.7	17
14	Corrosion Behavior and Microstructure Influence of Glass-Ceramic Nuclear Waste Forms. <i>Corrosion</i> , 2017, 73, 1306-1319.	1.1	11
15	Polyacrylonitrile Composites of Ag-Al-Si-O Aerogels and Xerogels as Iodine and Iodide Sorbents. <i>ACS Applied Polymer Materials</i> , 2021, 3, 3344-3353.	4.4	11
16	Competitive TcO ₄ ⁻ , IO ₃ ⁻ , and CrO ₄ ²⁻ Incorporation into Ettringite. <i>Environmental Science & Technology</i> , 2021, 55, 1057-1066.	10.0	11
17	Seeded Stage III glass dissolution behavior of a statistically designed glass matrix. <i>Journal of the American Ceramic Society</i> , 2021, 104, 4145-4162.	3.8	9
18	A Lithium Feedstock Pathway: Coupled Electrochemical Extraction and Direct Battery Materials Manufacturing. <i>ACS Energy Letters</i> , 2022, 7, 2420-2427.	17.4	9

#	ARTICLE	IF	CITATIONS
19	Characterizing Technetium in Subsurface Sediments for Contaminant Remediation. ACS Earth and Space Chemistry, 2018, 2, 1145-1160.	2.7	8
20	Review and experimental comparison of the durability of iodine waste forms in semi-dynamic leach testing. Chemical Engineering Journal Advances, 2022, 11, 100300.	5.2	7
21	Synthesis of Nd ₃ BSi ₂ O ₁₀ using a LiCl-flux method. Journal of Nuclear Materials, 2019, 515, 370-381.	2.7	4
22	The evolution of hydrated lime-based cementitious waste forms during leach testing leading to enhanced technetium retention. Journal of Hazardous Materials, 2022, 430, 128507.	12.4	4
23	The sporadic history of rubidium and its role in corrosion of steel related to nuclear material storage. Journal of Nuclear Materials, 2020, 530, 151914.	2.7	3
24	The Influence of Transitional Metal Dopants on Reducing Chlorine Evolution during the Electrolysis of Raw Seawater. Applied Sciences (Switzerland), 2021, 11, 11911.	2.5	3
25	The behavior of iodine in stabilized granular activated carbon and silver mordenite in cementitious waste forms. Journal of Environmental Radioactivity, 2022, 244-245, 106824.	1.7	2
26	Technetium Getters to Improve Cast Stone Performance. Materials Research Society Symposia Proceedings, 2015, 1744, 43-52.	0.1	1