

# Daniel Bailey

## List of Publications by Year in descending order

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29  
papers

271  
citations

1040056

9  
h-index

940533

16  
g-index

30  
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docs citations

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times ranked

315  
citing authors

#	ARTICLE	IF	CITATIONS
1	Role of Microstructure and Surface Defects on the Dissolution Kinetics of CeO <sub>2</sub> , a UO <sub>2</sub> Fuel Analogue. ACS Applied Materials & Interfaces, 2016, 8, 10562-10571.	8.0	56
2	Contribution of Energetically Reactive Surface Features to the Dissolution of CeO <sub>2</sub> and ThO <sub>2</sub> Analogues for Spent Nuclear Fuel Microstructures. ACS Applied Materials & Interfaces, 2014, 6, 12279-12289.	8.0	30
3	Review of zirconolite crystal chemistry and aqueous durability. Advances in Applied Ceramics, 2021, 120, 69-83.	1.1	25
4	Immobilizing Pertechetate in Ettringite via Sulfate Substitution. Environmental Science & Technology, 2020, 54, 13610-13618.	10.0	20
5	Multi-scale investigation of uranium attenuation by arsenic at an abandoned uranium mine, South Teras. Npj Materials Degradation, 2017, 1, .	5.8	19
6	Characterisation and disposability assessment of multi-waste stream in-container vitrified products for higher activity radioactive waste. Journal of Hazardous Materials, 2021, 401, 123764.	12.4	19
7	Synthesis and characterisation of brannerite compositions (U <sub>0.9</sub> Ce <sub>0.1</sub> ) <sub>1-x</sub> MxTi <sub>2</sub> O <sub>6</sub> (M = Gd <sup>3+</sup> , Ca <sup>2+</sup> ) for the immobilisation of MOX residues. RSC Advances, 2018, 8, 2092-2099.	3.6	15
8	Synthesis, characterisation and corrosion behaviour of simulant Chernobyl nuclear meltdown materials. Npj Materials Degradation, 2020, 4, .	5.8	13
9	A new approach to the immobilisation of technetium and transuranics: Co-disposal in a zirconolite ceramic matrix. Journal of Nuclear Materials, 2020, 528, 151885.	2.7	9
10	Synthesis and Characterization of Brannerite Compositions for MOX Residue Disposal. MRS Advances, 2017, 2, 557-562.	0.9	8
11	Synthesis and characterisation of the hollandite solid solution Ba <sub>1.2-x</sub> Cs <sub>x</sub> Fe <sub>2.4-x</sub> Ti <sub>5.6+x</sub> O <sub>16</sub> for partitioning and conditioning of radiocaesium. Journal of Nuclear Materials, 2018, 503, 164-170.	2.7	8
12	Synthesis of Ca <sub>1-x</sub> Ce <sub>x</sub> ZrTi <sub>2-2x</sub> Al <sub>2x</sub> O <sub>7</sub> zirconolite ceramics for plutonium disposition. Journal of Nuclear Materials, 2021, 556, 153198.	2.7	8
13	Objective colour analysis from digital images as a nuclear forensic tool. Forensic Science International, 2021, 319, 110678.	2.2	6
14	Synthesis of simulant "lava-like"™ fuel containing materials (LFCM) from the Chernobyl reactor Unit 4 meltdown. MRS Advances, 2017, 2, 609-614.	0.9	5
15	Thermal treatment of nuclear fuel-containing Magnox sludge radioactive waste. Journal of Nuclear Materials, 2021, 552, 152965.	2.7	5
16	Spectroscopic evaluation of U <sup>VI</sup> "cement mineral interactions: ettringite and hydrotalcite. Journal of Synchrotron Radiation, 2022, 29, 89-102.	2.4	5
17	Synthesis and characterization of iodovanadinite using PdI <sub>2</sub> an iodine source for the immobilisation of radioiodine. RSC Advances, 2020, 10, 25116-25124.	3.6	4
18	On the existence of AgM <sub>9</sub> (VO <sub>4</sub> ) <sub>6</sub> I (M = Ba, Pb). RSC Advances, 2017, 7, 49004-49009.	3.6	3

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19	Synthesis and characterisation of HIP Ca <sub>0.80</sub> Ce <sub>0.20</sub> ZrTi <sub>1.60</sub> Cr <sub>0.40</sub> O <sub>7</sub> zirconolite and observations of the ceramic–canister interface. MRS Advances, 2021, 6, 112-118.	0.9	3
20	Ceramic Immobilization Options for Technetium. MRS Advances, 2017, 2, 753-758.	0.9	2
21	Ba <sub>1.2-x</sub> Cs <sub>x</sub> M <sub>1.2-x/2</sub> Ti <sub>6.8+x/2</sub> O <sub>16</sub> (M = Ni, Zn) hollandites for the immobilisation of radiocaesium. MRS Advances, 2020, 5, 55-64.	0.9	2
22	Development of monazite glass-ceramic wasteforms for the immobilisation of pyroprocessing wastes. MRS Advances, 2022, 7, 81-85.	0.9	2
23	Reducing the uncertainty of nuclear fuel dissolution: an investigation of UO <sub>2</sub> analogue CeO <sub>2</sub> . Materials Research Society Symposia Proceedings, 2013, 1518, 151-156.	0.1	1
24	A synchrotron X-ray spectroscopy study of titanium co-ordination in explosive melt glass derived from the trinity nuclear test. RSC Advances, 2019, 9, 12921-12927.	3.6	1
25	Ce and U speciation in wasteforms for thermal treatment of plutonium bearing wastes, probed by L3 edge XANES. IOP Conference Series: Materials Science and Engineering, 2020, 818, 012019.	0.6	1
26	Ceramic-based stabilization/solidification of radioactive waste. , 2022, , 449-468.		1
27	Comment on “Preliminary assessment of modified borosilicate glasses for chromium and ruthenium immobilization”, by Farid and Rahman. Materials Chemistry and Physics, 2017, 192, 29-32.	4.0	0
28	Use of WetSEM <sup>®</sup> capsules for convenient multimodal scanning electron microscopy, energy dispersive X-ray analysis, and micro Raman spectroscopy characterisation of technetium oxides. Journal of Radioanalytical and Nuclear Chemistry, 2021, 328, 1313-1318.	1.5	0
29	Synthesis, Characterisation and Dissolution of Simulant Chernobyl and Fukushima Fuel Debris. , 2020, , .		0