Neil C Hyatt

List of Publications by Year
in descending order

237 papers	4,370 citations	159358 30 h-index	161609 54 g-index
256 all docs	256 docs citations	256 times ranked	3514 citing authors

#	Article	IF	Citations
1	Co2+/PMS based sulfate-radical treatment for effective mineralization of spent ion exchange resin. Chemosphere, 2022, 287, 132351.	4.2	22
2	Chemical structure and dissolution behaviour of CaO and ZnO containing alkali-borosilicate glass. Materials Advances, 2022, 3, 1747-1758.	2.6	3
3	Ceramic-based stabilization/solidification of radioactive waste. , 2022, , 449-468.		1
4	Spectroscopic evaluation of U^{VI}â€"cement mineral interactions: ettringite and hydrotalcite. Journal of Synchrotron Radiation, 2022, 29, 89-102.	1.0	5
5	<i>HERMES</i> â€" a GUI-based software tool for pre-processing of X-ray absorption spectroscopy data from laboratory Rowland circle spectrometers. Journal of Synchrotron Radiation, 2022, 29, 276-279.	1.0	0
6	Chemical characterisation of degraded nuclear fuel analogues simulating the Fukushima Daiichi nuclear accident. Npj Materials Degradation, 2022, 6, .	2.6	3
7	Synthesis and characterisation of Ce-doped zirconolite Ca0.80Ce0.20ZrTi1.60M0.40O7 (Mâ€‰=â€‰Fe, Al) formed by reactive spark plasma sintering (RSPS). MRS Advances, 2022, 7, 75-80.	0.5	8
8	Site-Selective d¹⁰/d⁰ Substitution in an <i>S</i> = ¹/₂ Spin Ladder Ba₂CuTe_{1â€"<i>x</i>}W_{<i>x</i>}O₆ (0 â‰) Tj ETQq0 0 0 rgBT /Overloc	1.9	5
9	Phase Evolution in the CaZrTi₂O₇â€"Dy₂Ti₂O₇ System: A Potential Host Phase for Minor Actinide Immobilization. Inorganic Chemistry, 2022, 61, 5744-5756.	1.9	12
10	Characterization of and Structural Insight into Struvite-K, MgKPO₄Â·6H₂O, an Analogue of Struvite. Inorganic Chemistry, 2021, 60, 195-205.	1.9	29
11	Fenton-like treatment for reduction of simulated carbon-14 spent resin. Journal of Environmental Chemical Engineering, 2021, 9, 104740.	3.3	7
12	Characterisation and disposability assessment of multi-waste stream in-container vitrified products for higher activity radioactive waste. Journal of Hazardous Materials, 2021, 401, 123764.	6.5	19
13	Synthesis, structure, and characterization of the thorium zirconolite CaZr_{1â€x}Th_xTi₂O₇ system. Journal of the American Ceramic Society, 2021, 104, 2937-2951.	1.9	12
14	On the existence of the compound â€œCe3NbO7+â€•prepared under air atmosphere. Journal of Rare Earths, 2021, 39, 596-599.	2.5	4
15	Synthesis of zirconolite-2M ceramics for immobilisation of neptunium. Ceramics International, 2021, 47, 1047-1052.	2.3	1
16	ILW conditioning and performance. , 2021, , 548-563.		1
17	Safely probing the chemistry of Chernobyl nuclear fuel using micro-focus X-ray analysis. Journal of Materials Chemistry A, 2021, 9, 12612-12622.	5.2	8
18	A high throughput computational investigation of the solid solution mechanisms of actinides and lanthanides in zirconolite. RSC Advances, 2021, 11, 25179-25186.	1.7	1

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19	Nuclear forensic signatures and structural analysis of uranyl oxalate, its products of thermal decomposition and Fe impurity dopant. Journal of Radioanalytical and Nuclear Chemistry, 2021, 327, 957-973.	0.7	2
20	Objective colour analysis from digital images as a nuclear forensic tool. Forensic Science International, 2021, 319, 110678.	1.3	6
21	Review of zirconolite crystal chemistry and aqueous durability. Advances in Applied Ceramics, 2021, 120, 69-83.	0.6	25
22	The dissolution of simulant UK Ca/Zn-modified nuclear waste glass: the effect of increased waste loading. MRS Advances, 2021, 6, 95-102.	0.5	5
23	The thermal decomposition of studtite: analysis of the amorphous phase. Journal of Radioanalytical and Nuclear Chemistry, 2021, 327, 1335-1347.	0.7	13
24	Nuclear forensic signatures of studtite and Î±-UO3 from a matrix of solution processing parameters. Journal of Nuclear Materials, 2021, 544, 152713.	1.3	5
25	Temperature transformation of blended magnesium potassium phosphate cement binders. Cement and Concrete Research, 2021, 141, 106332.	4.6	25
26	A preliminary investigation of the molten salt mediated synthesis of Gd2TiO5 â€˜stuffedâ€™ pyrochlore. MRS Advances, 2021, 6, 149-153.	0.5	2
27	Synthesis and characterisation of HIP Ca0.80Ce0.20ZrTi1.60Cr0.40O7 zirconolite and observations of the ceramicâ€“canister interface. MRS Advances, 2021, 6, 112-118.	0.5	3
28	Influence of accessory phases and surrogate type on accelerated leaching of zirconolite wasteforms. Npj Materials Degradation, 2021, 5, .	2.6	8
29	Use of WetSEMÂ® 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.	0.7	0
30	Early age hydration and application of blended magnesium potassium phosphate cements for reduced corrosion of reactive metals. Cement and Concrete Research, 2021, 143, 106375.	4.6	37
31	An in-situ TEM study into the role of disorder, temperature and ballistic collisions on the accumulation of helium bubbles and voids in glass-ceramic composites. Journal of Nuclear Materials, 2021, 548, 152836.	1.3	7
32	Thermal treatment of Cs-exchanged chabazite by hot isostatic pressing to support decommissioning of Fukushima Daiichi Nuclear Power Plant. Journal of Hazardous Materials, 2021, 413, 125250.	6.5	12
33	Thermal treatment of nuclear fuel-containing Magnox sludge radioactive waste. Journal of Nuclear Materials, 2021, 552, 152965.	1.3	5
34	Chemical state mapping of simulant Chernobyl lava-like fuel containing material using micro-focused synchrotron X-ray spectroscopy. Journal of Synchrotron Radiation, 2021, 28, 1672-1683.	1.0	4
35	Symmetry and the Role of the Anion Sublattice in Aurivillius Oxyfluoride Bi2TiO4F2. Inorganic Chemistry, 2021, 60, 14105-14115.	1.9	8
36	Synthesis of Ca1-xCexZrTi2-2xAl2xO7 zirconolite ceramics for plutonium disposition. Journal of Nuclear Materials, 2021, 556, 153198.	1.3	8

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37	Actinide Immobilization in Dedicated Wasteforms: An Alternative Pathway for the Long-Term Management of Existing Actinide Stockpiles. , 2021, , 650-662.		2
38	Low-Temperature Nitridation of Fe₃O₄ by Reaction with NaNH₂. Inorganic Chemistry, 2021, 60, 2553-2562.	1.9	3
39	Fenton and Fenton-like wet oxidation for degradation and destruction of organic radioactive wastes. Npj Materials Degradation, 2021, 5, .	2.6	24
40	Synthesis, Characterization, and Crystal Structure of Dominant Uranium(V) Brannerites in the UTi_{2â€“<i>x</i>}Al_{<i>x</i>}O₆ System. Inorganic Chemistry, 2021, 60, 18112-18121.	1.9	7
41	Forty years of durability assessment of nuclear waste glass by standard methods. Npj Materials Degradation, 2021, 5, .	2.6	35
42	A new approach to the immobilisation of technetium and transuranics: Co-disposal in a zirconolite ceramic matrix. Journal of Nuclear Materials, 2020, 528, 151885.	1.3	9
43	Preliminary investigation of chlorine speciation in zirconolite glass-ceramics for plutonium residues by analysis of Cl K-edge XANES. MRS Advances, 2020, 5, 37-43.	0.5	1
44	Effect of Ti4+ on the structure of nepheline (NaAlSiO4) glass. Geochimica Et Cosmochimica Acta, 2020, 290, 333-351.	1.6	10
45	Advanced Gas-cooled Reactor SIMFuel Fabricated by Hot Isostatic Pressing: a Feasibility Investigation. IOP Conference Series: Materials Science and Engineering, 2020, 818, 012011.	0.3	0
46	The HADES Facility for High Activity Decommissioning Engineering & Science: part of the UK National Nuclear User Facility. IOP Conference Series: Materials Science and Engineering, 2020, 818, 012022.	0.3	53
47	Investigation of ion irradiation induced damages in iron phosphate glasses: Role of electronic and nuclear losses in glass network modification. Journal of Non-Crystalline Solids: X, 2020, 8, 100055.	0.5	2
48	Molten salt synthesis of Ce doped zirconolite for the immobilisation of pyroprocessing wastes and separated plutonium. Ceramics International, 2020, 46, 29080-29089.	2.3	4
49	Nanoscale mechanism of UO2 formation through uranium reduction by magnetite. Nature Communications, 2020, 11, 4001.	5.8	57
50	Hot Isostatically Pressed Zirconolite Wasteforms for Actinide Immobilisation. IOP Conference Series: Materials Science and Engineering, 2020, 818, 012010.	0.3	10
51	Rapid synthesis of zirconolite ceramic wasteform by microwave sintering for disposition of plutonium. Journal of Nuclear Materials, 2020, 539, 152332.	1.3	6
52	Short communication on further elucidating the structure of amorphous U2O7 by extended X-ray absorption spectroscopy and DFT simulations. Journal of Nuclear Materials, 2020, 542, 152476.	1.3	5
53	Thermal treatment for radioactive waste minimisation. EPJ Nuclear Sciences & Technologies, 2020, 6, 25.	0.3	4
54	Taking X-ray spectroscopy global from the kitchen table. Synchrotron Radiation News, 2020, 33, 46-46.	0.2	0

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55	Synthesis and characterization of iodovanadinite using PdI_{2,} an iodine source for the immobilisation of radioiodine. RSC Advances, 2020, 10, 25116-25124.	1.7	4
56	Safe management of the UK separated plutonium inventory: a challenge of materials degradation. Npj Materials Degradation, 2020, 4, .	2.6	18
57	Solubility, speciation and local environment of chlorine in zirconolite glassâ€"ceramics for the immobilisation of plutonium residues. RSC Advances, 2020, 10, 32497-32510.	1.7	6
58	Synthesis and <i>in situ</i> ion irradiation of A-site deficient zirconate perovskite ceramics. Journal of Materials Chemistry A, 2020, 8, 19454-19466.	5.2	7
59	Crystal and Electronic Structures of A₂NaIO₆ Periodate Double Perovskites (A = Sr, Ca, Ba): Candidate Wasteforms for I-129 Immobilization. Inorganic Chemistry, 2020, 59, 18407-18419.	1.9	13
60	Synthesis and characterisation of high ceramic fraction brannerite (UTi2O6) glass-ceramic composites. IOP Conference Series: Materials Science and Engineering, 2020, 818, 012018.	0.3	3
61	The formation of stoichiometric uranium brannerite (UTi2O6) glass-ceramic composites from the component oxides in a one-pot synthesis. Journal of Nuclear Materials, 2020, 542, 152516.	1.3	8
62	Structure of NaFeSiO4, NaFeSi2O6, and NaFeSi3O8 glasses and glass-ceramics. American Mineralogist, 2020, 105, 1375-1384.	0.9	10
63	Tuning between Proper and Hybrid-Improper Mechanisms for Polar Behavior in CsLn2Ti2NbO10 Dion-Jacobson Phases. Chemistry of Materials, 2020, 32, 8700-8712.	3.2	14
64	Hot isostatic pressing: thermal treatment trials of inactive and radioactive simulant UK intermediate level waste. IOP Conference Series: Materials Science and Engineering, 2020, 818, 012009.	0.3	9
65	Laboratory Based X-ray Absorption Spectroscopy of Iron Phosphate Glasses for Radioactive Waste Immobilisation: A Preliminary Investigation.. IOP Conference Series: Materials Science and Engineering, 2020, 818, 012020.	0.3	1
66	Synthesis and characterisation of Ca1-xCexZrTi2-2xCr2xO7: Analogue zirconolite wasteform for the immobilisation of stockpiled UK plutonium. Journal of the European Ceramic Society, 2020, 40, 5909-5919.	2.8	29
67	Short communication: The dissolution of UK simulant vitrified high-level-waste in groundwater solutions. Journal of Nuclear Materials, 2020, 538, 152245.	1.3	11
68	Hot Isostatic Pressing (HIP): A novel method to prepare Cr-doped UO2 nuclear fuel. MRS Advances, 2020, 5, 45-53.	0.5	1
69	Synthesis, characterisation and preliminary corrosion behaviour assessment of simulant Fukushima nuclear accident fuel debris. MRS Advances, 2020, 5, 65-72.	0.5	2
70	Influence of Transition Metal Charge Compensation Species on Phase Assemblage in Zirconolite Ceramics for Pu Immobilisation. MRS Advances, 2020, 5, 93-101.	0.5	3
71	Multimodal X-ray microanalysis of a UFeO₄: evidence for the environmental stability of ternary U(<scp>v</scp>) oxides from depleted uranium munitions testing. Environmental Sciences: Processes and Impacts, 2020, 22, 1577-1585.	1.7	3
72	Ba1.2-xCsxM1.2-x/2Ti6.8+x/2O16 (M = Ni, Zn) hollandites for the immobilisation of radiocaesium. MRS Advances, 2020, 5, 55-64.	0.5	2

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73	Insights into the fabrication and structure of plutonium pyrochlores. Journal of Materials Chemistry A, 2020, 8, 2387-2403.	5.2	17
74	Radiation stability study on cerium loaded iron phosphate glasses by ion irradiation method. Journal of Radioanalytical and Nuclear Chemistry, 2020, 323, 1381-1386.	0.7	5
75	The Effect of A-Site Cation on the Formation of Brannerite (ATi2O6, A = U, Th, Ce) Ceramic Phases in a Glass-Ceramic Composite System. MRS Advances, 2020, 5, 73-81.	0.5	7
76	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.	0.3	1
77	A systematic investigation of the phase assemblage and microstructure of the zirconolite CaZr1-xCexTi2O7 system. Journal of Nuclear Materials, 2020, 535, 152137.	1.3	26
78	Slipcasting of MAX phase tubes for nuclear fuel cladding applications. Nuclear Materials and Energy, 2020, 22, 100725.	0.6	9
79	A Feasibility Investigation of Laboratory Based X-ray Absorption Spectroscopy in Support of Nuclear Waste Management. MRS Advances, 2020, 5, 27-35.	0.5	9
80	The dissolution of simulant UK Ca/Zn-modified nuclear waste glass: Insight into Stage III behavior. MRS Advances, 2020, 5, 103-109.	0.5	10
81	Synthesis, characterisation and corrosion behaviour of simulant Chernobyl nuclear meltdown materials. Npj Materials Degradation, 2020, 4, .	2.6	13
82	A feasibility investigation of speciation by Fe K-edge XANES using a laboratory X-ray absorption spectrometer. Journal of Geosciences (Czech Republic), 2020, , 27-35.	0.3	13
83	The Effect of Temperature on the Stability and Cerium Oxidation State of CeTi2O6 in Inert and Oxidizing Atmospheres. Inorganic Chemistry, 2020, 59, 17364-17373.	1.9	5
84	Reactive spark plasma sintering of Cs-exchanged chabazite: characterisation and durability assessment for Fukushima Daiichi NPP clean-up. Journal of Nuclear Science and Technology, 2019, 56, 891-901.	0.7	15
85	The Formation of Pitted Features on the International Simple Glass during Dynamic Experiments at Alkaline pH. MRS Advances, 2019, 4, 993-999.	0.5	6
86	Resistance to amorphisation in Ca1-xLa2x/3TiO3 perovskites â€" a bulk ion-irradiation study. Acta Materialia, 2019, 180, 180-188.	3.8	10
87	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.	1.7	1
88	Glass structure and crystallization in boro-alumino-silicate glasses containing rare earth and transition metal cations: a US-UK collaborative program. MRS Advances, 2019, 4, 1029-1043.	0.5	6
89	Investigation of the role of Mg and Ca in the structure and durability of aluminoborosilicate glass. Journal of Non-Crystalline Solids, 2019, 512, 41-52.	1.5	21
90	An improved laboratory-based x-ray absorption fine structure and x-ray emission spectrometer for analytical applications in materials chemistry research. Review of Scientific Instruments, 2019, 90, 024106.	0.6	70

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91	Physical and optical properties of the International Simple Glass. Npj Materials Degradation, 2019, 3, .	2.6	37
92	Investigation of Radiation Damage in Iron Phosphate Glasses by Soft X-Ray Absorption Spectroscopy: A Powerful Tool for Surface Characterization. Springer Proceedings in Physics, 2019, , 133-139.	0.1	0
93	A preliminary validation study of PuO2 incorporation into zirconolite glass-ceramics. MRS Advances, 2018, 3, 1065-1071.	0.5	16
94	Synthesis and characterisation of brannerite compositions (U0.9Ce0.1)1âˆ’xMxTi2O6 (M = Gd3+, Ca2+) for the immobilisation of MOX residues. RSC Advances, 2018, 8, 2092-2099.	1.7	15
95	Nonresonant valence-to-core x-ray emission spectroscopy of niobium. Physical Review B, 2018, 97, .	1.1	11
96	Synthesis and characterisation of the hollandite solid solution Ba1.2-xCsxFe2.4-xTi5.6+xO16 for partitioning and conditioning of radiocaesium. Journal of Nuclear Materials, 2018, 503, 164-170.	1.3	8
97	Transformation of Cs-IONSIVÂ® into a ceramic wasteform by hot isostatic pressing. Journal of Nuclear Materials, 2018, 498, 33-43.	1.3	7
98	Hot-isostatically pressed wasteforms for Magnox sludge immobilisation. Journal of Nuclear Materials, 2018, 499, 233-241.	1.3	9
99	Reactive spark plasma synthesis of CaZrTi2O7 zirconolite ceramics for plutonium disposition. Journal of Nuclear Materials, 2018, 500, 11-14.	1.3	27
100	Characterisation of a high pH cement backfill for the geological disposal of nuclear waste: The Nirex Reference Vault Backfill. Applied Geochemistry, 2018, 89, 180-189.	1.4	26
101	Response to the discussion by Hongyan Ma and Ying Li of the paper â€œCharacterization of magnesium potassium phosphate cement blended with fly ash and ground granulated blast furnace slagâ€• Cement and Concrete Research, 2018, 103, 249-253.	4.6	18
102	Corrosion of the International Simple Glass under acidic to hyperalkaline conditions. Npj Materials Degradation, 2018, 2, .	2.6	34
103	Corrigendum to â€œThe dissolution rates of simulated UK Magnox â€" ThORP blend nuclear waste glass as a function of pH, temperature and waste loadingâ€•[Miner. Mag. 79, (2015) 1529â€"1542]. Mineralogical Magazine, 2018, 82, 939-942.	0.6	4
104	Impact of rare earth ion size on the phase evolution of MoO3-containing aluminoborosilicate glass-ceramics. Journal of Nuclear Materials, 2018, 510, 539-550.	1.3	35
105	Leaching of Nirex Reference Vault Backfill cement by clay, granite and saline groundwaters. MRS Advances, 2018, 3, 1175-1180.	0.5	2
106	Immobilisation of Prototype Fast Reactor raffinate in a barium borosilicate glass matrix. Journal of Nuclear Materials, 2018, 508, 203-211.	1.3	10
107	Molten salt synthesis of MAX phases in the Ti-Al-C system. Journal of the European Ceramic Society, 2018, 38, 4585-4589.	2.8	49
108	Development, characterization and dissolution behavior of calcium-aluminoborate glass wasteforms to immobilize rare-earth oxides. Scientific Reports, 2018, 8, 5320.	1.6	15

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109	Structure analysis of vitusite glassâ€“ceramic waste forms using extended X-ray absorption fine structures. Ceramics International, 2017, 43, 4687-4691.	2.3	5
110	Plutonium management policy in the United Kingdom: The need for a dual track strategy. Energy Policy, 2017, 101, 303-309.	4.2	39
111	The effect of pre-treatment parameters on the quality of glass-ceramic wasteforms for plutonium immobilisation, consolidated by hot isostatic pressing. Journal of Nuclear Materials, 2017, 485, 253-261.	1.3	15
112	Combined Quantitative X-ray Diffraction, Scanning Electron Microscopy, and Transmission Electron Microscopy Investigations of Crystal Evolution in CaOâ€“Al₂O₃â€“SiO₂â€“TiO₂â€“ZrO₂â€“Nd₂O<sub>3 System. Crystal Growth and Design, 2017, 17, 1079-1087.	1.4	15
113	Synthesis of simulant â€˜lava-likeâ€™ fuel containing materials (LFCM) from the Chernobyl reactor Unit 4 meltdown. MRS Advances, 2017, 2, 609-614.	0.5	5
114	Comment on â€œPreliminary assessment of modified borosilicate glasses for chromium and ruthenium immobilizationâ€; by Farid and Rahman. Materials Chemistry and Physics, 2017, 192, 29-32.	2.0	0
115	Interactions between Simulant Vitrified Nuclear Wastes and high pH solutions: A Natural Analogue Approach. MRS Advances, 2017, 2, 669-675.	0.5	4
116	Evaluation of novel leaching assessment of nuclear waste glasses. MRS Advances, 2017, 2, 635-640.	0.5	0
117	Ceramic Immobilization Options for Technetium. MRS Advances, 2017, 2, 753-758.	0.5	2
118	Thermal treatment of plutonium contaminated material (PCM) waste. MRS Advances, 2017, 2, 735-740.	0.5	1
119	Synthesis and Characterization of Brannerite Compositions for MOX Residue Disposal. MRS Advances, 2017, 2, 557-562.	0.5	8
120	Investigation of Ce incorporation in zirconolite glass-ceramics for UK plutonium disposition. MRS Advances, 2017, 2, 699-704.	0.5	11
121	On the existence of AgM₉(VO₄)₆I (M = Ba, Pb). RSC Advances, 2017, 7, 49004-49009.	1.7	3
122	Iron phosphate glasses: Bulk properties and atomic scale structure. Journal of Nuclear Materials, 2017, 494, 342-353.	1.3	28
123	Multi-scale investigation of uranium attenuation by arsenic at an abandoned uranium mine, South Terras. Npj Materials Degradation, 2017, 1, .	2.6	19
124	A Potential Wasteform for Cs Immobilization: Synthesis, Structure Determination, and Aqueous Durability of Cs₂TiNb₆O₁₈. Inorganic Chemistry, 2016, 55, 12686-12695.	1.9	18
125	Synthesis and Characterization of Brannerite Wasteforms for the Immobilization of Mixed Oxide Fuel Residues. Procedia Chemistry, 2016, 21, 371-377.	0.7	8
126	Role of Microstructure and Surface Defects on the Dissolution Kinetics of CeO₂, a UO₂ Fuel Analogue. ACS Applied Materials & Interfaces, 2016, 8, 10562-10571.	4.0	56

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127	Alteration layer formation of Ca- and Zn-oxide bearing alkali borosilicate glasses for immobilisation of UK high level waste: A vapour hydration study. Journal of Nuclear Materials, 2016, 479, 639-646.	1.3	24
128	Investigation of Processing Parameters for the Consolidation of Actinide Glass-Ceramic Wasteforms by Hot Isostatic Pressing. MRS Advances, 2016, 1, 4269-4274.	0.5	2
129	Simulation of alpha decay of actinides in iron phosphate glasses by ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2016, 371, 424-428.	0.6	12
130	MoO3 incorporation in alkaline earth aluminosilicate glasses. Materials Research Society Symposia Proceedings, 2015, 1744, 67-72.	0.1	2
131	Ion Beam Irradiation Induced Structural Modifications in Iron Phosphate Glasses: A Model System for Understanding Radiation Damage in Nuclear Waste Glasses. Materials Research Society Symposia Proceedings, 2015, 1757, 65.	0.1	1
132	Solution Composition Effects on the Dissolution of a CeO2 analogue for UO2 and ThO2 nuclear fuels. Materials Research Society Symposia Proceedings, 2015, 1744, 185-190.	0.1	5
133	The initial dissolution rates of simulated UK Magnoxâ€“ThORP blend nuclear waste glass as a function of pH, temperature and waste loading. Mineralogical Magazine, 2015, 79, 1529-1542.	0.6	25
134	Expanding the nuclear forensic toolkit: chemical profiling of uranium ore concentrate particles by synchrotron X-ray microanalysis. RSC Advances, 2015, 5, 87908-87918.	1.7	15
135	Evolution of phase assemblage of blended magnesium potassium phosphate cement binders at 200Â° and 1000Â°C. Advances in Applied Ceramics, 2015, 114, 386-392.	0.6	26
136	The influence of glass composition on crystalline phase stability in glass-ceramic wasteforms. Journal of Nuclear Materials, 2015, 456, 461-466.	1.3	38
137	MoO3 incorporation in magnesium aluminosilicate glasses. Journal of Nuclear Materials, 2015, 458, 335-342.	1.3	23
138	Characterisation of magnesium potassium phosphate cements blended with fly ash and ground granulated blast furnace slag. Cement and Concrete Research, 2015, 74, 78-87.	4.6	234
139	Effect of Zn- and Ca-oxides on the structure and chemical durability of simulant alkali borosilicate glasses for immobilisation of UK high level wastes. Journal of Nuclear Materials, 2015, 462, 321-328.	1.3	45
140	Influence of Lubricants and Attrition Milling Parameters on the Quality of Zirconolite Ceramics, Consolidated by Hot Isostatic Pressing, for Immobilization of Plutonium. International Journal of Applied Ceramic Technology, 2015, 12, E92.	1.1	10
141	Solution composition and particle size effects on the dissolution and solubility of a ThO2 microstructural analogue for UO2 matrix of nuclear fuel. Radiochimica Acta, 2015, 103, 565-576.	0.5	12
142	Proper Ferroelectricity in the Dionâ€“Jacobson Material CsBi2Ti2NbO10: Experiment and Theory. Chemistry of Materials, 2015, 27, 8298-8309.	3.2	36
143	Graphite immobilisation in iron phosphate glass composite materials produced by microwave and conventional sintering routes. Journal of Nuclear Materials, 2014, 454, 343-351.	1.3	5
144	Thermal treatment of simulant plutonium contaminated materials from the Sellafield site by vitrification in a blast-furnace slag. Journal of Nuclear Materials, 2014, 444, 186-199.	1.3	15

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145	Microanalytical X-ray Imaging of Depleted Uranium Speciation in Environmentally Aged Munitions Residues. Environmental Science & Technology, 2014, 48, 1467-1474.	4.6	26
146	Contribution of Energetically Reactive Surface Features to the Dissolution of CeO₂ and ThO₂ Analogues for Spent Nuclear Fuel Microstructures. ACS Applied Materials & Interfaces, 2014, 6, 12279-12289.	4.0	30
147	The effect of uranium oxide additions on the structure of alkali borosilicate glasses. Journal of Non-Crystalline Solids, 2013, 378, 282-289.	1.5	19
148	Formation of alteration products during dissolution of vitrified ILW in a high-pH calcium-rich solution. Journal of Nuclear Materials, 2013, 442, 33-45.	1.3	23
149	Preparation, characterisation and dissolution of a CeO2 analogue for UO2 nuclear fuel. Journal of Nuclear Materials, 2013, 432, 182-188.	1.3	39
150	Encapsulation of TRISO particle fuel in durable soda-lime-silicate glasses. Journal of Nuclear Materials, 2013, 436, 139-149.	1.3	9
151	Remediation of soils contaminated with particulate depleted uranium by multi stage chemical extraction. Journal of Hazardous Materials, 2013, 263, 382-390.	6.5	24
152	Dissolution of vitrified wastes in a high-pH calcium-rich solution. Journal of Nuclear Materials, 2013, 435, 112-122.	1.3	70
153	Structural Transformations and Disordering in Zirconolite (CaZrTi₂O₇) at High Pressure. Inorganic Chemistry, 2013, 52, 1550-1558.	1.9	40
154	MÃ¶ssbauer studies of materials used to immobilise industrial wastes. Hyperfine Interactions, 2013, 217, 83-90.	0.2	5
155	Real-Time Gamma Imaging of Technetium Transport through Natural and Engineered Porous Materials for Radioactive Waste Disposal. Environmental Science & Technology, 2013, 47, 13857-13864.	4.6	21
156	The Use of High Durability Alumino-Borosilicate Glass for the Encapsulation of High Temperature Reactor (HTR) Fuel. Materials Research Society Symposia Proceedings, 2013, 1518, 3-8.	0.1	1
157	Surface Sensitive Spectroscopy Study of Ion Beam Irradiation Induced Structural Modifications in Borosilicate Glasses. Materials Research Society Symposia Proceedings, 2013, 1514, 75-80.	0.1	2
158	Reducing the uncertainty of nuclear fuel dissolution: an investigation of UO2 analogue CeO2. Materials Research Society Symposia Proceedings, 2013, 1518, 151-156.	0.1	1
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