Paul A Bingham

List of Publications by Year
in descending order

94 papers	2,069 citations	236925 25 h-index	276875 41 g-index
97 all docs	97 docs citations	97 times ranked	2019 citing authors

#	Article	IF	Citations
1	Effects of modifier additions on the thermal properties, chemical durability, oxidation state and structure of iron phosphate glasses. Journal of Non-Crystalline Solids, 2009, 355, 1526-1538.	3.1	160
2	Soft Chemical Control of Superconductivity in Lithium Iron Selenide Hydroxides Li_{1â€“x}Fe_x(OH)Fe_{1â€“y}Se. Inorganic Chemistry, 2015, 54, 1958-1964.	4.0	102
3	Doping of iron phosphate glasses with Al2O3, SiO2 or B2O3 for improved thermal stability. Materials Research Bulletin, 2006, 41, 1622-1630.	5.2	82
4	Vitrification of toxic wastes: a brief review. Advances in Applied Ceramics, 2006, 105, 21-31.	1.1	81
5	Elucidating the Mechanistic Origin of a Spin State-Dependent FeN_xâ€“C Catalyst toward Organic Contaminant Oxidation via Peroxymonosulfate Activation. Environmental Science & Technology, 2022, 56, 1321-1330.	10.0	81
6	Redox and clustering of iron in silicate glasses. Journal of Non-Crystalline Solids, 1999, 253, 203-209.	3.1	78
7	Dissolution of vitrified wastes in a high-pH calcium-rich solution. Journal of Nuclear Materials, 2013, 435, 112-122.	2.7	70
8	PVP surfactant-modified flower-like BiOBr with tunable bandgap structure for efficient photocatalytic decontamination of pollutants. Applied Surface Science, 2020, 530, 147233.	6.1	67
9	Local structure and medium range ordering of tetrahedrally coordinated Fe3+ ions in alkaliâ€“alkaline earthâ€“silica glasses. Journal of Non-Crystalline Solids, 2007, 353, 2479-2494.	3.1	60
10	Fiberglass and Glass Technology. , 2010, , .		60
11	Roman blue-green bottle glass: chemicalâ€“optical analysis and high temperature viscosity modelling. Journal of Archaeological Science, 2008, 35, 302-309.	2.4	51
12	BiOBr/MoS2 catalyst as heterogenous peroxymonosulfate activator toward organic pollutant removal: Energy band alignment and mechanism insight. Journal of Colloid and Interface Science, 2021, 594, 635-649.	9.4	51
13	Novel structural behaviour of iron in alkaliâ€“alkaline-earthâ€“silica glasses. Comptes Rendus Chimie, 2002, 5, 787-796.	0.5	49
14	Sulphate incorporation and glass formation in phosphate systems for nuclear and toxic waste immobilization. Materials Research Bulletin, 2008, 43, 1679-1693.	5.2	49
15	Towards improved cover glasses for photovoltaic devices. Progress in Photovoltaics: Research and Applications, 2020, 28, 1187-1206.	8.1	43
16	A new method to inertize incinerator toxic fly ash with silica from rice husk ash. Environmental Chemistry Letters, 2013, 11, 329-333.	16.2	42
17	Self-Assembly of Nanosheet-Supported Fe-MOF Heterocrystals as a Reusable Catalyst for Boosting Advanced Oxidation Performance via Radical and Nonradical Pathways. ACS Applied Materials & Interfaces, 2021, 13, 22694-22707.	8.0	40
18	Corrosion of glass contact refractories for the vitrification of radioactive wastes: a review. International Materials Reviews, 2011, 56, 226-242.	19.3	39

#	Article	IF	Citations
19	Boron environments and irradiation stability of iron borophosphate glasses analysed by EELS. Solid State Sciences, 2008, 10, 1194-1199.	3.2	38
20	Selective behaviour of dilute Fe3+ ions in silicate glasses: an Fe K-edge EXAFS and XANES study. Journal of Non-Crystalline Solids, 2014, 387, 47-56.	3.1	36
21	The effects of Î³-radiation on model vitreous wasteforms intended for the disposal of intermediate and high level radioactive wastes in the United Kingdom. Journal of Nuclear Materials, 2012, 429, 353-367.	2.7	34
22	Vitrified metal finishing wastesI. Composition, density and chemical durability. Journal of Hazardous Materials, 2005, 119, 125-133.	12.4	33
23	Vitrified metal finishing wastes. Journal of Hazardous Materials, 2005, 122, 129-138.	12.4	32
24	Modelling the sulfate capacity of simulated radioactive waste borosilicate glasses. Journal of Alloys and Compounds, 2017, 695, 656-667.	5.5	31
25	Mechanical properties of nuclear waste glasses. Journal of Nuclear Materials, 2011, 408, 188-193.	2.7	28
26	Crystallization behavior of ironâ€•and boronâ€•containing nepheline (Na₂OÂ·Al₂O₃Â·2SiO₂) based model highâ€level nuclear waste glasses. Journal of the American Ceramic Society, 2019, 102, 1101-1121.	3.8	28
27	Enhanced thermal stability of high-bismuth borate glasses by addition of iron. Journal of Non-Crystalline Solids, 2018, 500, 149-157.	3.1	27
28	The Use of Surrogates in Waste Immobilization Studies: A Case Study of Plutonium. Materials Research Society Symposia Proceedings, 2008, 1107, 1.	0.1	26
29	The Structural Role of <scp>Zn</scp> in Nuclear Waste Glasses. International Journal of Applied Glass Science, 2011, 2, 343-353.	2.0	23
30	Integrated management of ash from industrial and domestic combustion: a new sustainable approach for reducing greenhouse gas emissions from energy conversion. Environmental Science and Pollution Research, 2017, 24, 14834-14846.	5.3	23
31	Structural phase transitions in Ti-doped Bi1-xNdxFeO3 ceramics. Journal of Applied Physics, 2012, 111, .	2.5	22
32	Oxidation state and local environment of selenium in alkali borosilicate glasses for radioactive waste immobilisation. Journal of Non-Crystalline Solids, 2011, 357, 2726-2734.	3.1	21
33	Neutron Diffraction and Raman Studies of the Incorporation of Sulfate in Silicate Glasses. Journal of Physical Chemistry C, 2020, 124, 5409-5424.	3.1	20
34	Gamma irradiation-induced defects in borosilicate glasses for high-level radioactive waste immobilisation. Journal of Nuclear Materials, 2021, 544, 152702.	2.7	19
35	Preliminary studies of sulphate solubility and redox in 60P2O5â€“40Fe2O3 glasses. Materials Letters, 2006, 60, 844-847.	2.6	16
36	Topochemical Fluorination of Sr3(M0.5Ru0.5)2O7(M = Ti, Mn, Fe),n= 2, Ruddlesdenâ€“Popper Phases. Inorganic Chemistry, 2013, 52, 3388-3398.	4.0	16

#	Article	IF	Citations
37	An injectable, self-healing and MMP-inhibiting hyaluronic acid gel via iron coordination. International Journal of Biological Macromolecules, 2020, 165, 2022-2029.	7.5	16
38	Photo-Fenton degradation of methylene blue using hematite-enriched slag under visible light. Journal of Radioanalytical and Nuclear Chemistry, 2020, 325, 537-549.	1.5	16
39	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.	2.7	15
40	Arsenic stabilization in coal fly ash through the employment of waste materials. Journal of Environmental Chemical Engineering, 2014, 2, 1352-1357.	6.7	15
41	Microporous glass ceramics from combination of silicate, borate and phosphate wastes. Advances in Applied Ceramics, 2012, 111, 415-421.	1.1	14
42	Thermal conductivity of refractory glass fibres. Journal of Thermal Analysis and Calorimetry, 2016, 125, 35-44.	3.6	13
43	Doped Sr₂FeIrO₆â€”Phase Separation and a J_{eff} â‰ 0 State for Ir⁵⁺. Inorganic Chemistry, 2018, 57, 10303-10311.	4.0	13
44	Structural, electrical and photocatalytic properties of iron-containing soda-lime aluminosilicate glass and glass-ceramics. Journal of Non-Crystalline Solids, 2021, 553, 120510.	3.1	13
45	Melting behavior of waste glass cullet briquettes in sodaâ€limeâ€silica container glass batch. International Journal of Applied Glass Science, 2019, 10, 125-137.	2.0	12
46	Topochemical Reduction of the Ruddlesdenâ€“Popper Phases Sr₂Fe_{0.5}Ru_{0.5}O₄ and Sr₃(Fe_{0.5}Ru_{0.5})₂O₇. Inorganic Chemistry, 2013, 52, 10920-10928.	4.0	11
47	Variable Temperature 57Fe-MÃ¶ssbauer Spectroscopy Study of Nanoparticle Iron Carbides. Croatica Chemica Acta, 2015, 88, 531-537.	0.4	11
48	Immobilisation of Simulated Plutonium-Contaminated Material in Phosphate Glass: An Initial Scoping Study. Materials Research Society Symposia Proceedings, 2006, 932, 1.	0.1	10
49	Sintered silicophosphate glass ceramics from MBM ash and recycled sodaâ€“limeâ€“silica glass. Advances in Applied Ceramics, 2011, 110, 41-48.	1.1	10
50	Structure of NaFeSiO4, NaFeSi2O6, and NaFeSi3O8 glasses and glass-ceramics. American Mineralogist, 2020, 105, 1375-1384.	1.9	10
51	MÃ¶ssbauer studies of phosphate glasses for the immobilisation of toxic and nuclear wastes. Hyperfine Interactions, 2007, 165, 135-140.	0.5	9
52	Structure of iron phosphate glasses modified by alkali and alkaline earth additions: neutron and x-ray diffraction studies. Journal of Physics Condensed Matter, 2012, 24, 175403.	1.8	9
53	The relationship between local structure and photo-Fenton catalytic ability of glasses and glass-ceramics prepared from Japanese slag. Journal of Radioanalytical and Nuclear Chemistry, 2019, 322, 751-761.	1.5	9
54	X-ray Fluorescence Analysis of Feldspars and Silicate Glass: Effects of Melting Time on Fused Bead Consistency and Volatilisation. Minerals (Basel, Switzerland), 2020, 10, 442.	2.0	9

#	Article	IF	Citations
55	Optical and structural properties of d0 ion-doped silicate glasses for photovoltaic applications. Journal of Commonwealth Law and Legal Education, 2018, 59, 193-202.	0.5	8
56	CO3+1 network formation in ultra-high pressure carbonate liquids. Scientific Reports, 2019, 9, 15416.	3.3	8
57	Composition-structure-property effects of antimony in soda-lime-silica glasses. Journal of Non-Crystalline Solids, 2020, 544, 120184.	3.1	8
58	Exploratory research in alternative raw material sources and reformulation for industrial sodaâ€limeâ€silica glass batches. International Journal of Applied Glass Science, 2020, 11, 340-356.	2.0	8
59	A new nanotechnology of fly ash inertization based on the use of silica gel extracted from rice husk ash and microwave treatment. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2014, 228, 27-32.	0.1	7
60	Physical properties and sinterability of pure and iron-doped bismuth sodium titanate ceramics. Journal of the Australian Ceramic Society, 2020, 56, 1441-1449.	1.9	7
61	Design of New Energy-Friendly Compositions. , 2010, , 267-351.		7
62	Nanobead Formation and Nanopatterning in Glasses. Microscopy and Microanalysis, 2008, 14, 434-435.	0.4	6
63	Structural studies of iron in vitrified toxic wastes. Hyperfine Interactions, 2009, 192, 37-42.	0.5	6
64	Concerning the use of standards for identifying coordination environments in glasses. Journal of Physics: Conference Series, 2010, 217, 012072.	0.4	6
65	Magnetic interactions in cubic-, hexagonal- and trigonal-barium iron oxide fluoride, BaFeO₂F. Journal of Physics Condensed Matter, 2016, 28, 346001.	1.8	6
66	Structure and properties of Na₅FeSi₄O₁₂ crystallized from 5Na₂Oâ€“Fe₂O₃â€“8SiO₂ glass. Acta Crystallographica Section C, Structural Chemistry, 2018, 74, 1595-1602.	0.5	6
67	MAS-NMR studies of carbonate retention in a very wide range of Na2O-SiO2 glasses. Journal of Non-Crystalline Solids, 2020, 534, 119958.	3.1	6
68	Effects of composition and phase relations on mechanical properties and crystallization of silicate glasses. Journal of the American Ceramic Society, 2021, 104, 3921-3946.	3.8	6
69	Increasing force generation in electroadhesive devices through modelling of novel electrode geometries. Journal of Electrostatics, 2021, 109, 103540.	1.9	6
70	Briquetting of waste glass cullet fine particles for energy saving glass manufacture. Glass Technology: European Journal of Glass Science and Technology Part A, 2018, 59, 81-91.	0.2	6
71	Waste Loading of Actinide Chloride Surrogates in an Iron Phosphate Glass. Materials Research Society Symposia Proceedings, 2008, 1107, 1.	0.1	5
72	MÃ¶ssbauer studies of materials used to immobilise industrial wastes. Hyperfine Interactions, 2013, 217, 83-90.	0.5	5

#	Article	IF	Citations
73	Complex Magnetic Ordering in the Oxide Selenide Sr₂Fe₃Se₂O₃. Inorganic Chemistry, 2018, 57, 10312-10322.	4.0	5
74	A MÃ¶ssbauer Study of Iron in Vitrified Wastes. Materials Research Society Symposia Proceedings, 2008, 1107, 1.	0.1	4
75	Synthesis and Characterization of Li₁₁Nd₁₈Fe₄O_{39â˜Î´}. Inorganic Chemistry, 2012, 51, 8073-8082.	4.0	4
76	Nonisothermal crystallization kinetics and stability of leucite and kalsilite from K₂Oâ€Al₂O₃â€SiO₂ glasses. Journal of the American Ceramic Society, 2019, 102, 508-523.	3.8	4
77	The structure of sodium silicate glass from neutron diffraction and modeling of oxygenâ€oxygen correlations. Journal of the American Ceramic Society, 2021, 104, 6155.	3.8	4
78	The environment of Fe3+/Fe2+ cations in a sodium borosilicate glass. Journal of Commonwealth Law and Legal Education, 2017, 58, 78-91.	0.5	4
79	Development of electrically conductive ZrO2-CaO-Fe2O3-V2O5 glass and glass-ceramics as a new cathode active material for Na-ion batteries with high performance. Journal of Alloys and Compounds, 2022, 899, 163309.	5.5	4
80	Conversion of Li₂FeSbO₅to the Fe(III)/Fe(V) Phase LiFeSbO₅via Topochemical Lithium Extraction. Chemistry of Materials, 2022, 34, 2468-2475.	6.7	4
81	The Effect of Î³-radiation on Mechanical Properties of Model UK Nuclear Waste Glasses. Materials Research Society Symposia Proceedings, 2013, 1518, 41-46.	0.1	3
82	Effects of Residual Charge on the Performance of Electro-Adhesive Grippers. Lecture Notes in Computer Science, 2016, , 327-338.	1.3	3
83	The structure and thermochemistry of K2CO3â€“MgCO3 glass. Journal of Materials Research, 2019, 34, 3377-3388.	2.6	3
84	The facile and additive-free synthesis of a cell-friendly iron(<scp>iii</scp>)â€“glutathione complex. Dalton Transactions, 2020, 49, 10574-10579.	3.3	3
85	Antimony-modified soda-lime-silica glass: Towards low-cost radiation-resistant materials. Journal of Non-Crystalline Solids, 2022, 585, 121526.	3.1	3
86	Survey of Potential Glass Compositions for the Immobilisation of the UK's Separated Plutonium Stocks. Materials Research Society Symposia Proceedings, 2006, 985, 1.	0.1	2
87	The chemical suitability for recycling of zinc contaminated steelmaking by-product dusts: The case of the UK steel plant. Resources, Conservation & Recycling Advances, 2022, 14, 200073.	2.5	2
88	Glass Development for Vitrification of Wet Intermediate Level Waste (WILW) from Decommissionning of the Hinkley Point â€˜Aâ€™ Site. Materials Research Society Symposia Proceedings, 2008, 1124, 1.	0.1	1
89	Evolutionary Learning for Soft Margin Problems: A Case Study on Practical Problems with Kernels. , 2020, , .		1
90	MÃ¶ssbauer spectroscopy for optimising systems for environmental remediation. Hyperfine Interactions, 2014, 226, 499-508.	0.5	0

#	Article	IF	Citations
91	57Fe MÃ¶ssbauer spectroscopy used to develop understanding of a diamond preservation index model. Hyperfine Interactions, 2016, 237, 1.	0.5	0
92	Synthesis and characterisation of Li11RE18M4O39â^Î´: RE = Nd or Sm; M = Al, Co or Fe. Dalton Transactions, 2016, 45, 315-323.	3.3	0
93	Structure and magnetism of the Rh4+-containing perovskite oxides La0.5Sr0.5Mn0.5Rh0.5O3 and La0.5Sr0.5Fe0.5Rh0.5O3. Dalton Transactions, 2020, 49, 11346-11353.	3.3	0
94	(Hydroxy)apatite on cement: insights into a new surface treatment. Materials Advances, 0, , .	5.4	0