Brant Walkley

List of Publications by Year
in descending order

43 papers	2,239 citations	279487 23 h-index	288905 40 g-index
43 all docs	43 docs citations	43 times ranked	1480 citing authors

#	Article	IF	Citations
1	Gel nanostructure in alkali-activated binders based on slag and fly ash, and effects of accelerated carbonation. Cement and Concrete Research, 2013, 53, 127-144.	4.6	593
2	Phase evolution of C-(N)-A-S-H/N-A-S-H gel blends investigated via alkali-activation of synthetic calcium aluminosilicate precursors. Cement and Concrete Research, 2016, 89, 120-135.	4.6	256
3	Reactivity tests for supplementary cementitious materials: RILEM TC 267-TRM phase 1. Materials and Structures/Materiaux Et Constructions, 2018, 51, 1.	1.3	144
4	Solid-state nuclear magnetic resonance spectroscopy of cements. Materials Today Advances, 2019, 1, 100007.	2.5	110
5	Metakaolin-based geopolymers: Relation between formulation, physicochemical properties and efflorescence formation. Composites Part B: Engineering, 2020, 182, 107671.	5.9	110
6	The role of zinc in metakaolin-based geopolymers. Cement and Concrete Research, 2020, 136, 106194.	4.6	108
7	New Structural Model of Hydrous Sodium Aluminosilicate Gels and the Role of Charge-Balancing Extra-Framework Al. Journal of Physical Chemistry C, 2018, 122, 5673-5685.	1.5	75
8	Phase evolution of Na₂Oâ€“Al₂O₃â€“SiO₂â€“H₂O gels in synthetic aluminosilicate binders. Dalton Transactions, 2016, 45, 5521-5535.	1.6	74
9	Structural evolution of synthetic alkali-activated CaO-MgO-Na 2 O-Al 2 O 3 -SiO 2 materials is influenced by Mg content. Cement and Concrete Research, 2017, 99, 155-171.	4.6	73
10	Incorporation of strontium and calcium in geopolymer gels. Journal of Hazardous Materials, 2020, 382, 121015.	6.5	71
11	New selective dissolution process to quantify reaction extent and product stability in metakaolin-based geopolymers. Composites Part B: Engineering, 2019, 176, 107172.	5.9	58
12	Slag and Activator Chemistry Control the Reaction Kinetics of Sodium Metasilicate-Activated Slag Cements. Sustainability, 2018, 10, 4709.	1.6	47
13	Strategies for control and mitigation of efflorescence in metakaolin-based geopolymers. Cement and Concrete Research, 2021, 144, 106431.	4.6	44
14	Degradation resistance of different cementitious materials to phosphoric acid attack at early stage. Cement and Concrete Research, 2022, 151, 106606.	4.6	41
15	Synthesis of stoichiometrically controlled reactive aluminosilicate and calcium-aluminosilicate powders. Powder Technology, 2016, 297, 17-33.	2.1	40
16	Examination of alkali-activated material nanostructure during thermal treatment. Journal of Materials Science, 2018, 53, 9486-9503.	1.7	37
17	Nanostructural evolution of alkali-activated mineral wools. Cement and Concrete Composites, 2020, 106, 103472.	4.6	30
18	Thermal performance of calcium-rich alkali-activated materials: A microstructural and mechanical study. Construction and Building Materials, 2017, 153, 225-237.	3.2	29

#	Article	IF	Citations
19	Report of RILEM TC 267-TRM phase 2: optimization and testing of the robustness of the R3 reactivity tests for supplementary cementitious materials. Materials and Structures/Materiaux Et Constructions, 2022, 55, 1.	1.3	29
20	Stoichiometrically controlled Câ€“(A)â€“Sâ€“H/Nâ€“Aâ€“Sâ€“H gel blends via alkali-activation of synthetic precursors. Advances in Applied Ceramics, 2015, 114, 372-377.	0.6	28
21	Metakaolin-based geopolymers: Efflorescence and its effect on microstructure and mechanical properties. Ceramics International, 2022, 48, 2212-2229.	2.3	27
22	Exploiting in-situ solid-state NMR spectroscopy to probe the early stages of hydration of calcium aluminate cement. Solid State Nuclear Magnetic Resonance, 2019, 99, 1-6.	1.5	25
23	Influence of activator type on reaction kinetics, setting time, and compressive strength of alkali-activated mineral wools. Journal of Thermal Analysis and Calorimetry, 2021, 144, 1129-1138.	2.0	24
24	Activator Anion Influences the Nanostructure of Alkali-Activated Slag Cements. Journal of Physical Chemistry C, 2021, 125, 20727-20739.	1.5	23
25	Nanostructure of CaO-(Na₂O)-Al₂O₃-SiO₂-H₂O Gels Revealed by Multinuclear Solid-State Magic Angle Spinning and Multiple Quantum Magic Angle Spinning Nuclear Magnetic Resonance Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 1681-1694.	1.5	19
26	Thermodynamic modelling of BFS-PC cements under temperature conditions relevant to the geological disposal of nuclear wastes. Cement and Concrete Research, 2019, 119, 21-35.	4.6	17
27	TGFÎ² Inhibition Stimulates Collagen Maturation to Enhance Bone Repair and Fracture Resistance in a Murine Myeloma Model. Journal of Bone and Mineral Research, 2019, 34, 2311-2326.	3.1	14
28	Thermodynamic properties of sodium aluminosilicate hydrate (Nâ€“Aâ€“Sâ€“H). Dalton Transactions, 2021, 50, 13968-13984.	1.6	14
29	Capture of aqueous radioiodine species by metallated adsorbents from wastestreams of the nuclear power industry: a review. SN Applied Sciences, 2021, 3, .	1.5	13
30	Synthesis and characterisation of the new oxyfluoride Li+ ion conductor, Li5SiO4F. Solid State Ionics, 2018, 327, 64-70.	1.3	12
31	Synthesis of Ca1-xCexZrTi2-2xAl2xO7 zirconolite ceramics for plutonium disposition. Journal of Nuclear Materials, 2021, 556, 153198.	1.3	8
32	18-month hydration of a low-pH cement for geological disposal of radioactive waste: The Cebama reference cement. Applied Geochemistry, 2020, 116, 104536.	1.4	6
33	Reversible Adsorption of Polycarboxylates on Silica Fume in High pH, High Ionic Strength Environments for Control of Concrete Fluidity. Langmuir, 2022, 38, 1662-1671.	1.6	6
34	Fly ash-based geopolymer chemistry and behavior. , 2017, , 185-214.		5
35	The influence of Fe2O3 reagent grade purity on the electrical properties of â€˜undopedâ€™ LaFeO3 ceramics: A cautionary reminder. Journal of the European Ceramic Society, 2021, 41, 4189-4198.	2.8	5
36	Spectroscopic evaluation of U^{VI}â€“cement mineral interactions: ettringite and hydrotalcite. Journal of Synchrotron Radiation, 2022, 29, 89-102.	1.0	5

#	Article	IF	Citations
37	Characterizing oxygen atoms in perovskite and pyrochlore oxides using ADF-STEM at a resolution of a few tens of picometers. Acta Materialia, 2021, 208, 116717.	3.8	4
38	Cement-based stabilization/solidification of radioactive waste. , 2022, , 407-431.		4
39	Encapsulation of iodine-loaded metallated silica materials by a geopolymer matrix. MRS Advances, 2022, 7, 105-109.	0.5	4
40	Mimicking Biosintering: The Identification of Highly Condensed Surfaces in Bioinspired Silica Materials. Langmuir, 2021, 37, 561-568.	1.6	3
41	Chemical structure and dissolution behaviour of CaO and ZnO containing alkali-borosilicate glass. Materials Advances, 2022, 3, 1747-1758.	2.6	3
42	Geopolymers. Encyclopedia of Earth Sciences Series, 2018, , 1-2.	0.1	1
43	Geopolymers. Encyclopedia of Earth Sciences Series, 2018, , 406-407.	0.1	0