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	Metakaolin-based geopolymers: Efflorescence and its effect on microstructure and mechanical properties. Ceramics International, 2022, 48, 2212-2229.	2.3	27
2	Degradation resistance of different cementitious materials to phosphoric acid attack at early stage. Cement and Concrete Research, 2022, 151, 106606.	4.6	41
3	Chemical structure and dissolution behaviour of CaO and ZnO containing alkali-borosilicate glass. Materials Advances, 2022, 3, 1747-1758.	2.6	3
4	Cement-based stabilization/solidification of radioactive waste. , 2022, , 407-431.		4
5	Spectroscopic evaluation of U^{VI}â€“cement mineral interactions: ettringite and hydrotalcite. Journal of Synchrotron Radiation, 2022, 29, 89-102.	1.0	5
6	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
7	Encapsulation of iodine-loaded metallated silica materials by a geopolymer matrix. MRS Advances, 2022, 7, 105-109.	0.5	4
8	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
9	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
10	Thermodynamic properties of sodium aluminosilicate hydrate (Nâ€“Aâ€“Sâ€“H). Dalton Transactions, 2021, 50, 13968-13984.	1.6	14
11	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
12	Strategies for control and mitigation of efflorescence in metakaolin-based geopolymers. Cement and Concrete Research, 2021, 144, 106431.	4.6	44
13	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
14	Activator Anion Influences the Nanostructure of Alkali-Activated Slag Cements. Journal of Physical Chemistry C, 2021, 125, 20727-20739.	1.5	23
15	Synthesis of Ca1-xCexZrTi2-2xAl2xO7 zirconolite ceramics for plutonium disposition. Journal of Nuclear Materials, 2021, 556, 153198.	1.3	8
16	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
17	Mimicking Biosintering: The Identification of Highly Condensed Surfaces in Bioinspired Silica Materials. Langmuir, 2021, 37, 561-568.	1.6	3
18	Incorporation of strontium and calcium in geopolymer gels. Journal of Hazardous Materials, 2020, 382, 121015.	6.5	71

#	Article	IF	Citations
19	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
20	Nanostructural evolution of alkali-activated mineral wools. Cement and Concrete Composites, 2020, 106, 103472.	4.6	30
21	Metakaolin-based geopolymers: Relation between formulation, physicochemical properties and efflorescence formation. Composites Part B: Engineering, 2020, 182, 107671.	5.9	110
22	The role of zinc in metakaolin-based geopolymers. Cement and Concrete Research, 2020, 136, 106194.	4.6	108
23	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
24	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
25	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
26	Solid-state nuclear magnetic resonance spectroscopy of cements. Materials Today Advances, 2019, 1, 100007.	2.5	110
27	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
28	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
29	Examination of alkali-activated material nanostructure during thermal treatment. Journal of Materials Science, 2018, 53, 9486-9503.	1.7	37
30	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
31	Slag and Activator Chemistry Control the Reaction Kinetics of Sodium Metasilicate-Activated Slag Cements. Sustainability, 2018, 10, 4709.	1.6	47
32	Reactivity tests for supplementary cementitious materials: RILEM TC 267-TRM phase 1. Materials and Structures/Materiaux Et Constructions, 2018, 51, 1.	1.3	144
33	Synthesis and characterisation of the new oxyfluoride Li+ ion conductor, Li5SiO4F. Solid State Ionics, 2018, 327, 64-70.	1.3	12
34	Geopolymers. Encyclopedia of Earth Sciences Series, 2018, , 406-407.	0.1	0
35	Geopolymers. Encyclopedia of Earth Sciences Series, 2018, , 1-2.	0.1	1
36	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

#	Article	IF	Citations
37	Thermal performance of calcium-rich alkali-activated materials: A microstructural and mechanical study. Construction and Building Materials, 2017, 153, 225-237.	3.2	29
38	Fly ash-based geopolymer chemistry and behavior. , 2017, , 185-214.		5
39	Synthesis of stoichiometrically controlled reactive aluminosilicate and calcium-aluminosilicate powders. Powder Technology, 2016, 297, 17-33.	2.1	40
40	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
41	Phase evolution of Na₂Oâ€“Al₂O₃â€“SiO₂â€“H₂O gels in synthetic aluminosilicate binders. Dalton Transactions, 2016, 45, 5521-5535.	1.6	74
42	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
43	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