

Narayanan Neithalath

List of Publications by Year in descending order

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160
papers

8,657
citations

38738

50
h-index

48312

88
g-index

160
all docs

160
docs citations

160
times ranked

4825
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure and properties of aerated concrete: a review. Cement and Concrete Composites, 2000, 22, 321-329.	10.7	665
2	The Filler Effect: The Influence of Filler Content and Surface Area on Cementitious Reaction Rates. Journal of the American Ceramic Society, 2013, 96, 1978-1990.	3.8	303
3	Characterizing pore volume, sizes, and connectivity in pervious concretes for permeability prediction. Materials Characterization, 2010, 61, 802-813.	4.4	292
4	Influence of a fine glass powder on the durability characteristics of concrete and its comparison to fly ash. Cement and Concrete Composites, 2008, 30, 486-496.	10.7	272
5	Hydration and strength development in ternary portland cement blends containing limestone and fly ash or metakaolin. Cement and Concrete Composites, 2013, 39, 93-103.	10.7	244
6	Characterizing Enhanced Porosity Concrete using electrical impedance to predict acoustic and hydraulic performance. Cement and Concrete Research, 2006, 36, 2074-2085.	11.0	221
7	Analysis of calcium leaching behavior of plain and modified cement pastes in pure water. Cement and Concrete Composites, 2009, 31, 176-185.	10.7	203
8	Influence of a fine glass powder on cement hydration: Comparison to fly ash and modeling the degree of hydration. Cement and Concrete Research, 2008, 38, 429-436.	11.0	202
9	Compressive behavior of pervious concretes and a quantification of the influence of random pore structure features. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 402-412.	5.6	201
10	The rheological properties of ternary binders containing Portland cement, limestone, and metakaolin or fly ash. Cement and Concrete Research, 2013, 52, 196-207.	11.0	200
11	Pore structure features of pervious concretes proportioned for desired porosities and their performance prediction. Cement and Concrete Composites, 2011, 33, 778-787.	10.7	167
12	Effects of activator characteristics on the reaction product formation in slag binders activated using alkali silicate powder and NaOH. Cement and Concrete Composites, 2012, 34, 809-818.	10.7	163
13	Structure and strength of NaOH activated concretes containing fly ash or GGBFS as the sole binder. Cement and Concrete Composites, 2010, 32, 399-410.	10.7	162
14	Isothermal reaction kinetics and temperature dependence of alkali activation of slag, fly ash and their blends. Construction and Building Materials, 2013, 45, 233-242.	7.2	156
15	Permeability Reduction in Pervious Concretes due to Clogging: Experiments and Modeling. Journal of Materials in Civil Engineering, 2010, 22, 741-751.	2.9	148
16	Compressive response of pervious concretes proportioned for desired porosities. Construction and Building Materials, 2011, 25, 4181-4189.	7.2	148
17	Microstructure, strength, and moisture stability of alkali activated glass powder-based binders. Cement and Concrete Composites, 2014, 45, 46-56.	10.7	147
18	On the feasibility of using phase change materials (PCMs) to mitigate thermal cracking in cementitious materials. Cement and Concrete Composites, 2014, 51, 14-26.	10.7	140

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19	The influence of microencapsulated phase change material (PCM) characteristics on the microstructure and strength of cementitious composites: Experiments and finite element simulations. <i>Cement and Concrete Composites</i> , 2016, 73, 29-41.	10.7	128
20	Insights into material design, extrusion rheology, and properties of 3D-printable alkali-activated fly ash-based binders. <i>Materials and Design</i> , 2019, 167, 107634.	7.0	126
21	Reaction kinetics in sodium silicate powder and liquid activated slag binders evaluated using isothermal calorimetry. <i>Thermochimica Acta</i> , 2012, 546, 32-43.	2.7	123
22	Chloride transport in fly ash and glass powder modified concretes – Influence of test methods on microstructure. <i>Cement and Concrete Composites</i> , 2010, 32, 148-156.	10.7	109
23	Effective properties of a fly ash geopolymer: Synergistic application of X-ray synchrotron tomography, nanoindentation, and homogenization models. <i>Cement and Concrete Research</i> , 2015, 78, 252-262.	11.0	107
24	Electrical conductivity based characterization of plain and coarse glass powder modified cement pastes. <i>Cement and Concrete Composites</i> , 2007, 29, 656-666.	10.7	106
25	Ternary blends containing slag and interground/blended limestone: Hydration, strength, and pore structure. <i>Construction and Building Materials</i> , 2016, 102, 113-124.	7.2	103
26	Microstructural investigations on aerated concrete. <i>Cement and Concrete Research</i> , 2000, 30, 457-464.	11.0	99
27	Simple methods to estimate the influence of limestone fillers on reaction and property evolution in cementitious materials. <i>Cement and Concrete Composites</i> , 2013, 42, 20-29.	10.7	96
28	Relating rapid chloride transport parameters of concretes to microstructural features extracted from electrical impedance. <i>Cement and Concrete Research</i> , 2010, 40, 1041-1051.	11.0	94
29	Microstructural packing- and rheology-based binder selection and characterization for Ultra-high Performance Concrete (UHPC). <i>Cement and Concrete Research</i> , 2018, 103, 179-190.	11.0	94
30	Material design of economical ultra-high performance concrete (UHPC) and evaluation of their properties. <i>Cement and Concrete Composites</i> , 2019, 104, 103346.	10.7	94
31	Observations on the rheological response of alkali activated fly ash suspensions: the role of activator type and concentration. <i>Rheologica Acta</i> , 2014, 53, 843-855.	2.4	89
32	The durability of cementitious composites containing microencapsulated phase change materials. <i>Cement and Concrete Composites</i> , 2017, 81, 66-76.	10.7	83
33	Fundamental insights into the compressive and flexural response of binder- and aggregate-optimized ultra-high performance concrete (UHPC). <i>Cement and Concrete Composites</i> , 2019, 98, 1-13.	10.7	83
34	Response of alkali activated fly ash mortars to microwave curing. <i>Cement and Concrete Research</i> , 2010, 40, 1688-1696.	11.0	79
35	Fracture behavior of pervious concretes: The effects of pore structure and fibers. <i>Engineering Fracture Mechanics</i> , 2014, 118, 1-16.	4.3	78
36	Acoustic performance and damping behavior of cellulose–cement composites. <i>Cement and Concrete Composites</i> , 2004, 26, 359-370.	10.7	72

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37	Electrically induced chloride ion transport in alkali activated slag concretes and the influence of microstructure. <i>Cement and Concrete Research</i> , 2013, 47, 31-42.	11.0	72
38	The filler effect: The influence of filler content and type on the hydration rate of tricalcium silicate. <i>Journal of the American Ceramic Society</i> , 2017, 100, 3316-3328.	3.8	70
39	The rheology of cementitious suspensions: A closer look at experimental parameters and property determination using common rheological models. <i>Cement and Concrete Composites</i> , 2015, 59, 38-48.	10.7	64
40	Synthesis and characterization of 3D-printable geopolymetric foams for thermally efficient building envelope materials. <i>Cement and Concrete Composites</i> , 2019, 104, 103377.	10.7	63
41	Monitoring the evolution of material structure in cement pastes and concretes using electrical property measurements. <i>Construction and Building Materials</i> , 2013, 49, 288-297.	7.2	61
42	Linking fresh paste microstructure, rheology and extrusion characteristics of cementitious binders for 3D printing. <i>Journal of the American Ceramic Society</i> , 2019, 102, 3951-3964.	3.8	59
43	Microstructural and ²⁹ Si MAS NMR spectroscopic evaluations of alkali cationic effects on fly ash activation. <i>Cement and Concrete Composites</i> , 2015, 57, 34-43.	10.7	56
44	Modeling the Influence of Pore Structure on the Acoustic Absorption of Enhanced Porosity Concrete. <i>Journal of Advanced Concrete Technology</i> , 2005, 3, 29-40.	1.8	55
45	Clinkering-free cementation by fly ash carbonation. <i>Journal of CO2 Utilization</i> , 2018, 23, 117-127.	6.8	55
46	The fracture response of blended formulations containing limestone powder: Evaluations using two-parameter fracture model and digital image correlation. <i>Cement and Concrete Composites</i> , 2014, 53, 316-326.	10.7	54
47	Hydration in high-performance cementitious systems containing vitreous calcium aluminosilicate or silica fume. <i>Cement and Concrete Research</i> , 2009, 39, 473-481.	11.0	53
48	Porous inclusions as hosts for phase change materials in cementitious composites: Characterization, thermal performance, and analytical models. <i>Construction and Building Materials</i> , 2017, 134, 574-584.	7.2	53
49	Crack Healing in Cementitious Mortars Using Enzyme-Induced Carbonate Precipitation: Quantification Based on Fracture Response. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	2.9	53
50	A critical examination of the influence of material characteristics and extruder geometry on 3D printing of cementitious binders. <i>Cement and Concrete Composites</i> , 2020, 112, 103671.	10.7	53
51	Extracting the performance predictors of Enhanced Porosity Concretes from electrical conductivity spectra. <i>Cement and Concrete Research</i> , 2007, 37, 796-804.	11.0	51
52	A comparison of intergrinding and blending limestone on reaction and strength evolution in cementitious materials. <i>Construction and Building Materials</i> , 2013, 43, 428-435.	7.2	51
53	An electrical impedance investigation into the chloride ion transport resistance of alkali silicate powder activated slag concretes. <i>Cement and Concrete Composites</i> , 2013, 44, 58-68.	10.7	50
54	Mechanical and microstructural characterization of alkali sulfate activated high volume fly ash binders. <i>Materials and Design</i> , 2017, 122, 236-246.	7.0	50

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55	Topological controls on the dissolution kinetics of glassy aluminosilicates. <i>Journal of the American Ceramic Society</i> , 2017, 100, 5521-5527.	3.8	48
56	Early-age temperature evolutions in concrete pavements containing microencapsulated phase change materials. <i>Construction and Building Materials</i> , 2017, 147, 466-477.	7.2	47
57	Elucidating the Role of the Aluminous Source on Limestone Reactivity in Cementitious Materials. <i>Journal of the American Ceramic Society</i> , 2015, 98, 4076-4089.	3.8	46
58	Electrical impedance analysis based quantification of microstructural changes in concretes due to non-steady state chloride migration. <i>Materials Chemistry and Physics</i> , 2011, 129, 569-579.	4.0	44
59	The influence of filler type and surface area on the hydration rates of calcium aluminate cement. <i>Construction and Building Materials</i> , 2015, 96, 657-665.	7.2	44
60	How Microstructure and Pore Moisture Affect Strength Gain in Portlandite-Enriched Composites That Mineralize CO ₂ . <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13053-13061.	6.7	44
61	Confined Water in Layered Silicates: The Origin of Anomalous Thermal Expansion Behavior in Calcium-Silicate-Hydrates. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 35621-35627.	8.0	43
62	Simulation of chloride diffusion in fly ash and limestone-calcined clay cement (LC3) concretes and the influence of damage on service-life. <i>Cement and Concrete Research</i> , 2020, 130, 106010.	11.0	43
63	Machine learning-based accelerated property prediction of two-phase materials using microstructural descriptors and finite element analysis. <i>Computational Materials Science</i> , 2021, 191, 110328.	3.0	43
64	Ca ²⁺ (N)-S ²⁻ H and Na ⁺ -A ⁺ -S ²⁻ H gels: Compositions and solubility data at 25 ^o C and 50 ^o C. <i>Journal of the American Ceramic Society</i> , 2017, 100, 2700-2711.	3.8	41
65	Rheological evaluations of interground and blended cement-limestone suspensions. <i>Construction and Building Materials</i> , 2015, 79, 65-72.	7.2	40
66	Numerical simulations to quantify the influence of phase change materials (PCMs) on the early- and later-age thermal response of concrete pavements. <i>Cement and Concrete Composites</i> , 2017, 81, 11-24.	10.7	40
67	Synthesis and Properties of a Novel Structural Binder Utilizing the Chemistry of Iron Carbonation. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 8295-8304.	8.0	39
68	Factors influencing the density and compressive strength of aerated concrete. <i>Magazine of Concrete Research</i> , 2000, 52, 163-168.	2.0	38
69	Water Vapor Sorption in Cementitious Materials—Measurement, Modeling and Interpretation. <i>Transport in Porous Media</i> , 2014, 103, 69-98.	2.6	38
70	Effects of Irradiation on Albite TM s Chemical Durability. <i>Journal of Physical Chemistry A</i> , 2017, 121, 7835-7845.	2.5	37
71	Fracture process zone and tensile behavior of blended binders containing limestone powder. <i>Cement and Concrete Research</i> , 2015, 73, 51-62.	11.0	36
72	Figure of merit for the thermal performance of cementitious composites containing phase change materials. <i>Cement and Concrete Composites</i> , 2016, 65, 214-226.	10.7	36

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73	New insights into the prehydration of cement and its mitigation. <i>Cement and Concrete Research</i> , 2015, 70, 94-103.	11.0	34
74	The influences of soft and stiff inclusions on the mechanical properties of cementitious composites. <i>Cement and Concrete Composites</i> , 2016, 71, 153-165.	10.7	32
75	A microstructure-guided constitutive modeling approach for random heterogeneous materials: Application to structural binders. <i>Computational Materials Science</i> , 2016, 119, 52-64.	3.0	31
76	3D DEM Simulations of Drained Triaxial Compression of Sand Strengthened Using Microbially Induced Carbonate Precipitation. <i>International Journal of Geomechanics</i> , 2017, 17, .	2.7	31
77	Influence of composition and curing on drying shrinkage of aerated concrete. <i>Materials and Structures/Materiaux Et Constructions</i> , 2000, 33, 243-250.	3.1	29
78	Moisture and ionic transport in concretes containing coarse limestone powder. <i>Cement and Concrete Composites</i> , 2010, 32, 486-496.	10.7	29
79	Microstructural, Mechanical, and Durability Related Similarities in Concretes Based on OPC and Alkali-Activated Slag Binders. <i>International Journal of Concrete Structures and Materials</i> , 2014, 8, 289-299.	3.2	28
80	Crack propagation and strain localization in metallic particulate-reinforced cementitious mortars. <i>Materials & Design</i> , 2015, 79, 15-25.	5.1	28
81	Electrically driven chloride ion transport in blended binder concretes: Insights from experiments and numerical simulations. <i>Cement and Concrete Research</i> , 2014, 66, 1-10.	11.0	27
82	Electrical conductivity based microstructure and strength prediction of plain and modified concretes. <i>International Journal of Advances in Engineering Sciences and Applied Mathematics</i> , 2010, 2, 83-94.	1.1	26
83	Characterization of toughening mechanisms in UHPC through image correlation and inverse analysis of flexural results. <i>Cement and Concrete Composites</i> , 2021, 122, 104157.	10.7	26
84	Pore- and micro-structural characterization of a novel structural binder based on iron carbonation. <i>Materials Characterization</i> , 2014, 98, 168-179.	4.4	25
85	The influence of slightly and highly soluble carbonate salts on phase relations in hydrated calcium aluminate cements. <i>Journal of Materials Science</i> , 2016, 51, 6062-6074.	3.7	25
86	The Influence of Water Activity on the Hydration Rate of Tricalcium Silicate. <i>Journal of the American Ceramic Society</i> , 2016, 99, 2481-2492.	3.8	24
87	Synthesis and characterization of economical, multi-functional porous ceramics based on abundant aluminosilicates. <i>Materials and Design</i> , 2018, 152, 10-21.	7.0	24
88	Particle-Scale Mechanisms in Undrained Triaxial Compression of Biocemented Sands: Insights from 3D DEM Simulations with Flexible Boundary. <i>International Journal of Geomechanics</i> , 2019, 19, .	2.7	24
89	Microstructure-guided numerical simulations to predict the thermal performance of a hierarchical cement-based composite material. <i>Cement and Concrete Composites</i> , 2018, 87, 20-28.	10.7	23
90	Flexural fracture response of a novel iron carbonate matrix “Glass fiber composite and its comparison to Portland cement-based composites. <i>Construction and Building Materials</i> , 2015, 93, 360-370.	7.2	22

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91	A refined, self-consistent Poisson-Nernst-Planck (PNP) model for electrically induced transport of multiple ionic species through concrete. <i>Cement and Concrete Composites</i> , 2017, 82, 80-94.	10.7	22
92	Examining the effects of microencapsulated phase change materials on early-age temperature evolutions in realistic pavement geometries. <i>Cement and Concrete Composites</i> , 2019, 103, 149-159.	10.7	22
93	Examining layer height effects on the flexural and fracture response of plain and fiber-reinforced 3D-printed beams. <i>Cement and Concrete Composites</i> , 2021, 124, 104254.	10.7	22
94	Restrained shrinkage cracking of cementitious composites containing soft PCM inclusions: A paste (matrix) controlled response. <i>Materials and Design</i> , 2017, 132, 367-374.	7.0	19
95	A comprehensive analysis of buildability of 3D-printed concrete and the use of bi-linear stress-strain criterion-based failure curves towards their prediction. <i>Cement and Concrete Composites</i> , 2022, 128, 104424.	10.7	19
96	Quantifying the Effects of Hydration Enhancement and Dilution in Cement Pastes Containing Coarse Glass Powder. <i>Journal of Advanced Concrete Technology</i> , 2008, 6, 397-408.	1.8	18
97	Finite element-based micromechanical modeling of the influence of phase properties on the elastic response of cementitious mortars. <i>Construction and Building Materials</i> , 2016, 127, 153-166.	7.2	18
98	Monovalent Ion Exchange Kinetics of Hydrated Calcium-Alumino Layered Double Hydroxides. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 63-74.	3.7	18
99	A general method for retrieving thermal deformation properties of microencapsulated phase change materials or other particulate inclusions in cementitious composites. <i>Materials and Design</i> , 2017, 126, 259-267.	7.0	17
100	Strain sensing ability of metallic particulate reinforced cementitious composites: Experiments and microstructure-guided finite element modeling. <i>Cement and Concrete Composites</i> , 2018, 90, 225-234.	10.7	17
101	The effect of irradiation on the atomic structure and chemical durability of calcite and dolomite. <i>Npj Materials Degradation</i> , 2019, 3, .	5.8	17
102	Machine learning approaches to predict the micromechanical properties of cementitious hydration phases from microstructural chemical maps. <i>Construction and Building Materials</i> , 2020, 265, 120647.	7.2	17
103	Understanding the Energy Implications of Phase-Change Materials in Concrete Walls through Finite-Element Analysis. <i>Journal of Energy Engineering - ASCE</i> , 2014, 140, 04013009.	1.9	16
104	Strain energy and process zone based fracture characterization of a novel iron carbonate binding material. <i>Engineering Fracture Mechanics</i> , 2016, 156, 1-15.	4.3	16
105	Novel synthesis of lightweight geopolymer matrices from fly ash through carbonate-based activation. <i>Materials Today Communications</i> , 2018, 17, 266-277.	1.9	16
106	Role of Electrochemical Surface Potential and Irradiation on Garnet-Type Almandineâ€™s Dissolution Kinetics. <i>Journal of Physical Chemistry C</i> , 2018, 122, 17268-17277.	3.1	15
107	Quantitative 2D Restrained Shrinkage Cracking of Cement Paste with Wollastonite Microfibers. <i>Journal of Materials in Civil Engineering</i> , 2016, 28, .	2.9	14
108	Time, Temperature, and Cationic Dependence of Alkali Activation of Slag: Insights from Fourier Transform Infrared Spectroscopy and Spectral Deconvolution. <i>Applied Spectroscopy</i> , 2017, 71, 1795-1807.	2.2	14

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109	The effects of (di- and tri-valent) cation partitioning and intercalant anion type on the solubility of hydroxalces. <i>Journal of the American Ceramic Society</i> , 2020, 103, 6025-6039.	3.8	14
110	New insights into the mechanisms of carbon dioxide mineralization by portlandite. <i>AICHE Journal</i> , 2021, 67, e17160.	3.6	14
111	Simulating the Fracture of Notched Mortar Beams through Extended Finite-Element Method and Peridynamics. <i>Journal of Engineering Mechanics - ASCE</i> , 2019, 145, 04019049.	2.9	13
112	Elucidating the nano-mechanical behavior of multi-component binders for ultra-high performance concrete. <i>Construction and Building Materials</i> , 2020, 243, 118214.	7.2	12
113	The Influence of Metakaolin on Limestone Reactivity in Cementitious Materials. <i>RILEM Bookseries</i> , 2015, , 11-19.	0.4	11
114	Experimental and Numerical Investigation of Fracture Behavior of Particle-Reinforced Alkali-Activated Slag Mortars. <i>Journal of Materials in Civil Engineering</i> , 2019, 31, 04019043.	2.9	11
115	Damage development in neutron-irradiated concrete in a test reactor: Hygro-thermal and mechanical simulations. <i>Cement and Concrete Research</i> , 2021, 142, 106349.	11.0	11
116	Damage assessment in cellulose-cement composites using dynamic mechanical characteristics. <i>Cement and Concrete Composites</i> , 2006, 28, 658-667.	10.7	10
117	Properties of Concrete Containing Vitreous Calcium Aluminosilicate Pozzolan. <i>Transportation Research Record</i> , 2008, 2070, 32-38.	1.9	10
118	Physico-chemical changes in nano-silica and silica fume modified cement pastes in response to leaching. <i>International Journal of Materials and Structural Integrity</i> , 2009, 3, 114.	0.1	10
119	Isothermal Stimulation of Mineral Dissolution Processes by Acoustic Perturbation. <i>Journal of Physical Chemistry C</i> , 2018, 122, 28665-28673.	3.1	10
120	Analysis of the influence of material parameters on electrical conductivity of cement pastes and concretes. <i>Magazine of Concrete Research</i> , 2009, 61, 257-270.	2.0	9
121	Evaluating the short- and long-term moisture transport phenomena in lightweight aggregate concretes. <i>Magazine of Concrete Research</i> , 2007, 59, 435-445.	2.0	8
122	A methodology to extract the component size distributions in interground composite (limestone) cements. <i>Construction and Building Materials</i> , 2016, 121, 328-337.	7.2	8
123	Rheology-Based Protocol to Establish Admixture Compatibility in Dense Cementitious Suspensions. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	2.9	8
124	Elucidating the influences of compliant microscale inclusions on the fracture behavior of cementitious composites. <i>Cement and Concrete Composites</i> , 2018, 94, 13-23.	10.7	8
125	Calcination-free production of calcium hydroxide at sub-boiling temperatures. <i>RSC Advances</i> , 2021, 11, 1762-1772.	3.6	8
126	Re-examining the influence of the inclusion characteristics on the drying shrinkage of cementitious composites. <i>Construction and Building Materials</i> , 2017, 146, 713-722.	7.2	7

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127	Temperature-Induced Aggregation in Portlandite Suspensions. <i>Langmuir</i> , 2020, 36, 10811-10821.	3.5	7
128	A thermodynamic framework for modelling thixotropic yield stress fluids: Application to cement pastes. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2020, 281, 104318.	2.4	7
129	Transfer (machine) learning approaches coupled with target data augmentation to predict the mechanical properties of concrete. <i>Machine Learning With Applications</i> , 2022, 8, 100271.	4.4	7
130	Predicting mechanical properties of ultrahigh temperature ceramics using machine learning. <i>Journal of the American Ceramic Society</i> , 2022, 105, 6851-6863.	3.8	7
131	Temperature-induced phase and microstructural transformations in a synthesized iron carbonate (siderite) complex. <i>Materials and Design</i> , 2016, 92, 189-199.	7.0	6
132	Elucidating the Crack Resistance of Alkali-Activated Slag Mortars Using Coupled Fracture Tests and Image Correlation. <i>Journal of the American Ceramic Society</i> , 2016, 99, 273-280.	3.8	6
133	Atomic Dislocations and Bond Rupture Govern Dissolution Enhancement under Acoustic Stimulation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 55399-55410.	8.0	6
134	Dispersing nano- and micro-sized portlandite particulates via electrosteric exclusion at short screening lengths. <i>Soft Matter</i> , 2020, 16, 3425-3435.	2.7	6
135	Comparative Analysis of the Influence of Sodium and Potassium Silicate Solutions on the Kinetics and Products of Slag Activation. <i>Advances in Civil Engineering Materials</i> , 2014, 3, 371-387.	0.6	6
136	Strength and Transport Properties of Concretes Modified with Coarse Limestone Powder to Compensate for Dilution Effects. <i>Transportation Research Record</i> , 2012, 2290, 130-138.	1.9	5
137	Stability of Calcium-Alumino Layered-Double-Hydroxide Nanocomposites in Aqueous Electrolytes. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 13417-13426.	3.7	5
138	Relating the nano-mechanical response and qualitative chemical maps of multi-component ultra-high performance cementitious binders. <i>Construction and Building Materials</i> , 2020, 260, 119959.	7.2	5
139	The role of gas flow distributions on CO ₂ mineralization within monolithic cemented composites: coupled CFD-factorial design approach. <i>Reaction Chemistry and Engineering</i> , 2021, 6, 494-504.	3.7	5
140	A review of materials science-based models for mixture design and permeability prediction of pervious concretes. <i>International Journal of Materials and Structural Integrity</i> , 2015, 9, 108.	0.1	4
141	Mathematical morphology-based point cloud analysis techniques for geometry assessment of 3D printed concrete elements. <i>Additive Manufacturing</i> , 2022, 49, 102499.	3.0	4
142	PREDICTING THE ELASTIC MODULI OF ENHANCED POROSITY (PERVIOUS) CONCRETES USING RECONSTRUCTED 3D MATERIAL STRUCTURES. , 2009, , 275-289.		3
143	Finite element simulation of restrained shrinkage cracking of cementitious materials: Considering moisture diffusion, aging viscoelasticity, aleatory uncertainty, and the effects of soft/stiff inclusions. <i>Finite Elements in Analysis and Design</i> , 2020, 173, 103390.	3.2	3
144	Discrete Element Simulations of Rheological Response of Cementitious Binders as Applied to 3D Printing. <i>RILEM Bookseries</i> , 2019, , 102-112.	0.4	3

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145	How clay particulates affect flow cessation and the coiling stability of yield stress-matched cementing suspensions. <i>Soft Matter</i> , 2020, 16, 3929-3940.	2.7	2
146	Ultrafast stiffening of concentrated thermoresponsive mineral suspensions. <i>Materials and Design</i> , 2022, 221, 110905.	7.0	2
147	Reply to the discussion by H. Vaupel and I. Odler of the paper "Microstructural investigations on aerated concrete". <i>Cement and Concrete Research</i> , 2001, 31, 155.	11.0	1
148	Analysis and Design Procedures for Strain Hardening Flexural Beam and Panel. <i>RILEM Bookseries</i> , 2018, , 518-526.	0.4	1
149	Rapid Elemental Extraction from Ordered and Disordered Solutes by Acoustically-Stimulated Dissolution. <i>ACS Engineering Au</i> , 0, , .	5.1	1
150	Evaluating the Use of Accelerated Test Methods for Chloride Transport in Alkali Activated Slag Concretes Using Electrical Impedance and Associated Models. , 2013, , 85-107.		1
151	STRUCTURE AND PROPERTIES OF NaOH ACTIVATED CEMENT FREE BINDER (CFB) CONCRETES. , 2009, , 169-182.		0
152	Multiphysics design optimization model for structural walls incorporating phase-change materials. <i>Engineering Optimization</i> , 2015, 47, 308-327.	2.6	0
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