Dale P Bentz

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62 157 9,950 95 h-index g-index citations papers 160 6.2 6.71 11,175 avg, IF L-index ext. citations ext. papers

#	Paper	IF	Citations
157	Three-Dimensional Computer Simulation of Portland Cement Hydration and Microstructure Development. <i>Journal of the American Ceramic Society</i> , 1997 , 80, 3-21	3.8	381
156	Water permeability and chloride ion diffusion in portland cement mortars: Relationship to sand content and critical pore diameter. <i>Cement and Concrete Research</i> , 1995 , 25, 790-802	10.3	298
155	Protected paste volume in concrete: Extension to internal curing using saturated lightweight fine aggregate. <i>Cement and Concrete Research</i> , 1999 , 29, 1863-1867	10.3	283
154	Percolation of phases in a three-dimensional cement paste microstructural model. <i>Cement and Concrete Research</i> , 1991 , 21, 325-344	10.3	263
153	Potential applications of phase change materials in concrete technology. <i>Cement and Concrete Composites</i> , 2007 , 29, 527-532	8.6	222
152	Percolation and pore structure in mortars and concrete. Cement and Concrete Research, 1994, 24, 25-37	10.3	221
151	Effects of cement particle size distribution on performance properties of Portland cement-based materials. <i>Cement and Concrete Research</i> , 1999 , 29, 1663-1671	10.3	217
150	Mitigation strategies for autogenous shrinkage cracking. <i>Cement and Concrete Composites</i> , 2004 , 26, 677-685	8.6	198
149	Analytical formulas for interfacial transition zone properties. <i>Advanced Cement Based Materials</i> , 1997 , 6, 99-108		193
148	A review of early-age properties of cement-based materials. <i>Cement and Concrete Research</i> , 2008 , 38, 196-204	10.3	189
147	Volume change and cracking in internally cured mixtures made with saturated lightweight aggregate under sealed and unsealed conditions. <i>Cement and Concrete Composites</i> , 2009 , 31, 427-437	8.6	183
146	Shrinkage-reducing admixtures and early-age desiccation in cement pastes and mortars. <i>Cement and Concrete Research</i> , 2001 , 31, 1075-1085	10.3	181
145	Influence of particle size distributions on yield stress and viscosity of cementfly ash pastes. <i>Cement and Concrete Research</i> , 2012 , 42, 404-409	10.3	160
144	Multiscale Analytical/Numerical Theory of the Diffusivity of Concrete. <i>Advanced Cement Based Materials</i> , 1998 , 8, 77-88		157
143	Influence of internal curing using lightweight aggregates on interfacial transition zone percolation and chloride ingress in mortars. <i>Cement and Concrete Composites</i> , 2009 , 31, 285-289	8.6	155
142	Influence of silica fume on diffusivity in cement-based materials: I. Experimental and computer modeling studies on cement pastes. <i>Cement and Concrete Research</i> , 2000 , 30, 953-962	10.3	151
141	Modelling drying shrinkage in reconstructed porous materials: application to porous Vycor glass. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1998 , 6, 211-236	2	145

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140	Modeling the influence of limestone filler on cement hydration using CEMHYD3D. <i>Cement and Concrete Composites</i> , 2006 , 28, 124-129	8.6	141
139	Fine limestone additions to regulate setting in high volume fly ash mixtures. <i>Cement and Concrete Composites</i> , 2012 , 34, 11-17	8.6	138
138	Effect of sample conditioning on the water absorption of concrete. <i>Cement and Concrete Composites</i> , 2011 , 33, 805-813	8.6	136
137	Estimation of the degree of hydration of blended cement pastes by a scanning electron microscope point-counting procedure. <i>Cement and Concrete Research</i> , 2004 , 34, 1787-1793	10.3	131
136	The effect of statistical fluctuation, finite size error, and digital resolution on the phase percolation and transport properties of the NIST cement hydration model. <i>Cement and Concrete Research</i> , 2001 , 31, 1501-1514	10.3	130
135	Transient plane source measurements of the thermal properties of hydrating cement pastes. <i>Materials and Structures/Materiaux Et Constructions</i> , 2007 , 40, 1073-1080	3.4	123
134	Influence of water-to-cement ratio on hydration kinetics: Simple models based on spatial considerations. <i>Cement and Concrete Research</i> , 2006 , 36, 238-244	10.3	121
133	Incorporation of phase change materials in cementitious systems via fine lightweight aggregate. <i>Construction and Building Materials</i> , 2012 , 35, 483-490	6.7	12 0
132	Evaluation of sustainable high-volume fly ash concretes. Cement and Concrete Composites, 2011, 33, 39-	-45 56	119
131	Internal curing :		119
131	Internal curing: Water absorption in internally cured mortar made with water-filled lightweight aggregate. Cement and Concrete Research, 2009, 39, 883-892	10.3	119
	Water absorption in internally cured mortar made with water-filled lightweight aggregate. <i>Cement</i>	10.3	
130	Water absorption in internally cured mortar made with water-filled lightweight aggregate. <i>Cement and Concrete Research</i> , 2009 , 39, 883-892 Multi-scale investigation of the performance of limestone in concrete. <i>Construction and Building</i>		117
130	Water absorption in internally cured mortar made with water-filled lightweight aggregate. <i>Cement and Concrete Research</i> , 2009 , 39, 883-892 Multi-scale investigation of the performance of limestone in concrete. <i>Construction and Building Materials</i> , 2015 , 75, 1-10 Limestone and Silica Powder Replacements for Cement: Early-Age Performance. <i>Cement and</i>	6.7	117
130 129 128	Water absorption in internally cured mortar made with water-filled lightweight aggregate. <i>Cement and Concrete Research</i> , 2009 , 39, 883-892 Multi-scale investigation of the performance of limestone in concrete. <i>Construction and Building Materials</i> , 2015 , 75, 1-10 Limestone and Silica Powder Replacements for Cement: Early-Age Performance. <i>Cement and Concrete Composites</i> , 2017 , 78, 43-56 Modelling of the microstructure and transport properties of concrete. <i>Construction and Building</i>	6.7 8.6	117 110 109
130 129 128	Water absorption in internally cured mortar made with water-filled lightweight aggregate. <i>Cement and Concrete Research</i> , 2009 , 39, 883-892 Multi-scale investigation of the performance of limestone in concrete. <i>Construction and Building Materials</i> , 2015 , 75, 1-10 Limestone and Silica Powder Replacements for Cement: Early-Age Performance. <i>Cement and Concrete Composites</i> , 2017 , 78, 43-56 Modelling of the microstructure and transport properties of concrete. <i>Construction and Building Materials</i> , 1996 , 10, 293-300 Digital simulation of the aggregatedement paste interfacial zone in concrete. <i>Journal of Materials</i>	6.7 8.6 6.7	117 110 109
130 129 128 127 126	Water absorption in internally cured mortar made with water-filled lightweight aggregate. <i>Cement and Concrete Research</i> , 2009 , 39, 883-892 Multi-scale investigation of the performance of limestone in concrete. <i>Construction and Building Materials</i> , 2015 , 75, 1-10 Limestone and Silica Powder Replacements for Cement: Early-Age Performance. <i>Cement and Concrete Composites</i> , 2017 , 78, 43-56 Modelling of the microstructure and transport properties of concrete. <i>Construction and Building Materials</i> , 1996 , 10, 293-300 Digital simulation of the aggregatedement paste interfacial zone in concrete. <i>Journal of Materials Research</i> , 1991 , 6, 196-201 Early-Age Properties of Cement-Based Materials. II: Influence of Water-to-Cement Ratio. <i>Journal of</i>	6.7 8.6 6.7 2.5	117 110 109 107 98

122	Prediction of Adiabatic Temperature Rise in Conventional and High-Performance Concretes Using a 3-D Microstructural Model. <i>Cement and Concrete Research</i> , 1998 , 28, 285-297	10.3	90
121	Interfacial transport in porous media: Application to dc electrical conductivity of mortars. <i>Journal of Applied Physics</i> , 1995 , 78, 5898-5908	2.5	89
120	The Influence of Calcium Chloride Deicing Salt on Phase Changes and Damage Development in Cementitious Materials. <i>Cement and Concrete Composites</i> , 2015 , 64, 1-15	8.6	88
119	Rheology and setting of high volume fly ash mixtures. Cement and Concrete Composites, 2010, 32, 265-	2 <i>7</i> 8 0 6	87
118	Effects of the incorporation of Municipal Solid Waste Incineration fly ash in cement pastes and mortars: I. Experimental study. <i>Cement and Concrete Research</i> , 2002 , 32, 303-311	10.3	87
117	The Visible Cement Data Set. <i>Journal of Research of the National Institute of Standards and Technology</i> , 2002 , 107, 137-48	1.3	86
116	Influence of silica fume on diffusivity in cement-based materials. <i>Cement and Concrete Research</i> , 2000 , 30, 1121-1129	10.3	84
115	Influence of Cement Particle-Size Distribution on Early Age Autogenous Strains and Stresses in Cement-Based Materials. <i>Journal of the American Ceramic Society</i> , 2001 , 84, 129-135	3.8	82
114	Optimization of cement and fly ash particle sizes to produce sustainable concretes. <i>Cement and Concrete Composites</i> , 2011 , 33, 824-831	8.6	80
113	Modeling of the influence of transverse cracking on chloride penetration into concrete. <i>Cement and Concrete Composites</i> , 2013 , 38, 65-74	8.6	77
112	Activation energies of high-volume fly ash ternary blends: Hydration and setting. <i>Cement and Concrete Composites</i> , 2014 , 53, 214-223	8.6	73
111	Cellular automaton simulations of cement hydration and microstructure development. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1994 , 2, 783-808	2	73
110	Using a Saturation Function to Interpret the Electrical Properties of Partially Saturated Concrete. <i>Journal of Materials in Civil Engineering</i> , 2013 , 25, 1097-1106	3	72
109	Acoustic emission waveform characterization of crack origin and mode in fractured and ASR damaged concrete. <i>Cement and Concrete Composites</i> , 2015 , 60, 135-145	8.6	70
108	Factors that Influence Electrical Resistivity Measurements in Cementitious Systems. <i>Transportation Research Record</i> , 2013 , 2342, 90-98	1.7	69
107	Capillary porosity depercolation in cement-based materials: Measurement techniques and factors which influence their interpretation. <i>Cement and Concrete Research</i> , 2011 , 41, 854-864	10.3	69
106	In situ measurement of water at the organic coating/substrate interface. <i>Progress in Organic Coatings</i> , 1996 , 27, 181-193	4.8	69
105	Experimental and simulation studies of the interfacial zone in concrete. <i>Cement and Concrete Research</i> , 1992 , 22, 891-902	10.3	69

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104	Early-Age Properties of Cement-Based Materials. I: Influence of Cement Fineness. <i>Journal of Materials in Civil Engineering</i> , 2008 , 20, 502-508	3	68
103	Influence of Shrinkage-Reducing Admixtures on Early-Age Properties of Cement Pastes. <i>Journal of Advanced Concrete Technology</i> , 2006 , 4, 423-429	2.3	68
102	Mitigation of autogenous shrinkage in alkali activated slag mortars by internal curing. <i>Materials and Structures/Materiaux Et Constructions</i> , 2013 , 46, 1355-1367	3.4	67
101	A virtual rapid chloride permeability test. <i>Cement and Concrete Composites</i> , 2007 , 29, 723-731	8.6	67
100	CEMHYD3D:		67
99	Damage development in cementitious materials exposed to magnesium chloride deicing salt. <i>Construction and Building Materials</i> , 2015 , 93, 384-392	6.7	66
98	A comparison study of Portland cement hydration kinetics as measured by chemical shrinkage and isothermal calorimetry. <i>Cement and Concrete Composites</i> , 2013 , 39, 23-32	8.6	66
97	Modeling the influence of the interfacial zone on the DC electrical conductivity of mortar. <i>Advanced Cement Based Materials</i> , 1995 , 2, 169-181		65
96	Evolution of porosity and calcium hydroxide in laboratory concretes containing silica fume. <i>Cement and Concrete Research</i> , 1994 , 24, 1044-1050	10.3	65
95	Transport and diffusion in three-dimensional composite media. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1994 , 207, 28-36	3.3	61
94	Increasing the Service Life of Bridge Decks by Incorporating Phase-Change Materials to Reduce Freeze-Thaw Cycles. <i>Journal of Materials in Civil Engineering</i> , 2012 , 24, 1034-1042	3	60
93	Multi-Scale Microstructural Modeling of Concrete Diffusivity: Identification of Significant Varibles. <i>Cement, Concrete and Aggregates</i> , 1998 , 20, 129		60
92	The influence of the filler effect on the sulfate requirement of blended cements. <i>Cement and Concrete Research</i> , 2019 , 126, 105918	10.3	58
91	Hydraulic radius and transport in reconstructed model three-dimensional porous media. <i>Transport in Porous Media</i> , 1994 , 17, 221-238	3.1	57
90	Suspended hydration and loss of freezable water in cement pastes exposed to 90% relative humidity. <i>Cement and Concrete Research</i> , 2004 , 34, 2045-2056	10.3	56
89	An argument for using coarse cements in high-performance concretes. <i>Cement and Concrete Research</i> , 1999 , 29, 615-618	10.3	56
88	CEMHYD3D:		54
87	Computer modeling of the replacement of Boarseltement particles by inert fillers in low w/c ratio concretes. <i>Cement and Concrete Research</i> , 2001 , 31, 503-506	10.3	53

86	Cement hydration: building bridges and dams at the microstructure level. <i>Materials and Structures/Materiaux Et Constructions</i> , 2007 , 40, 397-404	3.4	48
85	Modelling drying shrinkage of cement paste and mortar Part 1. Structural models from nanometres to millimetres. <i>Materiaux Et Constructions</i> , 1995 , 28, 450-458		48
84	Acoustic Emission and Low-Temperature Calorimetry Study of Freeze and Thaw Behavior in Cementitious Materials Exposed to Sodium Chloride Salt. <i>Transportation Research Record</i> , 2014 , 2441, 81-90	1.7	45
83	Preliminary observations of water movement in cement pastes during curing using X-ray absorption. <i>Cement and Concrete Research</i> , 2000 , 30, 1157-1168	10.3	45
82	Fluid transport in high volume fly ash mixtures with and without internal curing. <i>Cement and Concrete Composites</i> , 2014 , 45, 102-110	8.6	44
81	Replacement of Boarseltement particles by inert fillers in low w/c ratio concretes. <i>Cement and Concrete Research</i> , 2005 , 35, 185-188	10.3	44
80	Reducing Set Retardation in High-Volume Fly Ash Mixtures with the Use of Limestone: Iimproving Constructability for Sustainability. <i>Transportation Research Record</i> , 2012 , 2290, 139-146	1.7	42
79	Blending different fineness cements to engineer the properties of cement-based materials. <i>Magazine of Concrete Research</i> , 2010 , 62, 327-338	2	42
78	Influence of Substrate Moisture State and Roughness on Interface Microstructure and Bond Strength: Slant Shear vs. Pull-Off Testing. <i>Cement and Concrete Composites</i> , 2018 , 87, 63-72	8.6	41
77	A computer model to predict the surface temperature and time-of-wetness of concrete pavements and bridge decks		40
77 76		3	40
	and bridge decks Influence of Shrinkage-Reducing Admixtures on Moisture Absorption in Cementitious Materials at	3 10.3	39
76	Influence of Shrinkage-Reducing Admixtures on Moisture Absorption in Cementitious Materials at Early Ages. <i>Journal of Materials in Civil Engineering</i> , 2010 , 22, 277-286 Effects of the incorporation of Municipal Solid Waste Incineration fly ash in cement pastes and		39
76 75	Influence of Shrinkage-Reducing Admixtures on Moisture Absorption in Cementitious Materials at Early Ages. <i>Journal of Materials in Civil Engineering</i> , 2010 , 22, 277-286 Effects of the incorporation of Municipal Solid Waste Incineration fly ash in cement pastes and mortars: II: Modeling. <i>Cement and Concrete Research</i> , 2002 , 32, 565-576 Quantitative comparison of real and CEMHYD3D model microstructures using correlation	10.3	39
76 75 74	Influence of Shrinkage-Reducing Admixtures on Moisture Absorption in Cementitious Materials at Early Ages. <i>Journal of Materials in Civil Engineering</i> , 2010 , 22, 277-286 Effects of the incorporation of Municipal Solid Waste Incineration fly ash in cement pastes and mortars: II: Modeling. <i>Cement and Concrete Research</i> , 2002 , 32, 565-576 Quantitative comparison of real and CEMHYD3D model microstructures using correlation functions. <i>Cement and Concrete Research</i> , 2006 , 36, 259-263	10.3	39 38 37
76 75 74 73	Influence of Shrinkage-Reducing Admixtures on Moisture Absorption in Cementitious Materials at Early Ages. <i>Journal of Materials in Civil Engineering</i> , 2010 , 22, 277-286 Effects of the incorporation of Municipal Solid Waste Incineration fly ash in cement pastes and mortars: II: Modeling. <i>Cement and Concrete Research</i> , 2002 , 32, 565-576 Quantitative comparison of real and CEMHYD3D model microstructures using correlation functions. <i>Cement and Concrete Research</i> , 2006 , 36, 259-263 Quantifying Water at the Organic Film/Hydroxylated Substrate Interface 1995 , 48, 169-194 The reaction between metakaolin and limestone and its effect in porosity refinement and	10.3	39383737
76 75 74 73 72	Influence of Shrinkage-Reducing Admixtures on Moisture Absorption in Cementitious Materials at Early Ages. <i>Journal of Materials in Civil Engineering</i> , 2010 , 22, 277-286 Effects of the incorporation of Municipal Solid Waste Incineration fly ash in cement pastes and mortars: II: Modeling. <i>Cement and Concrete Research</i> , 2002 , 32, 565-576 Quantitative comparison of real and CEMHYD3D model microstructures using correlation functions. <i>Cement and Concrete Research</i> , 2006 , 36, 259-263 Quantifying Water at the Organic Film/Hydroxylated Substrate Interface 1995 , 48, 169-194 The reaction between metakaolin and limestone and its effect in porosity refinement and mechanical properties. <i>Cement and Concrete Research</i> , 2021 , 140, 106307 A hard coresoft shell microstructural model for studying percolation and transport in	10.3	3938373737

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68	Decoupling the physical and chemical effects of supplementary cementitious materials on strength and permeability: A multi-level approach. <i>Cement and Concrete Composites</i> , 2016 , 65, 19-28	8.6	34
67	Numerical Simulation of the Freeze-Thaw Behavior of Mortar Containing Deicing Salt Solution. <i>Materials and Structures/Materiaux Et Constructions</i> , 2017 , 50, 1	3.4	32
66	Analytical formulas for interfacial transition zone properties 1997 , 6, 99-99		32
65	Measurement of water transport from saturated pumice aggregates to hardening cement paste. <i>Materials and Structures/Materiaux Et Constructions</i> , 2006 , 39, 861-868	3.4	31
64	1. Digital Images and Computer Modeling. Experimental Methods in the Physical Sciences, 1999 , 1-41	0.4	31
63	Doubling the service life of concrete structures. I: Reducing ion mobility using nanoscale viscosity modifiers. <i>Cement and Concrete Composites</i> , 2008 , 30, 674-678	8.6	30
62	Microstructure and Thermal Conductivity of Hydrated Calcium Silicate Board Materials. <i>Journal of Building Physics</i> , 2007 , 31, 55-67	2.6	28
61	Influence of alkalis on porosity percolation in hydrating cement pastes. <i>Cement and Concrete Composites</i> , 2006 , 28, 427-431	8.6	28
60	Improved mesoscale segmentation of concrete from 3D X-ray images using contrast enhancers. <i>Cement and Concrete Composites</i> , 2018 , 93, 30-42	8.6	27
59	Low-Temperature Curing Strength Enhancement in Cement-Based Materials Containing Limestone Powder. <i>Materials and Structures/Materiaux Et Constructions</i> , 2017 , 50, 1	3.4	25
58	Thermo-mechanical assessment of concrete microcracking damage due to early-age temperature rise. <i>Construction and Building Materials</i> , 2015 , 81, 140-153	6.7	24
57	D90: The Strongest Contributor to Setting Time in Mineral Trioxide Aggregate and Portland Cement. <i>Journal of Endodontics</i> , 2015 , 41, 1146-50	4.7	24
56	Towards the formulation of robust and sustainable cementitious binders for 3-D additive construction by extrusion. <i>Construction and Building Materials</i> , 2018 , 175, 215-224	6.7	24
55	Capillary Porosity Depercolation/Repercolation in Hydrating Cement Pastes Via Low-Temperature Calorimetry Measurements and CEMHYD3D Modeling. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 2606-2611	3.8	23
54	In Situ Spectroscopic Study of Water at the Asphalt/Siliceous Substrate Interface and Its Implication in Stripping 2005 , 81, 1-28		22
53	Using Neutron Radiography to Quantify Water Transport and the Degree of Saturation in Entrained Air Cement Based Mortar. <i>Physics Procedia</i> , 2015 , 69, 542-550		21
52	Recycling of hydrated cement pastes by synthesis of <code>BH-C2S</code> . <i>Cement and Concrete Research</i> , 2017 , 100, 398-412	10.3	20
51	Reducing setting time of blended cement paste containing high-SO fly ash (HSFA) using chemical/physical accelerators and by fly ash pre-washing. <i>Cement and Concrete Composites</i> , 2018 , 90, 14-26	8.6	20

50	Electrical Testing of Cement-Based Materials: Role of Testing Techniques, Sample Conditioning		20
49	Simulation studies of methods to delay corrosion and increase service life for cracked concrete exposed to chlorides. <i>Cement and Concrete Composites</i> , 2015 , 58, 59-69	8.6	19
48	Parametric Assessment of Stress Development and Cracking in Internally Cured Restrained Mortars Experiencing Autogenous Deformations and Thermal Loading. <i>Advances in Civil Engineering</i> , 2011 , 2011, 1-16	1.3	19
47	Relating Compressive Strength to Heat Release in Mortars. <i>Advances in Civil Engineering Materials</i> , 2012 , 1, 20120002	0.7	19
46	Design and performance of ternary blend high-volume fly ash concretes of moderate slump. <i>Construction and Building Materials</i> , 2015 , 84, 409-415	6.7	18
45	Numerical simulation of heat and mass transport during hydration of Portland cement mortar in semi-adiabatic and steam curing conditions. <i>Cement and Concrete Composites</i> , 2016 , 69, 38-48	8.6	18
44	Computer Simulations of Binder Removal from 2-D and 3-D Model Particulate Bodies. <i>Journal of the American Ceramic Society</i> , 1996 , 79, 1377-1388	3.8	18
43	Calculation of the Thermal Conductivity and Gas Permeability in a Uniaxial Bundle of Fibers. <i>Journal of the American Ceramic Society</i> , 1994 , 77, 2669-2680	3.8	18
42	Influence of internal curing and viscosity modifiers on resistance to sulfate attack. <i>Materials and Structures/Materiaux Et Constructions</i> , 2014 , 47, 581-589	3.4	17
41	Computational Materials Science of Cement-Based Materials. MRS Bulletin, 1993, 18, 50-54	3.2	17
40	CEMHYD3D:		17
39	The ONIX model: a parameter-free multiscale framework for the prediction of self-desiccation in concrete. <i>Cement and Concrete Composites</i> , 2019 , 103, 36-48	8.6	16
38	Accelerated and natural carbonation of concretes with internal curing and shrinkage/viscosity modifiers. <i>Materials and Structures/Materiaux Et Constructions</i> , 2015 , 48, 1207-1214	3.4	16
37	A methodology for assessing the chemical and physical potential of industrially sourced rice husk ash on strength development and early-age hydration of cement paste. <i>Construction and Building Materials</i> , 2017 , 149, 869-881	6.7	14
36	Relationship Between Engineering Properties, Mineralogy, and Microstructure in Cement-Based Hydroceramic Materials Cured at 200°B50°C. <i>Journal of the American Ceramic Society</i> , 2009 , 92, 694-701	3.8	14
35	Binder Distribution in Macro-Defect-Free Cements: Relation between Percolative Properties and Moisture Absorption Kinetics. <i>Journal of the American Ceramic Society</i> , 1994 , 77, 711-716	3.8	14
34	Continuous strength measurements of cement pastes and concretes by the ultrasonic wave reflection method. <i>Construction and Building Materials</i> , 2020 , 242, 117902	6.7	14
33	Anion Capture and Exchange by Functional Coatings: New Routes to Mitigate Steel Corrosion in Concrete Infrastructure. <i>Cement and Concrete Research</i> , 2017 , 101, 82-92	10.3	13

32	Bridging the micro-to-macro gap: a new application for micro X-ray fluorescence. <i>Microscopy and Microanalysis</i> , 2011 , 17, 410-7	0.5	13
31	Doubling the service life of concrete structures. II: Performance of nanoscale viscosity modifiers in mortars. <i>Cement and Concrete Composites</i> , 2010 , 32, 187-193	8.6	13
30	X-ray absorption studies of drying of cementitious tile adhesive mortars. <i>Cement and Concrete Composites</i> , 2008 , 30, 361-373	8.6	13
29	A slug calorimeter for evaluating the thermal performance of fire resistive materials. <i>Fire and Materials</i> , 2006 , 30, 257-270	1.8	13
28	Best Practices Guide for High-Volume Fly Ash Concretes : Assuring Properties and Performance		13
27	Anticipating the Setting Time of High-Volume Fly Ash Concretes Using Electrical Measurements: Feasibility Studies Using Pastes. <i>Journal of Materials in Civil Engineering</i> , 2015 , 27, 04014129	3	12
26	Applying a biodeposition layer to increase the bond of a repair mortar on a mortar substrate. <i>Cement and Concrete Composites</i> , 2018 , 86, 30-39	8.6	11
25	Determining thermal properties of gypsum board at elevated temperatures. <i>Fire and Materials</i> , 2009 , 34, n/a-n/a	1.8	10
24	Application of Digital-Image-Based Models to Microstructure, Transport Properties, and Degradation of Cement-Based materials 1996 , 167-185		10
23	Towards a methodology for the characterization of fire resistive materials with respect to thermal performance models. <i>Fire and Materials</i> , 2006 , 30, 311-321	1.8	9
22	Comparative study of methods to measure the density of Cementious powders. <i>Journal of Testing and Evaluation</i> , 2016 , 44,	1	9
21	Using Viscosity Modifiers to Reduce Effective Diffusivity in Mortars. <i>Journal of Materials in Civil Engineering</i> , 2012 , 24, 1017-1024	3	8
20	Minimizing Paste Content in Concrete Using Limestone Powders - Demonstration Mixtures		8
19	Effect of a micro-copolymer addition on the thermal conductivity of fly ash mortars. <i>Journal of Building Physics</i> , 2016 , 40, 3-16	2.6	8
18	Measurement and Modeling of the Ability of Crack Fillers to Prevent Chloride Ingress into Mortar. <i>Cement and Concrete Composites</i> , 2017 , 81, 109-121	8.6	6
17	NEUTRON RADIOGRAPHY MEASUREMENT OF SALT SOLUTION ABSORPTION IN MORTAR. <i>ACI Materials Journal</i> , 2017 , 114, 149-159	0.9	6
16	Rheological Control of 3D Printable Cement Paste and Mortars. RILEM Bookseries, 2019, 70-80	0.5	6
15	Thermal degradation of poly(methyl methacrylate) at 50°C to 125°C. <i>Journal of Applied Polymer Science</i> , 1987 , 34, 377-393	2.9	5

14	Influence of curing conditions on water loss and hydration in cement pastes with and without fly ash substitution		5
13	Study of early-age bridge deck cracking in Nevada and Wyoming 2012 ,		4
12	Critical observations for the evaluation of cement hydration models. <i>International Journal of Advances in Engineering Sciences and Applied Mathematics</i> , 2010 , 2, 75-82	0.6	4
11	Effects of Initial Surface Treatment Timing on Chloride Concentrations in Concrete Bridge Decks. <i>Transportation Research Record</i> , 2007 , 2028, 103-110	1.7	4
10	Modeling Heat and Moisture Transport in Steam-Cured Mortar: Application to Aashto Type Vi Beams. <i>Construction and Building Materials</i> , 2017 , 151, 186-195	6.7	3
9	Comparison of ASTM C311 Strength Activity Index Testing versus Testing Based on Constant Volumetric Proportions. <i>Journal of ASTM International</i> , 2012 , 9, 104138		3
8	A Materials Science-Based Approach to Characterizing Fire Resistive Materials. <i>Journal of ASTM International</i> , 2009 , 6, 102203		3
7	Surface and Uniaxial Electrical Measurements on Layered Cementitious Composites having Cylindrical and Prismatic Geometries 2014 ,		3
6	Low temperature calorimetry studies of hydrating Portland cement pastes		3
5	Effect of Initial Timing of Scarification and Overlay Treatment on Chloride Concentrations in Concrete Bridge Decks. <i>Transportation Research Record</i> , 2011 , 2220, 66-74	1.7	1
4	A reply to a discussion by S. Chatterji of the paper P ercolation and pore structure in mortars and concrete <i>Cement and Concrete Research</i> , 1994 , 24, 1569-1571	10.3	1
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2	A reply to a discussion by S. Chatterji of the paper percolation of phases in a three-dimensional cement paste microstructural model <i>Cement and Concrete Research</i> , 1991 , 21, 1187-1188	10.3	1
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