

Barbara Lothenbach

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

217
papers

17,993
citations

73
h-index

131
g-index

232
ext. papers

22,476
ext. citations

7.5
avg, IF

7.31
L-index

#	Paper	IF	Citations
217	Supplementary cementitious materials. <i>Cement and Concrete Research</i> , 2011 , 41, 1244-1256	10.3	1348
216	Influence of limestone on the hydration of Portland cements. <i>Cement and Concrete Research</i> , 2008 , 38, 848-860	10.3	782
215	Hydration mechanisms of ternary Portland cements containing limestone powder and fly ash. <i>Cement and Concrete Research</i> , 2011 , 41, 279-291	10.3	599
214	Thermodynamic modelling of the effect of temperature on the hydration and porosity of Portland cement. <i>Cement and Concrete Research</i> , 2008 , 38, 1-18	10.3	599
213	Thermodynamic modelling of the hydration of Portland cement. <i>Cement and Concrete Research</i> , 2006 , 36, 209-226	10.3	523
212	The role of calcium carbonate in cement hydration. <i>Cement and Concrete Research</i> , 2007 , 37, 551-558	10.3	509
211	Influence of activator type on hydration kinetics, hydrate assemblage and microstructural development of alkali activated blast-furnace slags. <i>Cement and Concrete Research</i> , 2011 , 41, 301-310	10.3	489
210	The AFm phase in Portland cement. <i>Cement and Concrete Research</i> , 2007 , 37, 118-130	10.3	436
209	Hydration of calcium sulfoaluminate cements [Experimental findings and thermodynamic modelling. <i>Cement and Concrete Research</i> , 2010 , 40, 1239-1247	10.3	431
208	Effect of temperature on the pore solution, microstructure and hydration products of Portland cement pastes. <i>Cement and Concrete Research</i> , 2007 , 37, 483-491	10.3	403
207	Thermodynamic properties of Portland cement hydrates in the system $\text{CaO-Al}_2\text{O}_3\text{-SiO}_2\text{-CaSO}_4\text{-CaCO}_3\text{-H}_2\text{O}$. <i>Cement and Concrete Research</i> , 2007 , 37, 1379-1410	10.3	395
206	Influence of slag chemistry on the hydration of alkali-activated blast-furnace slag [Part I: Effect of MgO. <i>Cement and Concrete Research</i> , 2011 , 41, 955-963	10.3	363
205	Cemdata18: A chemical thermodynamic database for hydrated Portland cements and alkali-activated materials. <i>Cement and Concrete Research</i> , 2019 , 115, 472-506	10.3	303
204	Influence of slag chemistry on the hydration of alkali-activated blast-furnace slag [Part II: Effect of Al_2O_3 . <i>Cement and Concrete Research</i> , 2012 , 42, 74-83	10.3	283
203	Hydration of Portland cement with high replacement by siliceous fly ash. <i>Cement and Concrete Research</i> , 2012 , 42, 1389-1400	10.3	270
202	Impact of chloride on the mineralogy of hydrated Portland cement systems. <i>Cement and Concrete Research</i> , 2010 , 40, 1009-1022	10.3	249
201	Calcium silicate hydrates: Solid and liquid phase composition. <i>Cement and Concrete Research</i> , 2015 , 78, 57-70	10.3	213

200	Hydration of alkali-activated slag: comparison with ordinary Portland cement. <i>Advances in Cement Research</i> , 2006 , 18, 119-128	1.8	202
199	The pore solution of blended cements: a review. <i>Materials and Structures/Materiaux Et Constructions</i> , 2016 , 49, 3341-3367	3.4	197
198	The early hydration of Ordinary Portland Cement (OPC): An approach comparing measured heat flow with calculated heat flow from QXRD. <i>Cement and Concrete Research</i> , 2012 , 42, 134-138	10.3	196
197	Incorporation of aluminium in calcium-silicate-hydrates. <i>Cement and Concrete Research</i> , 2015 , 75, 91-103	10.3	193
196	Hydration of quaternary Portland cement blends containing blast-furnace slag, siliceous fly ash and limestone powder. <i>Cement and Concrete Composites</i> , 2015 , 55, 374-382	8.6	188
195	Influence of limestone and anhydrite on the hydration of Portland cements. <i>Cement and Concrete Composites</i> , 2014 , 46, 99-108	8.6	188
194	Effect of temperature and aluminium on calcium (alumino)silicate hydrate chemistry under equilibrium conditions. <i>Cement and Concrete Research</i> , 2015 , 68, 83-93	10.3	165
193	Quantification of the degree of reaction of fly ash. <i>Cement and Concrete Research</i> , 2010 , 40, 1620-1629	10.3	161
192	Physical and microstructural aspects of sulfate attack on ordinary and limestone blended Portland cements. <i>Cement and Concrete Research</i> , 2009 , 39, 1111-1121	10.3	160
191	Thermodynamics and cement science. <i>Cement and Concrete Research</i> , 2011 , 41, 679-695	10.3	159
190	Immobilization of Heavy Metals by Polynuclear Aluminium and Montmorillonite Compounds. <i>Environmental Science & Technology</i> , 1997 , 31, 1452-1462	10.3	149
189	Friedel's salt profiles from thermogravimetric analysis and thermodynamic modelling of Portland cement-based mortars exposed to sodium chloride solution. <i>Cement and Concrete Composites</i> , 2017 , 78, 73-83	8.6	145
188	Hydration mechanisms of super sulphated slag cement. <i>Cement and Concrete Research</i> , 2008 , 38, 983-992	10.3	145
187	Properties of magnesium silicate hydrates (M-S-H). <i>Cement and Concrete Research</i> , 2016 , 79, 323-332	10.3	143
186	The ternary system Portland cement-calcium sulphoaluminate clinker-anhydrite: Hydration mechanism and mortar properties. <i>Cement and Concrete Composites</i> , 2010 , 32, 497-507	8.6	142
185	Stability in the system $\text{CaO-Al}_2\text{O}_3\text{-H}_2\text{O}$. <i>Cement and Concrete Research</i> , 2012 , 42, 1621-1634	10.3	141
184	Alkali uptake in calcium alumina silicate hydrate (C-A-S-H). <i>Cement and Concrete Research</i> , 2016 , 85, 122-136	10.3	137
183	Hydration of Portland cement with additions of calcium sulfoaluminates. <i>Cement and Concrete Research</i> , 2013 , 43, 81-94	10.3	137

182	Influence of calcium to silica ratio on aluminium uptake in calcium silicate hydrate. <i>Cement and Concrete Research</i> , 2016 , 85, 111-121	10.3	136
181	Role of calcium on chloride binding in hydrated Portland cement–metakaolin–limestone blends. <i>Cement and Concrete Research</i> , 2017 , 95, 205-216	10.3	131
180	Synthesis and characterization of hydrogarnet $\text{Ca}_3(\text{Al}_x\text{Fe}_{1-x})_2(\text{SiO}_4)_y(\text{OH})_4(3-y)$. <i>Cement and Concrete Research</i> , 2014 , 59, 96-111	10.3	129
179	Effect of temperature on the hydration of Portland cement blended with siliceous fly ash. <i>Cement and Concrete Research</i> , 2013 , 52, 169-181	10.3	125
178	Chloride resistance of concrete and its binding capacity [Comparison between experimental results and thermodynamic modeling. <i>Cement and Concrete Composites</i> , 2010 , 32, 34-42	8.6	125
177	Influence of limestone on the hydration of ternary slag cements. <i>Cement and Concrete Research</i> , 2017 , 100, 96-109	10.3	124
176	A thermodynamic and experimental study of the conditions of thaumasite formation. <i>Cement and Concrete Research</i> , 2008 , 38, 337-349	10.3	123
175	Experimental studies and thermodynamic modeling of the carbonation of Portland cement, metakaolin and limestone mortars. <i>Cement and Concrete Research</i> , 2016 , 88, 60-72	10.3	120
174	Magnesium and calcium silicate hydrates. <i>Cement and Concrete Research</i> , 2015 , 77, 60-68	10.3	119
173	Beneficial use of limestone filler with calcium sulphoaluminate cement. <i>Construction and Building Materials</i> , 2012 , 26, 619-627	6.7	117
172	Composition of CSH in pastes with increasing levels of silica fume addition. <i>Cement and Concrete Research</i> , 2015 , 75, 14-22	10.3	117
171	Thermodynamic equilibrium calculations in cementitious systems. <i>Materials and Structures/Materiaux Et Constructions</i> , 2010 , 43, 1413-1433	3.4	117
170	TC 238-SCM: hydration and microstructure of concrete with SCMs. <i>Materials and Structures/Materiaux Et Constructions</i> , 2015 , 48, 835-862	3.4	113
169	Hydration of a low-alkali CEM III/B/BiO ₂ cement (LAC). <i>Cement and Concrete Research</i> , 2012 , 42, 410-423	10.3	113
168	Thermodynamic modelling of alkali-activated slag cements. <i>Applied Geochemistry</i> , 2015 , 61, 233-247	3.5	111
167	The origin of early age expansions induced in cementitious materials containing shrinkage reducing admixtures. <i>Cement and Concrete Research</i> , 2011 , 41, 218-229	10.3	110
166	A thermodynamic approach to the hydration of sulphate-resisting Portland cement. <i>Waste Management</i> , 2006 , 26, 706-19	8.6	107
165	Alkali–Silica Reaction: the Influence of Calcium on Silica Dissolution and the Formation of Reaction Products. <i>Journal of the American Ceramic Society</i> , 2011 , 94, 1243-1249	3.8	103

164	Influence of fly ash on compressive strength and micro-characteristics of magnesium potassium phosphate cement mortars. <i>Cement and Concrete Research</i> , 2017 , 99, 86-94	10.3	95
163	Sulfate ingress in Portland cement. <i>Cement and Concrete Research</i> , 2010 , 40, 1211-1225	10.3	95
162	Crystal structure of magnesium silicate hydrates (M-S-H): The relation with 2:1 MgSi phyllosilicates. <i>Cement and Concrete Research</i> , 2015 , 73, 228-237	10.3	94
161	Contribution of limestone to the hydration of calcium sulfoaluminate cement. <i>Cement and Concrete Composites</i> , 2015 , 62, 204-211	8.6	91
160	Influence of the Ca/Si ratio of the C ₃ S phase on the interaction with sulfate ions and its impact on the ettringite crystallization pressure. <i>Cement and Concrete Research</i> , 2015 , 69, 37-49	10.3	90
159	Hydration Degree of Alkali-Activated Slags: A ²⁹ Si NMR Study. <i>Journal of the American Ceramic Society</i> , 2011 , 94, 4541-4547	3.8	89
158	Influence of the calcium sulphate source on the hydration mechanism of Portland cement-calcium sulfoaluminate clinker-calcium sulphate binders. <i>Cement and Concrete Composites</i> , 2011 , 33, 551-561	8.6	88
157	Early hydration of SCM-blended Portland cements: A pore solution and isothermal calorimetry study. <i>Cement and Concrete Research</i> , 2017 , 93, 71-82	10.3	87
156	Hydration of alkali-activated slag: thermodynamic modelling. <i>Advances in Cement Research</i> , 2007 , 19, 81-92	1.8	86
155	Influence of fly ash on the hydration of calcium sulfoaluminate cement. <i>Cement and Concrete Research</i> , 2017 , 95, 152-163	10.3	85
154	Solubility of Fe- <i>ettringite</i> (Ca ₆ [Fe(OH) ₆] ₂ (SO ₄) ₃ ·6H ₂ O). <i>Geochimica Et Cosmochimica Acta</i> , 2008 , 72, 1-18	5.5	83
153	Iron in carbonate containing AFm phases. <i>Cement and Concrete Research</i> , 2011 , 41, 311-323	10.3	82
152	Effect of magnesium on calcium silicate hydrate (C-S-H). <i>Cement and Concrete Research</i> , 2017 , 97, 61-72	10.3	81
151	On the relevance of volume increase for the length changes of mortar bars in sulfate solutions. <i>Cement and Concrete Research</i> , 2013 , 46, 23-29	10.3	81
150	Fe-containing phases in hydrated cements. <i>Cement and Concrete Research</i> , 2014 , 58, 45-55	10.3	80
149	Carbonation of calcium sulfoaluminate mortars. <i>Cement and Concrete Composites</i> , 2017 , 80, 123-134	8.6	78
148	Solid solution between Al- <i>ettringite</i> and Fe- <i>ettringite</i> (Ca ₆ [Al _{1-x} Fe _x (OH) ₆] ₂ (SO ₄) ₃ ·6H ₂ O). <i>Cement and Concrete Research</i> , 2009 , 39, 482-489	10.3	77
147	An integrated sorption-diffusion model for the calculation of consistent distribution and diffusion coefficients in compacted bentonite. <i>Journal of Contaminant Hydrology</i> , 2001 , 47, 283-96	3.9	76

146	Outcomes of the RILEM round robin on degree of reaction of slag and fly ash in blended cements. <i>Materials and Structures/Materiaux Et Constructions</i> , 2017 , 50, 1	3.4	74
145	Report of TC 238-SCM: hydration stoppage methods for phase assemblage studies of blended cements—results of a round robin test. <i>Materials and Structures/Materiaux Et Constructions</i> , 2018 , 51, 1	3.4	74
144	Using gypsum to control hydration kinetics of CSA cements. <i>Construction and Building Materials</i> , 2017 , 155, 154-163	6.7	72
143	Reaction mechanism of magnesium potassium phosphate cement with high magnesium-to-phosphate ratio. <i>Cement and Concrete Research</i> , 2018 , 108, 140-151	10.3	70
142	Application of thermodynamic modelling to hydrated cements. <i>Cement and Concrete Research</i> , 2019 , 123, 105779	10.3	68
141	Influence of citric acid on the hydration of Portland cement. <i>Cement and Concrete Research</i> , 2009 , 39, 275-282	10.3	68
140	Chemical activation of hybrid binders based on siliceous fly ash and Portland cement. <i>Cement and Concrete Composites</i> , 2016 , 66, 10-23	8.6	62
139	Quantification of hydration phases in supersulfated cements: review and new approaches. <i>Advances in Cement Research</i> , 2011 , 23, 265-275	1.8	62
138	Formation of magnesium silicate hydrates (M-S-H). <i>Physics and Chemistry of the Earth</i> , 2017 , 99, 142-157	3	60
137	Comparing chloride ingress from seawater and NaCl solution in Portland cement mortar. <i>Cement and Concrete Research</i> , 2019 , 115, 80-89	10.3	60
136	Magnesium perturbation in low-pH concretes placed in clayey environment—Solid characterizations and modeling. <i>Cement and Concrete Research</i> , 2016 , 79, 137-150	10.3	59
135	Hydration of a silica fume blended low-alkali shotcrete cement. <i>Physics and Chemistry of the Earth</i> , 2014 , 70-71, 3-16	3	58
134	The Influence of Nitritotriacetate on Heavy Metal Uptake of Lettuce and Ryegrass. <i>Journal of Environmental Quality</i> , 1999 , 28, 1699-1705	3.4	58
133	Phase equilibria in the system $\text{Ca}_4\text{Al}_6\text{O}_{12}\text{SO}_4$ – Ca_2SiO_4 – CaSO_4 – H_2O referring to the hydration of calcium sulfoaluminate cements. <i>RILEM Technical Letters</i> , 1, 10		57
132	Immobilization of Zinc and Cadmium by Montmorillonite Compounds:—Effects of Aging and Subsequent Acidification. <i>Environmental Science & Technology</i> , 1999 , 33, 2945-2952	10.3	55
131	Influence of magnesium-to-phosphate ratio and water-to-cement ratio on hydration and properties of magnesium potassium phosphate cements. <i>Cement and Concrete Research</i> , 2019 , 123, 105781	10.3	54
130	Effect of carbonation on the pore solution of mortar. <i>Cement and Concrete Research</i> , 2019 , 118, 38-56	10.3	54
129	The effect of temperature on the hydration of composite cements containing limestone powder and fly ash. <i>Materials and Structures/Materiaux Et Constructions</i> , 2012 , 45, 1101-1114	3.4	54

128	Characterization of magnesium silicate hydrate (M-S-H). <i>Cement and Concrete Research</i> , 2019 , 116, 309-330	10.3	53
127	Immobilization of cadmium and zinc in soil by Al-montmorillonite and gravel sludge. <i>European Journal of Soil Science</i> , 1998 , 49, 141-148	3.4	50
126	Properties of fly ash blended magnesium potassium phosphate mortars: Effect of the ratio between fly ash and magnesia. <i>Cement and Concrete Composites</i> , 2018 , 90, 169-177	8.6	50
125	Magnesium and calcium silicate hydrates, Part I: Investigation of the possible magnesium incorporation in calcium silicate hydrate (C-S-H) and of the calcium in magnesium silicate hydrate (M-S-H). <i>Applied Geochemistry</i> , 2018 , 89, 229-242	3.5	49
124	Synthesis, characterization, and water uptake property of alkali-silica reaction products. <i>Cement and Concrete Research</i> , 2019 , 121, 58-71	10.3	48
123	Stability of Monosulfate in the Presence of Iron. <i>Journal of the American Ceramic Society</i> , 2012 , 95, 3305-3316	3	47
122	Zeolite formation in the presence of cement hydrates and albite. <i>Physics and Chemistry of the Earth</i> , 2017 , 99, 77-94	3	46
121	The influence of potassium-sodium ratio in cement on concrete expansion due to alkali-aggregate reaction. <i>Cement and Concrete Research</i> , 2008 , 38, 1162-1168	10.3	44
120	Sulfate resistance of calcined clay [Limestone] Portland cements. <i>Cement and Concrete Research</i> , 2019 , 116, 238-251	10.3	44
119	RILEM TC-238 SCM recommendation on hydration stoppage by solvent exchange for the study of hydrate assemblages. <i>Materials and Structures/Materiaux Et Constructions</i> , 2018 , 51, 1	3.4	43
118	5-year chemico-physical evolution of concrete-limestone interfaces, Mont Terri rock laboratory (Switzerland). <i>Swiss Journal of Geosciences</i> , 2017 , 110, 307-327	2.1	41
117	Solid solutions between CrO ₄ - and SO ₄ -ettringite Ca ₆ (Al(OH) ₆) ₂ [(CrO ₄) _x (SO ₄) _(1-x)] ₃ ·26 H ₂ O. <i>Environmental Science & Technology</i> , 2010 , 44, 8983-8	10.3	41
116	Mitigation of ASR by the use of LiNO ₃ -characterization of the reaction products. <i>Cement and Concrete Research</i> , 2014 , 59, 73-86	10.3	39
115	Quantification of fly ash in hydrated, blended Portland cement pastes by backscattered electron imaging. <i>Journal of Microscopy</i> , 2013 , 251, 188-204	1.9	39
114	Composition-solubility-structure relationships in calcium (alkali) aluminosilicate hydrate (C-(N,K-)A-S-H). <i>Dalton Transactions</i> , 2015 , 44, 13530-44	4.3	37
113	Influence of slag composition on the hydration of alkali-activated slags. <i>Journal of Sustainable Cement-Based Materials</i> , 2015 , 4, 85-100	3.6	36
112	The role of calcium on the formation of alkali-silica reaction products. <i>Cement and Concrete Research</i> , 2019 , 126, 105898	10.3	36
111	Characterization of supplementary cementitious materials by thermal analysis. <i>Materials and Structures/Materiaux Et Constructions</i> , 2017 , 50, 1	3.4	36

110	Coupling thermodynamics and digital image models to simulate hydration and microstructure development of portland cement pastes. <i>Journal of Materials Research</i> , 2011 , 26, 609-622	2.5	36
109	Effect of relative humidity on the carbonation rate of portlandite, calcium silicate hydrates and ettringite. <i>Cement and Concrete Research</i> , 2020 , 135, 106116	10.3	35
108	The effect of glass composition on the reactivity of synthetic glasses. <i>Journal of the American Ceramic Society</i> , 2017 , 100, 2553-2567	3.8	31
107	Calcium Sulfoaluminate Sodalite (Ca ₄ Al ₆ O ₁₂ SO ₄) Crystal Structure Evaluation and Bulk Modulus Determination. <i>Journal of the American Ceramic Society</i> , 2014 , 97, 892-898	3.8	31
106	Composite membranes for alkaline electrolysis based on polysulfone and mineral fillers. <i>Journal of Power Sources</i> , 2015 , 291, 163-172	8.9	29
105	Aluminum incorporation into magnesium silicate hydrate (M-S-H). <i>Cement and Concrete Research</i> , 2020 , 128, 105931	10.3	29
104	Understanding the carbonation of concrete with supplementary cementitious materials: a critical review by RILEM TC 281-CCC. <i>Materials and Structures/Materiaux Et Constructions</i> , 2020 , 53, 1	3.4	29
103	Synthesis and hydration of alite-calcium sulfoaluminate cement. <i>Advances in Cement Research</i> , 2017 , 29, 101-111	1.8	28
102	Stability of ettringite in CSA cement at elevated temperatures. <i>Advances in Cement Research</i> , 2016 , 28, 251-261	1.8	28
101	Influence of bicarbonate ions on the deterioration of mortar bars in sulfate solutions. <i>Cement and Concrete Research</i> , 2013 , 44, 77-86	10.3	28
100	Thermodynamic modeling of solid solutions between monosulfate and monochromate $3\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot [\text{Ca}[(\text{CrO}_4)_x(\text{SO}_4)_{1-x}] \cdot n\text{H}_2\text{O}$. <i>Cement and Concrete Research</i> , 2012 , 42, 158-165	10.3	28
99	Uptake of oxo-anions by cements through solid-solution formation: experimental evidence and modelling. <i>Radiochimica Acta</i> , 2002 , 90,	1.9	27
98	Thermodynamic modeling and sensitivity analysis of porewater chemistry in compacted bentonite. <i>Physics and Chemistry of the Earth</i> , 2004 , 29, 129-136	3	25
97	Further insights into calcium sulfoaluminate cement expansion. <i>Advances in Cement Research</i> , 2019 , 31, 160-177	1.8	25
96	Identification of the Thermodynamically Stable Fe-Containing Phase in Aged Cement Pastes. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 2286-2294	3.8	24
95	Influence of superplasticizers on pore solution composition and on expansion of concrete due to alkali-silica reaction. <i>Construction and Building Materials</i> , 2011 , 25, 344-350	6.7	24
94	Biologically induced concrete deterioration in a wastewater treatment plant assessed by combining microstructural analysis with thermodynamic modeling. <i>Cement and Concrete Research</i> , 2010 , 40, 1157-1164	10.3	24
93	The combined effect of potassium, sodium and calcium on the formation of alkali-silica reaction products. <i>Cement and Concrete Research</i> , 2020 , 127, 105914	10.3	24

92	Late hydration kinetics: Indications from thermodynamic analysis of pore solution data. <i>Cement and Concrete Research</i> , 2020 , 129, 105975	10.3	23
91	Thermodynamic data for magnesium (potassium) phosphates. <i>Applied Geochemistry</i> , 2019 , 111, 104450	3.5	23
90	The effect of sodium hydroxide on Al uptake by calcium silicate hydrates (CSH). <i>Journal of Colloid and Interface Science</i> , 2020 , 572, 246-256	9.3	22
89	Unsaturated ion diffusion in cementitious materials □The effect of slag and silica fume. <i>Cement and Concrete Research</i> , 2018 , 108, 31-37	10.3	21
88	Magnesium and calcium silicate hydrates, Part II: Mg-exchange at the interface □w-pH□cement and magnesium environment studied in a C-S-H and M-S-H model system. <i>Applied Geochemistry</i> , 2018 , 89, 210-218	3.5	21
87	Solubility of chromate in a hydrated OPC. <i>Applied Geochemistry</i> , 2014 , 48, 132-140	3.5	21
86	Influence of wollastonite on hydration and properties of magnesium potassium phosphate cements. <i>Cement and Concrete Research</i> , 2020 , 131, 106012	10.3	20
85	Deterioration of mortar bars immersed in magnesium containing sulfate solutions. <i>Materials and Structures/Materiaux Et Constructions</i> , 2013 , 46, 2003-2011	3.4	20
84	An internally consistent thermodynamic dataset for aqueous species in the system Ca-Mg-Na-K-Al-Si-O-H-C-Cl to 800 °C and 5 kbar. <i>Numerische Mathematik</i> , 2017 , 317, 755-806	5.3	20
83	Atomistic structure of alkali-silica reaction products refined from X-ray diffraction and micro X-ray absorption data. <i>Cement and Concrete Research</i> , 2020 , 129, 105958	10.3	19
82	Early reactivity of sodium silicate-activated slag pastes and its impact on rheological properties. <i>Cement and Concrete Research</i> , 2021 , 140, 106302	10.3	19
81	Micro-spectroscopic investigation of Al and S speciation in hardened cement paste. <i>Cement and Concrete Research</i> , 2010 , 40, 885-891	10.3	18
80	Thermodynamic modelling of short and long term hydration of ternary binders. Influence of Portland cement composition and blast furnace slag content. <i>Construction and Building Materials</i> , 2018 , 166, 510-521	6.7	17
79	Thermodynamic modelling: state of knowledge and challenges. <i>Advances in Cement Research</i> , 2010 , 22, 211-223	1.8	17
78	Influence of water hardness on concrete surface deterioration caused by nitrifying biofilms in wastewater treatment plants. <i>International Biodeterioration and Biodegradation</i> , 2010 , 64, 489-498	4.8	17
77	Fe(III) uptake by calcium silicate hydrates. <i>Applied Geochemistry</i> , 2020 , 113, 104460	3.5	17
76	Thermodynamic modelling of phase evolution in alkali-activated slag cements exposed to carbon dioxide. <i>Cement and Concrete Research</i> , 2020 , 136, 106158	10.3	16
75	Influence of superplasticizers on the long-term properties of cement pastes and possible impact on radionuclide uptake in a cement-based repository for radioactive waste. <i>Applied Geochemistry</i> , 2014 , 49, 126-142	3.5	16

74	Influence of the synergy between mineral additions and Portland cement in the physical-mechanical properties of ternary binders. <i>Materiales De Construccion</i> , 2016 , 66, 097	1.8	16
73	Early hydration of ye'elimite: Insights from thermodynamic modelling. <i>Cement and Concrete Research</i> , 2019 , 120, 152-163	10.3	14
72	Synthesis, characterization, and thermodynamic study of selected Na-based zeolites. <i>Cement and Concrete Research</i> , 2020 , 135, 106111	10.3	14
71	Methodology for pH measurement in high alkali cementitious systems. <i>Cement and Concrete Research</i> , 2020 , 135, 106122	10.3	14
70	Thermodynamics of AFm-(I2, SO4) solid solution and of its end-members in aqueous media. <i>Applied Geochemistry</i> , 2012 , 27, 2117-2129	3.5	14
69	Formation of shlykovite and ASR-P1 in concrete under accelerated alkali-silica reaction at 60 and 80°C. <i>Cement and Concrete Research</i> , 2020 , 137, 106213	10.3	14
68	Hydration of calcium aluminate cement blended with anhydrite. <i>Advances in Cement Research</i> , 2018 , 30, 24-36	1.8	14
67	Sensitivity analysis of radionuclide migration in compacted bentonite: a mechanistic model approach. <i>Journal of Contaminant Hydrology</i> , 2003 , 61, 313-28	3.9	13
66	Reaction of calcium carbonate minerals in sodium silicate solution and its role in alkali-activated systems. <i>Minerals Engineering</i> , 2021 , 165, 106849	4.9	13
65	Synthesis of alkali-silica reaction product structurally identical to that formed in field concrete. <i>Materials and Design</i> , 2020 , 190, 108562	8.1	11
64	Characterisation of magnesium silicate hydrate phases (M-S-H): A combined approach using synchrotron-based absorption-spectroscopy and ab initio calculations. <i>Cement and Concrete Research</i> , 2018 , 109, 175-183	10.3	11
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