Barbara Lothenbach

List of Publications by Year in Descending Order

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	Predicting damage in aggregates due to the volume increase of the alkali-silica reaction products. *Cement and Concrete Research*, **2022**, 154, 106744	10.3	0
216	Stability of hydrotalcite (Mg-Al layered double hydroxide) in presence of different anions. *Cement and Concrete Research*, **2022**, 152, 106674	10.3	8
215	Extensions of CASH+ thermodynamic solid solution model for the uptake of alkali metals and alkaline earth metals in C-S-H. *Cement and Concrete Research*, **2022**, 152, 106667	10.3	3
214	Stability of hemicarbonate under cement paste-like conditions. *Cement and Concrete Research*, **2022**, 153, 106692	10.3	2
213	Effect of alkali hydroxide on calcium silicate hydrate (C-S-H). *Cement and Concrete Research*, **2022**, 151, 106636	10.3	7
212	A structurally-consistent CASH+ sublattice solid solution model for fully hydrated C-S-H phases: Thermodynamic basis, methods, and Ca-Si-H2O core sub-model. *Cement and Concrete Research*, **2022**, 151, 106585	10.3	5
211	Hydration of blended cement with high volume iron-rich slag from non-ferrous metallurgy. *Cement and Concrete Research*, **2022**, 151, 106624	10.3	3
210	Solubility and speciation of iron in cementitious systems. *Cement and Concrete Research*, **2022**, 151, 106620	10.3	2
209	Effect of different ions on dissolution rates of silica and feldspars at high pH. *Cement and Concrete Research*, **2022**, 152, 106644	10.3	3
208	Mechanisms and thermodynamic modelling of iodide sorption on AFm phases. *Journal of Colloid and Interface Science*, **2022**, 608, 683-691	9.3	1
207	Report of RILEM TC 281-CCC: outcomes of a round robin on the resistance to accelerated carbonation of Portland, Portland-fly ash and blast-furnace blended cements.. *Materials and Structures/Materiaux Et Constructions*, **2022**, 55, 99	3.4	0
206	Effect of limestone fillers on CO2 and water vapour diffusion in carbonated concrete. *Cement*, **2022** , 8, 100027	2	0
205	Influence of aluminum sulfate on properties and hydration of magnesium potassium phosphate cements. *Cement and Concrete Research*, **2022**, 156, 106788	10.3	0
204	Analysis of the trend of pH changes of concrete pore solution during the hydration by various analytical methods. *Cement and Concrete Research*, **2022**, 156, 106780	10.3	3
203	Effect of sulfate on CO2 binding efficiency of recycled alkaline materials. *Cement and Concrete Research*, **2022**, 157, 106804	10.3	2
202	The influence of calcium sulfate content on the hydration of belite-calcium sulfoaluminate cements with different clinker phase compositions. *Materials and Structures/Materiaux Et Constructions*, **2021**, 54, 1	3.4	1
201	Effect of temperature curing on properties and hydration of wollastonite blended magnesium potassium phosphate cements. *Cement and Concrete Research*, **2021**, 142, 106370	10.3	6

200	Effective cation exchange capacity of calcium silicate hydrates (C-S-H). *Cement and Concrete Research*, **2021**, 143, 106393	10.3	9
199	Reaction of calcium carbonate minerals in sodium silicate solution and its role in alkali-activated systems. *Minerals Engineering*, **2021**, 165, 106849	4.9	13
198	The effect of equilibration time on Al uptake in C-S-H. *Cement and Concrete Research*, **2021**, 144, 106438	10.3	5
197	Interaction between CO2-rich acidic water, hydrated Portland cement and sedimentary rocks: Column experiments and reactive transport modeling. *Chemical Geology*, **2021**, 572, 120122	4.2	0
196	Early reactivity of sodium silicate-activated slag pastes and its impact on rheological properties. *Cement and Concrete Research*, **2021**, 140, 106302	10.3	19
195	Iron speciation in blast furnace slag cements. *Cement and Concrete Research*, **2021**, 140, 106287	10.3	8
194	Fe(II) interaction with cement phases: Method development, wet chemical studies and X-ray absorption spectroscopy. *Journal of Colloid and Interface Science*, **2021**, 588, 692-704	9.3	5
193	Effect of Al on the formation and structure of alkali-silica reaction products. *Cement and Concrete Research*, **2021**, 140, 106311	10.3	11
192	Spectroscopic investigations on structural incorporation pathways of FeIII into zeolite frameworks in cement-relevant environments. *Cement and Concrete Research*, **2021**, 140, 106304	10.3	2
191	Influence of sodium nitrate on the phases formed in the MgO-Al2O3-SiO2-H2O system. *Materials and Design*, **2021**, 198, 109391	8.1	3
190	Reactions of self-healing agents and the chemical binding of aggressive ions in sea water: Thermodynamics and kinetics. *Cement and Concrete Research*, **2021**, 145, 106450	10.3	3
189	Sorption and electrokinetic properties of ASR product and C-S-H: A comparative modelling study. *Cement and Concrete Research*, **2021**, 146, 106491	10.3	4
188	Use of scratch tracking method to study the dissolution of alpine aggregates subject to alkali silica reaction. *Cement and Concrete Composites*, **2021**, 104260	8.6	1
187	Influence of foreign ions on calcium silicate hydrate under hydrothermal conditions: A review. *Construction and Building Materials*, **2021**, 301, 124071	6.7	3
186	Synthesis, characterization, and thermodynamic study of selected K-based zeolites. *Cement and Concrete Research*, **2021**, 148, 106537	10.3	1
185	Portlandite solubility and Ca2+ activity in presence of gluconate and hexitols. *Cement and Concrete Research*, **2021**, 149, 106563	10.3	0
184	Incorporation of Sodium and Aluminum in Cementitious Calcium-Alumino-Silicate-Hydrate C-(A)-S-H Phases Studied by 23Na, 27Al, and 29Si MAS NMR Spectroscopy. *Journal of Physical Chemistry C*, **2021**, 125, 27975-27995	3.8	2
183	Preface / Special Issue Geochemistry Research for Cement-based Materials in Nuclear Waste Disposal Applications *Applied Geochemistry*, **2020**, 123, 104701	3.5	1

182	Synthesis, characterization, and thermodynamic study of selected Na-based zeolites. *Cement and Concrete Research*, **2020**, 135, 106111	10.3	14
181	Thermodynamic modelling of phase evolution in alkali-activated slag cements exposed to carbon dioxide. *Cement and Concrete Research*, **2020**, 136, 106158	10.3	16
180	Effect of relative humidity on the carbonation rate of portlandite, calcium silicate hydrates and ettringite. *Cement and Concrete Research*, **2020**, 135, 106116	10.3	35
179	Methodology for pH measurement in high alkali cementitious systems. *Cement and Concrete Research*, **2020**, 135, 106122	10.3	14
178	Thermodynamic study of cement/rock interactions using experimentally generated solubility data of zeolites. *Cement and Concrete Research*, **2020**, 135, 106149	10.3	8
177	Uptake of iodide by calcium aluminate phases (AFm phases). *Applied Geochemistry*, **2020**, 116, 104559	3.5	7
176	The effect of sodium hydroxide on Al uptake by calcium silicate hydrates (CSH). *Journal of Colloid and Interface Science*, **2020**, 572, 246-256	9.3	22
175	Synthesis of alkali-silica reaction product structurally identical to that formed in field concrete. *Materials and Design*, **2020**, 190, 108562	8.1	11
174	Influence of wollastonite on hydration and properties of magnesium potassium phosphate cements. *Cement and Concrete Research*, **2020**, 131, 106012	10.3	20
173	Geochemical modelling of the effect of waste degradation processes on the long-term performance of waste forms. *Applied Geochemistry*, **2020**, 115, 104539	3.5	5
172	Late hydration kinetics: Indications from thermodynamic analysis of pore solution data. *Cement and Concrete Research*, **2020**, 129, 105975	10.3	23
171	The combined effect of potassium, sodium and calcium on the formation of alkali-silica reaction products. *Cement and Concrete Research*, **2020**, 127, 105914	10.3	24
170	Atomistic structure of alkali-silica reaction products refined from X-ray diffraction and micro X-ray absorption data. *Cement and Concrete Research*, **2020**, 129, 105958	10.3	19
169	Retention and diffusion of radioactive and toxic species on cementitious systems: Main outcome of the CEBAMA project. *Applied Geochemistry*, **2020**, 112, 104480	3.5	10
168	Aluminum incorporation into magnesium silicate hydrate (M-S-H). *Cement and Concrete Research*, **2020**, 128, 105931	10.3	29
167	Fe(III) uptake by calcium silicate hydrates. *Applied Geochemistry*, **2020**, 113, 104460	3.5	17
166	Formation of shlykovite and ASR-P1 in concrete under accelerated alkali-silica reaction at 60 and 80℃. *Cement and Concrete Research*, **2020**, 137, 106213	10.3	14
165	Mechanical behavior and phase change of alkali-silica reaction products under hydrostatic compression. *Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials*, **2020**, 76, 674-682	1.8	9

164	Reply to the discussion of the paper "Cemdata18: A chemical thermodynamic database for hydrated Portland cements and alkali-activated materials" *Cement and Concrete Research*, **2020**, 138, 106225	10.3	
163	Understanding the carbonation of concrete with supplementary cementitious materials: a critical review by RILEM TC 281-CCC. *Materials and Structures/Materiaux Et Constructions*, **2020**, 53, 1	3.4	29
162	Structural characterisation of magnesium (sodium) aluminium silicate hydrate (M-(N)-A-S-H) phases by X-ray absorption near-edge spectroscopy. *Applied Geochemistry*, **2020**, 123, 104750	3.5	3
161	Influence of magnesium-to-phosphate ratio and water-to-cement ratio on hydration and properties of magnesium potassium phosphate cements. *Cement and Concrete Research*, **2019**, 123, 105781	10.3	54
160	Application of thermodynamic modelling to hydrated cements. *Cement and Concrete Research*, **2019**, 123, 105779	10.3	68
159	Alkali binding by magnesium silicate hydrates. *Journal of the American Ceramic Society*, **2019**, 102, 6322-6336	3.8	7
158	Synthesis, characterization, and water uptake property of alkali-silica reaction products. *Cement and Concrete Research*, **2019**, 121, 58-71	10.3	48
157	Effect of carbonation on the pore solution of mortar. *Cement and Concrete Research*, **2019**, 118, 38-56	10.3	54
156	Early hydration of ye'elimite: Insights from thermodynamic modelling. *Cement and Concrete Research*, **2019**, 120, 152-163	10.3	14
155	Effect of redox conditions on the structure and solubility of sulfur- and selenium-AFm phases. *Cement and Concrete Research*, **2019**, 123, 105803	10.3	7
154	Thermodynamic data for magnesium (potassium) phosphates. *Applied Geochemistry*, **2019**, 111, 104450	3.5	23
153	The role of calcium on the formation of alkali-silica reaction products. *Cement and Concrete Research*, **2019**, 126, 105898	10.3	36
152	Quantitative disentanglement of nanocrystalline phases in cement pastes by synchrotron ptychographic X-ray tomography. *IUCrJ*, **2019**, 6, 473-491	4.7	9
151	Sulfate resistance of calcined clay–Limestone–Portland cements. *Cement and Concrete Research*, **2019**, 116, 238-251	10.3	44
150	Characterization of magnesium silicate hydrate (M-S-H). *Cement and Concrete Research*, **2019**, 116, 309-330	10.3	53
149	Comparing chloride ingress from seawater and NaCl solution in Portland cement mortar. *Cement and Concrete Research*, **2019**, 115, 80-89	10.3	60
148	Further insights into calcium sulfoaluminate cement expansion. *Advances in Cement Research*, **2019**, 31, 160-177	1.8	25
147	Cemdata18: A chemical thermodynamic database for hydrated Portland cements and alkali-activated materials. *Cement and Concrete Research*, **2019**, 115, 472-506	10.3	303

146	Retention of selenium by calcium aluminate hydrate (AFm) phases under strongly-reducing radioactive waste repository conditions. *Dalton Transactions*, **2018**, 47, 4209-4218	4.3	6
145	Thermodynamic modelling of short and long term hydration of ternary binders. Influence of Portland cement composition and blast furnace slag content. *Construction and Building Materials*, **2018**, 166, 510-521	6.7	17
144	Unsaturated ion diffusion in cementitious materials The effect of slag and silica fume. *Cement and Concrete Research*, **2018**, 108, 31-37	10.3	21
143	Reaction mechanism of magnesium potassium phosphate cement with high magnesium-to-phosphate ratio. *Cement and Concrete Research*, **2018**, 108, 140-151	10.3	70
142	Magnesium and calcium silicate hydrates, Part II: Mg-exchange at the interface ow-pH cement and magnesium environment studied in a C-S-H and M-S-H model system. *Applied Geochemistry*, **2018**, 89, 210-218	3.5	21
141	Characterisation of magnesium silicate hydrate phases (M-S-H): A combined approach using synchrotron-based absorption-spectroscopy and ab initio calculations. *Cement and Concrete Research*, **2018**, 109, 175-183	10.3	11
140	Hydrate Phase Assemblages in Calcium Sulfoaluminate Metakaolin Limestone Blends. *RILEM Bookseries*, **2018**, 352-357	0.5	4
139	Improved volume stability of mortar bars exposed to magnesium sulfate in the presence of bicarbonate ions. *Cement and Concrete Research*, **2018**, 109, 217-229	10.3	7
138	Report of TC 238-SCM: hydration stoppage methods for phase assemblage studies of blended cements esults of a round robin test. *Materials and Structures/Materiaux Et Constructions*, **2018**, 51, 1	3.4	74
137	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). *Applied Geochemistry*, **2018**, 89, 229-242	3.5	49
136	Hydration of calcium aluminate cement blended with anhydrite. *Advances in Cement Research*, **2018** , 30, 24-36	1.8	14
135	RILEM TC-238 SCM recommendation on hydration stoppage by solvent exchange for the study of hydrate assemblages. *Materials and Structures/Materiaux Et Constructions*, **2018**, 51, 1	3.4	43
134	Properties of fly ash blended magnesium potassium phosphate mortars: Effect of the ratio between fly ash and magnesia. *Cement and Concrete Composites*, **2018**, 90, 169-177	8.6	50
133	Early hydration of SCM-blended Portland cements: A pore solution and isothermal calorimetry study. *Cement and Concrete Research*, **2017**, 93, 71-82	10.3	87
132	Friedel's salt profiles from thermogravimetric analysis and thermodynamic modelling of Portland cement-based mortars exposed to sodium chloride solution. *Cement and Concrete Composites*, **2017** , 78, 73-83	8.6	145
131	Zeolite formation in the presence of cement hydrates and albite. *Physics and Chemistry of the Earth*, **2017**, 99, 77-94	3	46
130	Formation of magnesium silicate hydrates (M-S-H). *Physics and Chemistry of the Earth*, **2017**, 99, 142-157	3	60
129	Role of calcium on chloride binding in hydrated Portland cement etakaolin imestone blends. *Cement and Concrete Research*, **2017**, 95, 205-216	10.3	131

128	Outcomes of the RILEM round robin on degree of reaction of slag and fly ash in blended cements. *Materials and Structures/Materiaux Et Constructions*, **2017**, 50, 1	3.4	74
127	Influence of fly ash on the hydration of calcium sulfoaluminate cement. *Cement and Concrete Research*, **2017**, 95, 152-163	10.3	85
126	Influence of fly ash on compressive strength and micro-characteristics of magnesium potassium phosphate cement mortars. *Cement and Concrete Research*, **2017**, 99, 86-94	10.3	95
125	Influence of limestone on the hydration of ternary slag cements. *Cement and Concrete Research*, **2017**, 100, 96-109	10.3	124
124	The effect of glass composition on the reactivity of synthetic glasses. *Journal of the American Ceramic Society*, **2017**, 100, 2553-2567	3.8	31
123	Effect of magnesium on calcium silicate hydrate (C-S-H). *Cement and Concrete Research*, **2017**, 97, 61-72	10.3	81
122	Carbonation of calcium sulfoaluminate mortars. *Cement and Concrete Composites*, **2017**, 80, 123-134	8.6	78
121	Synthesis and hydration of alite-calcium sulfoaluminate cement. *Advances in Cement Research*, **2017**, 29, 101-111	1.8	28
120	Using gypsum to control hydration kinetics of CSA cements. *Construction and Building Materials*, **2017**, 155, 154-163	6.7	72
119	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. *Numerische Mathematik*, **2017**, 317, 755-806	5.3	20
118	5-year chemico-physical evolution of concrete–claystone interfaces, Mont Terri rock laboratory (Switzerland). *Swiss Journal of Geosciences*, **2017**, 110, 307-327	2.1	41
117	Characterization of supplementary cementitious materials by thermal analysis. *Materials and Structures/Materiaux Et Constructions*, **2017**, 50, 1	3.4	36
116	4. Thermodynamic modelling of cement hydration: Portland cements – blended cements – calcium sulfoaluminate cements **2017**, 103-144		3
115	Cementitious Materials **2017**,		7
114	The pore solution of blended cements: a review. *Materials and Structures/Materiaux Et Constructions*, **2016**, 49, 3341-3367	3.4	197
113	Stability of ettringite in CSA cement at elevated temperatures. *Advances in Cement Research*, **2016**, 28, 251-261	1.8	28
112	Experimental studies and thermodynamic modeling of the carbonation of Portland cement, metakaolin and limestone mortars. *Cement and Concrete Research*, **2016**, 88, 60-72	10.3	120
111	Magnesium perturbation in low-pH concretes placed in clayey environments–solid characterizations and modeling. *Cement and Concrete Research*, **2016**, 79, 137-150	10.3	59

110	Alkali uptake in calcium alumina silicate hydrate (C-A-S-H). *Cement and Concrete Research*, **2016**, 85, 122-136	10.3	137
109	Sorption and diffusion studies with low molecular weight organic compounds in cementitious systems. *Applied Geochemistry*, **2016**, 67, 101-117	3.5	5
108	Chemical activation of hybrid binders based on siliceous fly ash and Portland cement. *Cement and Concrete Composites*, **2016**, 66, 10-23	8.6	62
107	Properties of magnesium silicate hydrates (M-S-H). *Cement and Concrete Research*, **2016**, 79, 323-332	10.3	143
106	Influence of the synergy between mineral additions and Portland cement in the physical-mechanical properties of ternary binders. *Materiales De Construccion*, **2016**, 66, 097	1.8	16
105	Degradation of mortar under advective flow: Column experiments and reactive transport modeling. *Cement and Concrete Research*, **2016**, 81, 81-93	10.3	6
104	Influence of calcium to silica ratio on aluminium uptake in calcium silicate hydrate. *Cement and Concrete Research*, **2016**, 85, 111-121	10.3	136
103	Magnesium and calcium silicate hydrates. *Cement and Concrete Research*, **2015**, 77, 60-68	10.3	119
102	Contribution of limestone to the hydration of calcium sulfoaluminate cement. *Cement and Concrete Composites*, **2015**, 62, 204-211	8.6	91
101	Durability of Portland Cement Blends Including Calcined Clay and Limestone: Interactions with Sulfate, Chloride and Carbonate Ions. *RILEM Bookseries*, **2015**, 133-141	0.5	10
100	Thermodynamic modelling of alkali-activated slag cements. *Applied Geochemistry*, **2015**, 61, 233-247	3.5	111
99	Calcium silicate hydrates: Solid and liquid phase composition. *Cement and Concrete Research*, **2015**, 78, 57-70	10.3	213
98	Crystal structure of magnesium silicate hydrates (M-S-H): The relation with 2:1 Mg-Si phyllosilicates. *Cement and Concrete Research*, **2015**, 73, 228-237	10.3	94
97	Hydration of quaternary Portland cement blends containing blast-furnace slag, siliceous fly ash and limestone powder. *Cement and Concrete Composites*, **2015**, 55, 374-382	8.6	188
96	Effect of temperature and aluminium on calcium (alumino)silicate hydrate chemistry under equilibrium conditions. *Cement and Concrete Research*, **2015**, 68, 83-93	10.3	165
95	Influence of slag composition on the hydration of alkali-activated slags. *Journal of Sustainable Cement-Based Materials*, **2015**, 4, 85-100	3.6	36
94	Ternary phase diagrams applied to hydrated cement **2015**, 485-502		2
93	Identification of the Thermodynamically Stable Fe-Containing Phase in Aged Cement Pastes. *Journal of the American Ceramic Society*, **2015**, 98, 2286-2294	3.8	24

92	Composite membranes for alkaline electrolysis based on polysulfone and mineral fillers. *Journal of Power Sources*, **2015**, 291, 163-172	8.9	29
91	Composition of C□□H in pastes with increasing levels of silica fume addition. *Cement and Concrete Research*, **2015**, 75, 14-22	10.3	117
90	Incorporation of aluminium in calcium-silicate-hydrates. *Cement and Concrete Research*, **2015**, 75, 91-103	10.3	193
89	Composition-solubility-structure relationships in calcium (alkali) aluminosilicate hydrate (C-(N,K-)A-S-H). *Dalton Transactions*, **2015**, 44, 13530-44	4.3	37
88	Influence of the Ca/Si ratio of the C□□H phase on the interaction with sulfate ions and its impact on the ettringite crystallization pressure. *Cement and Concrete Research*, **2015**, 69, 37-49	10.3	90
87	TC 238-SCM: hydration and microstructure of concrete with SCMs. *Materials and Structures/Materiaux Et Constructions*, **2015**, 48, 835-862	3.4	113
86	Crystal Chemistry of Iron Containing Cementitious AFm Layered Hydrates. *Current Inorganic Chemistry*, **2015**, 5, 184-193		9
85	Reactivity of Calcined Clay in Alite-Calcium Sulfoaluminate Cement Hydration. *RILEM Bookseries*, **2015**, 373-379	0.5	
84	Fe-containing phases in hydrated cements. *Cement and Concrete Research*, **2014**, 58, 45-55	10.3	80
83	Solubility of chromate in a hydrated OPC. *Applied Geochemistry*, **2014**, 48, 132-140	3.5	21
82	Mitigation of ASR by the use of LiNO3□characterization of the reaction products. *Cement and Concrete Research*, **2014**, 59, 73-86	10.3	39
81	Synthesis and characterization of hydrogarnet Ca3(AlxFe1 □x)2(SiO4)y(OH)4(3 □y). *Cement and Concrete Research*, **2014**, 59, 96-111	10.3	129
80	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. *Applied Geochemistry*, **2014**, 49, 126-142	3.5	16
79	Influence of limestone and anhydrite on the hydration of Portland cements. *Cement and Concrete Composites*, **2014**, 46, 99-108	8.6	188
78	Hydration of a silica fume blended low-alkali shotcrete cement. *Physics and Chemistry of the Earth*, **2014**, 70-71, 3-16	3	58
77	Calcium Sulfoaluminate Sodalite (Ca4Al6O12SO4) Crystal Structure Evaluation and Bulk Modulus Determination. *Journal of the American Ceramic Society*, **2014**, 97, 892-898	3.8	31
76	Deterioration of mortar bars immersed in magnesium containing sulfate solutions. *Materials and Structures/Materiaux Et Constructions*, **2013**, 46, 2003-2011	3.4	20
75	On the relevance of volume increase for the length changes of mortar bars in sulfate solutions. *Cement and Concrete Research*, **2013**, 46, 23-29	10.3	81

74	Hydration of Portland cement with additions of calcium sulfoaluminates. *Cement and Concrete Research*, **2013**, 43, 81-94	10.3	137
73	Influence of bicarbonate ions on the deterioration of mortar bars in sulfate solutions. *Cement and Concrete Research*, **2013**, 44, 77-86	10.3	28
72	Effect of temperature on the hydration of Portland cement blended with siliceous fly ash. *Cement and Concrete Research*, **2013**, 52, 169-181	10.3	125
71	Hydration of Blended Cements **2013**, 33-41		2
70	Characterization and Solubility Determination of the Solid-Solution Between AFm-I2 and AFm-SO4 **2013**, 57-65		1
69	Quantification of fly ash in hydrated, blended Portland cement pastes by backscattered electron imaging. *Journal of Microscopy*, **2013**, 251, 188-204	1.9	39
68	Modeling Degradation of Cementitious Materials in Aggressive Aqueous Environments. *RILEM State-of-the-Art Reports*, **2013**, 177-218	1.3	1
67	Beneficial use of limestone filler with calcium sulphoaluminate cement. *Construction and Building Materials*, **2012**, 26, 619-627	6.7	117
66	Stability of Monosulfate in the Presence of Iron. *Journal of the American Ceramic Society*, **2012**, 95, 3305-3316	3.8	47
65	Hydration of Portland cement with high replacement by siliceous fly ash. *Cement and Concrete Research*, **2012**, 42, 1389-1400	10.3	270
64	Stability in the system CaO□Al2O3□H2O. *Cement and Concrete Research*, **2012**, 42, 1621-1634	10.3	141
63	The effect of temperature on the hydration of composite cements containing limestone powder and fly ash. *Materials and Structures/Materiaux Et Constructions*, **2012**, 45, 1101-1114	3.4	54
62	Thermodynamics of AFm-(I2, SO4) solid solution and of its end-members in aqueous media. *Applied Geochemistry*, **2012**, 27, 2117-2129	3.5	14
61	Influence of slag chemistry on the hydration of alkali-activated blast-furnace slag □Part II: Effect of Al2O3. *Cement and Concrete Research*, **2012**, 42, 74-83	10.3	283
60	The early hydration of Ordinary Portland Cement (OPC): An approach comparing measured heat flow with calculated heat flow from QXRD. *Cement and Concrete Research*, **2012**, 42, 134-138	10.3	196
59	Thermodynamic modeling of solid solutions between monosulfate and monochromate 3CaO □ Al2O3 □Ca[(CrO4)x(SO4)1-x] □nH2O. *Cement and Concrete Research*, **2012**, 42, 158-165	10.3	28
58	Hydration of a low-alkali CEM III/B□SiO2 cement (LAC). *Cement and Concrete Research*, **2012**, 42, 410-423	10.3	113
57	Quantification of hydration phases in supersulfated cements: review and new approaches. *Advances in Cement Research*, **2011**, 23, 265-275	1.8	62

56	Alkali‐Silica Reaction: the Influence of Calcium on Silica Dissolution and the Formation of Reaction Products. *Journal of the American Ceramic Society*, **2011**, 94, 1243-1249	3.8	103
55	Hydration Degree of Alkali-Activated Slags: A 29Si NMR Study. *Journal of the American Ceramic Society*, **2011**, 94, 4541-4547	3.8	89
54	Supplementary cementitious materials. *Cement and Concrete Research*, **2011**, 41, 1244-1256	10.3	1348
53	Hydration mechanisms of ternary Portland cements containing limestone powder and fly ash. *Cement and Concrete Research*, **2011**, 41, 279-291	10.3	599
52	Influence of activator type on hydration kinetics, hydrate assemblage and microstructural development of alkali activated blast-furnace slags. *Cement and Concrete Research*, **2011**, 41, 301-310	10.3	489
51	The origin of early age expansions induced in cementitious materials containing shrinkage reducing admixtures. *Cement and Concrete Research*, **2011**, 41, 218-229	10.3	110
50	Thermodynamics and cement science. *Cement and Concrete Research*, **2011**, 41, 679-695	10.3	159
49	Influence of superplasticizers on pore solution composition and on expansion of concrete due to alkali-silica reaction. *Construction and Building Materials*, **2011**, 25, 344-350	6.7	24
48	Influence of the calcium sulphate source on the hydration mechanism of Portland cement–calcium sulphoaluminate clinker–calcium sulphate binders. *Cement and Concrete Composites*, **2011**, 33, 551-561	8.6	88
47	Iron in carbonate containing AFm phases. *Cement and Concrete Research*, **2011**, 41, 311-323	10.3	82
46	Influence of slag chemistry on the hydration of alkali-activated blast-furnace slag – Part I: Effect of MgO. *Cement and Concrete Research*, **2011**, 41, 955-963	10.3	363
45	Coupling thermodynamics and digital image models to simulate hydration and microstructure development of portland cement pastes. *Journal of Materials Research*, **2011**, 26, 609-622	2.5	36
44	Thermodynamic modelling: state of knowledge and challenges. *Advances in Cement Research*, **2010**, 22, 211-223	1.8	17
43	Solid solutions between CrO4- and SO4-ettringite Ca6(Al(OH)6)2[(CrO4)x(SO4)(1-x)]3*26 H2O. *Environmental Science & Technology*, **2010**, 44, 8983-8	10.3	41
42	Thermodynamic equilibrium calculations in cementitious systems. *Materials and Structures/Materiaux Et Constructions*, **2010**, 43, 1413-1433	3.4	117
41	Influence of water hardness on concrete surface deterioration caused by nitrifying biofilms in wastewater treatment plants. *International Biodeterioration and Biodegradation*, **2010**, 64, 489-498	4.8	17
40	Chloride resistance of concrete and its binding capacity – Comparison between experimental results and thermodynamic modeling. *Cement and Concrete Composites*, **2010**, 32, 34-42	8.6	125
39	The ternary system Portland cement–calcium sulphoaluminate clinker–anhydrite: Hydration mechanism and mortar properties. *Cement and Concrete Composites*, **2010**, 32, 497-507	8.6	142

38	Hydration of calcium sulfoaluminate cements Experimental findings and thermodynamic modelling. *Cement and Concrete Research*, **2010**, 40, 1239-1247	10.3	431
37	Micro-spectroscopic investigation of Al and S speciation in hardened cement paste. *Cement and Concrete Research*, **2010**, 40, 885-891	10.3	18
36	Impact of chloride on the mineralogy of hydrated Portland cement systems. *Cement and Concrete Research*, **2010**, 40, 1009-1022	10.3	249
35	Biologically induced concrete deterioration in a wastewater treatment plant assessed by combining microstructural analysis with thermodynamic modeling. *Cement and Concrete Research*, **2010**, 40, 1157-1164	10.3	24
34	Sulfate ingress in Portland cement. *Cement and Concrete Research*, **2010**, 40, 1211-1225	10.3	95
33	Quantification of the degree of reaction of fly ash. *Cement and Concrete Research*, **2010**, 40, 1620-1629	10.3	161
32	Influence of citric acid on the hydration of Portland cement. *Cement and Concrete Research*, **2009**, 39, 275-282	10.3	68
31	Solid solution between Al-ettringite and Fe-ettringite (Ca6[Al1 xFex(OH)6]2(SO4)3 26H2O). *Cement and Concrete Research*, **2009**, 39, 482-489	10.3	77
30	Physical and microstructural aspects of sulfate attack on ordinary and limestone blended Portland cements. *Cement and Concrete Research*, **2009**, 39, 1111-1121	10.3	160
29	Solubility of Fe ettringite (Ca6[Fe(OH)6]2(SO4)3 26H2O). *Geochimica Et Cosmochimica Acta*, **2008**, 72, 1-18	5.5	83
28	Thermodynamic modelling of the effect of temperature on the hydration and porosity of Portland cement. *Cement and Concrete Research*, **2008**, 38, 1-18	10.3	599
27	A thermodynamic and experimental study of the conditions of thaumasite formation. *Cement and Concrete Research*, **2008**, 38, 337-349	10.3	123
26	Influence of limestone on the hydration of Portland cements. *Cement and Concrete Research*, **2008**, 38, 848-860	10.3	782
25	Hydration mechanisms of super sulphated slag cement. *Cement and Concrete Research*, **2008**, 38, 983-992	10.3	145
24	The influence of potassium odium ratio in cement on concrete expansion due to alkali-aggregate reaction. *Cement and Concrete Research*, **2008**, 38, 1162-1168	10.3	44
23	Hydration of alkali-activated slag: thermodynamic modelling. *Advances in Cement Research*, **2007**, 19, 81-92	1.8	86
22	The AFm phase in Portland cement. *Cement and Concrete Research*, **2007**, 37, 118-130	10.3	436
21	The role of calcium carbonate in cement hydration. *Cement and Concrete Research*, **2007**, 37, 551-558	10.3	509

20	Effect of temperature on the pore solution, microstructure and hydration products of Portland cement pastes. *Cement and Concrete Research*, **2007**, 37, 483-491	10.3	403
19	Thermodynamic properties of Portland cement hydrates in the system CaO□Al2O3□SiO2□CaSO4□CaCO3□H2O. *Cement and Concrete Research*, **2007**, 37, 1379-1410	10.3	395
18	Mechanisms and Modelling of Waste/Cement Interactions □Survey of Topics Presented at the Meiringen Workshop. *Materials Research Society Symposia Proceedings*, **2006**, 932, 1		4
17	Hydration of alkali-activated slag: comparison with ordinary Portland cement. *Advances in Cement Research*, **2006**, 18, 119-128	1.8	202
16	Thermodynamic modelling of the hydration of Portland cement. *Cement and Concrete Research*, **2006**, 36, 209-226	10.3	523
15	A thermodynamic approach to the hydration of sulphate-resisting Portland cement. *Waste Management*, **2006**, 26, 706-19	8.6	107
14	Thermodynamic modeling and sensitivity analysis of porewater chemistry in compacted bentonite. *Physics and Chemistry of the Earth*, **2004**, 29, 129-136	3	25
13	Sensitivity analysis of radionuclide migration in compacted bentonite: a mechanistic model approach. *Journal of Contaminant Hydrology*, **2003**, 61, 313-28	3.9	13
12	Uptake of oxo-anions by cements through solid-solution formation: experimental evidence and modelling. *Radiochimica Acta*, **2002**, 90,	1.9	27
11	Systematic Trends and Empirical Modeling of Lead Uptake by Cements and Cement Minerals. *Materials Research Society Symposia Proceedings*, **2002**, 757, II10.1.1		2
10	An integrated sorption-diffusion model for the calculation of consistent distribution and diffusion coefficients in compacted bentonite. *Journal of Contaminant Hydrology*, **2001**, 47, 283-96	3.9	76
9	Thermodynamic data for the solubility of tin(IV) in aqueous cementitious environments. *Radiochimica Acta*, **2000**, 88,	1.9	10
8	The Influence of Nitrilotriacetate on Heavy Metal Uptake of Lettuce and Ryegrass. *Journal of Environmental Quality*, **1999**, 28, 1699-1705	3.4	58
7	Immobilization of Zinc and Cadmium by Montmorillonite Compounds:□Effects of Aging and Subsequent Acidification. *Environmental Science & Technology*, **1999**, 33, 2945-2952	10.3	55
6	Immobilization of cadmium and zinc in soil by Al-montmorillonite and gravel sludge. *European Journal of Soil Science*, **1998**, 49, 141-148	3.4	50
5	Application of Thermodynamic Sorption Models to Distribution Coefficients of Radionuclides in Bentonite. *Materials Research Society Symposia Proceedings*, **1997**, 506, 765		
4	Solubility of Radionuclides in Fresh and Leached Cementitious Systems at 22□C and 50□C. *Materials Research Society Symposia Proceedings*, **1997**, 506, 773		11
3	Immobilization of Heavy Metals by Polynuclear Aluminium and Montmorillonite Compounds. *Environmental Science & Technology*, **1997**, 31, 1452-1462	10.3	149

2	Phase equilibria in the system Ca4Al6O12SO4 – Ca2SiO4 – CaSO4 – H2O referring to the hydration of calcium sulfoaluminate cements. *RILEM Technical Letters*,1, 10	57
1	CemGEMS – an easy-to-use web application for thermodynamic modeling of cementitious materials. *RILEM Technical Letters*,6, 36-52	5