Ian G Richardson

List of Publications by Citations

41 papers	5,311 citations	29 h-index	43 g-index
43 ext. papers	5,990 ext. citations	6.6 avg, IF	6.34 L-index

#	Paper	IF	Citations
41	The calcium silicate hydrates. *Cement and Concrete Research*, **2008**, 38, 137-158	10.3	682
40	Tobermorite/jennite- and tobermorite/calcium hydroxide-based models for the structure of C-S-H: applicability to hardened pastes of tricalcium silicate, dicalcium silicate, Portland cement, and blends of Portland cement with blast-furnace slag, metakaolin, or silica fume. *Cement and Concrete Research*, **2004**, 34, 1733-1777	10.3	659
39	The nature of C-S-H in hardened cements. *Cement and Concrete Research*, **1999**, 29, 1131-1147	10.3	640
38	The characterization of hardened alkali-activated blast-furnace slag pastes and the nature of the calcium silicate hydrate (C-S-H) phase. *Cement and Concrete Research*, **1994**, 24, 813-829	10.3	282
37	The nature of the hydration products in hardened cement pastes. *Cement and Concrete Composites*, **2000**, 22, 97-113	8.6	222
36	Location of Aluminum in Substituted Calcium Silicate Hydrate (C-S-H) Gels as Determined by 29Si and 27Al NMR and EELS. *Journal of the American Ceramic Society*, **1993**, 76, 2285-2288	3.8	221
35	Microstructure and microanalysis of hardened cement pastes involving ground granulated blast-furnace slag. *Journal of Materials Science*, **1992**, 27, 6204-6212	4.3	206
34	Composition and microstructure of 20-year-old ordinary Portland cement–ground granulated blast-furnace slag blends containing 0 to 100% slag. *Cement and Concrete Research*, **2010**, 40, 971-983	10.3	200
33	Model structures for C-(A)-S-H(I). *Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials*, **2014**, 70, 903-23	1.8	195
32	The incorporation of minor and trace elements into calcium silicate hydrate (C?S?H) gel in hardened cement pastes. *Cement and Concrete Research*, **1993**, 23, 131-138	10.3	186
31	Models for the composition and structure of calcium silicate hydrate (C?S?H) gel in hardened tricalcium silicate pastes. *Cement and Concrete Research*, **1992**, 22, 1001-1010	10.3	166
30	Microstructure and microanalysis of hardened ordinary Portland cement pastes. *Journal of Materials Science*, **1993**, 28, 265-277	4.3	165
29	Progressive Changes in the Structure of Hardened C3S Cement Pastes due to Carbonation. *Journal of the American Ceramic Society*, **1991**, 74, 2891-2896	3.8	146
28	Composition and structure of C-S-H in white Portland cement–20% metakaolin pastes hydrated at 25 °C. *Cement and Concrete Research*, **2007**, 37, 109-117	10.3	133
27	The structure of the calcium silicate hydrate phases present in hardened pastes of white Portland cement/blast-furnace slag blends. *Journal of Materials Science*, **1997**, 32, 4793-4802	4.3	127
26	Characterisation of cement hydrate phases by TEM, NMR and Raman spectroscopy. *Advances in Cement Research*, **2010**, 22, 233-248	1.8	120
25	Thermal stability of C-S-H phases and applicability of Richardson and Groves' and Richardson C-(A)-S-H(I) models to synthetic C-S-H. *Cement and Concrete Research*, **2017**, 93, 45-56	10.3	107

24	Quantitative analysis of the microstructure of interfaces in steel reinforced concrete. *Cement and Concrete Research*, **2007**, 37, 1613-1623	10.3	99
23	In situ solid-state NMR studies of Ca3SiO5: hydration at room temperature and at elevated temperatures using 29Si enrichment. *Journal of Materials Science*, **1994**, 29, 3926-3940	4.3	80
22	Composition, morphology and nanostructure of C□□H in 70% white Portland cement□30% fly ash blends hydrated at 55 □C.. *Cement and Concrete Research*, **2010**, 40, 1350-1359	10.3	79
21	Composition, silicate anion structure and morphology of calcium silicate hydrates (C-S-H) synthesised by silica-lime reaction and by controlled hydration of tricalcium silicate (C3S). *Advances in Applied Ceramics*, **2015**, 114, 362-371	2.3	66
20	The importance of proper crystal-chemical and geometrical reasoning demonstrated using layered single and double hydroxides. *Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials*, **2013**, 69, 150-62	1.8	58
19	Application of Selective 29Si Isotopic Enrichment to Studies of the Structure of Calcium Silicate Hydrate (C-S-H) Gels. *Journal of the American Ceramic Society*, **1994**, 77, 593-596	3.8	56
18	A Combined 29Si MAS NMR and Selective Dissolution Technique for the Quantitative Evaluation of Hydrated Blast Furnace Slag Cement Blends. *Journal of the American Ceramic Society*, **2007**, 90, 598-602	3.8	49
17	Hydration of water- and alkali-activated white Portland cement pastes and blends with low-calcium pulverized fuel ash. *Cement and Concrete Research*, **2016**, 83, 1-18	10.3	42
16	Composition, morphology and nanostructure of C□□H in white Portland cement pastes hydrated at 55□□C. *Cement and Concrete Research*, **2007**, 37, 1571-1582	10.3	42
15	Nature of C□□H in 20 year old neat ordinary Portland cement and 10% Portland cement□90% ground granulated blast furnace slag pastes. *Advances in Applied Ceramics*, **2007**, 106, 294-301	2.3	39
14	The nature of C?S?H in model slag-cements. *Cement and Concrete Composites*, **2000**, 22, 259-266	8.6	38
13	EELS fingerprint of Al-coordination in silicates. *Microscopy Microanalysis Microstructures*, **1994**, 5, 173-182		31
12	Composition and structure of an 18-year-old 5M KOH-activated ground granulated blast-furnace slag paste. *Construction and Building Materials*, **2018**, 168, 404-411	6.7	27
11	A study of the pozzolanic reaction by solid-state 29Si nuclear magnetic resonance using selective isotopic enrichment. *Journal of Materials Science*, **1995**, 30, 1671-1678	4.3	25
10	morphology and nanostructure C□□H in white Portland cement□ly ash hydrated at 85□C. *Advances in Applied Ceramics*, **2007**, 106, 283-293	2.3	22
9	Clarification of possible ordered distributions of trivalent cations in layered double hydroxides and an explanation for the observed variation in the lower solid-solution limit. *Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials*, **2013**, 69, 629-33	1.8	18
8	Micro- and nano-structural evolutions in white Portland cement/pulverized fuel ash cement pastes due to deionized-water leaching. *Cement and Concrete Research*, **2018**, 103, 191-203	10.3	18
7	Parallel electron energy loss spectroscopy study of al-substituted calcium silicate hydrate (C?S?H) phases present in hardened cement pastes. *Solid State Communications*, **1993**, 88, 183-187	1.6	14

6	Zn- and Co-based layered double hydroxides: prediction of the a parameter from the fraction of trivalent cations and vice versa. *Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials*, **2013**, 69, 414-7	1.8	13
5	Microstructure of interface between fibre and matrix in 10-year aged GRC modified by calcium sulfoaluminate cement. *Cement and Concrete Research*, **2015**, 76, 20-26	10.3	12
4	Microcrystalline calcium hydroxide in pozzalanic cement pastes. *Cement and Concrete Research*, **1994**, 24, 1191-1196	10.3	11
3	A reply to discussions by H.F.W. Taylor of the papers Models for the composition and structure of calcium silicate hydrate (C?S?H) gel in hardened tricalcium silicate pastes and The incorporation of minor and trace elements into calcium silicate hydrate (C?S?H) gel in hardened cement pastes *Cement and Concrete Research*, **1993**, 23, 999-1000	10.3	10
2	Determining the local coordination of aluminium in cement using electron energy loss near-edge structure. *Mikrochimica Acta*, **1994**, 114-115, 221-229	5.8	4
1	Microstructure and phase assemblage of low-clinker cements during the early stages of carbonation. *Cement and Concrete Research*, **2022**, 152, 106643	10.3	0