

# Jan Elsen

## List of Publications by Year in descending order

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83  
papers

4,516  
citations

117625

34  
h-index

110387

64  
g-index

86  
all docs

86  
docs citations

86  
times ranked

3699  
citing authors

#	ARTICLE	IF	CITATIONS
1	Supplementary Cementitious Materials. Reviews in Mineralogy and Geochemistry, 2012, 74, 211-278.	4.8	350
2	Microscopy of historic mortars—a review. Cement and Concrete Research, 2006, 36, 1416-1424.	11.0	260
3	Surface textural analysis of quartz grains by scanning electron microscopy (SEM): From sample preparation to environmental interpretation. Earth-Science Reviews, 2014, 128, 93-104.	9.1	223
4	6. Supplementary Cementitious Materials. , 2012, , 211-278.		215
5	Phase and morphology evolution of calcium carbonate precipitated by carbonation of hydrated lime. Journal of Materials Science, 2012, 47, 6151-6165.	3.7	207
6	Pozzolanic reactions of common natural zeolites with lime and parameters affecting their reactivity. Cement and Concrete Research, 2009, 39, 233-240.	11.0	171
7	Pozzolanic reactivity of pure calcined clays. Applied Clay Science, 2016, 132-133, 552-560.	5.2	168
8	Accelerated mineral carbonation of stainless steel slags for CO2 storage and waste valorization: Effect of process parameters on geochemical properties. International Journal of Greenhouse Gas Control, 2013, 17, 32-45.	4.6	167
9	Nineteenth century hydraulic restoration mortars in the Saint Michael's Church (Leuven, Belgium). Cement and Concrete Research, 2001, 31, 397-403.	11.0	156
10	Stabilization of basic oxygen furnace slag by hot-stage carbonation treatment. Chemical Engineering Journal, 2012, 203, 239-250.	12.7	136
11	Report of TC 238-SCM: hydration stoppage methods for phase assemblage studies of blended cements—results of a round robin test. Materials and Structures/Materiaux Et Constructions, 2018, 51, 1.	3.1	132
12	Assessment of Pb-slag, MSWI bottom ash and boiler and fly ash for using as a fine aggregate in cement mortar. Journal of Hazardous Materials, 2008, 154, 766-777.	12.4	125
13	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.	3.1	123
14	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.	3.1	117
15	Real-time investigation of reaction rate and mineral phase modifications of lime carbonation. Construction and Building Materials, 2012, 35, 741-751.	7.2	113
16	Pre-treatment of municipal solid waste incineration (MSWI) bottom ash for utilisation in cement mortar. Construction and Building Materials, 2015, 96, 76-85.	7.2	111
17	Multi-scale analysis on the influence of moisture on the mechanical behavior of ferruginous sandstone. Construction and Building Materials, 2014, 54, 78-90.	7.2	109
18	Study of ancient mortars from Sagalassos (Turkey) in view of their conservation. Cement and Concrete Research, 2002, 32, 1457-1463.	11.0	99

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19	Early age hydration and pozzolanic reaction in natural zeolite blended cements: Reaction kinetics and products by in situ synchrotron X-ray powder diffraction. <i>Cement and Concrete Research</i> , 2010, 40, 1704-1713.	11.0	93
20	Ultrasound-intensified mineral carbonation. <i>Applied Thermal Engineering</i> , 2013, 57, 154-163.	6.0	85
21	Continuous elimination of Pb <sup>2+</sup> , Cu <sup>2+</sup> , Zn <sup>2+</sup> , H <sup>+</sup> and NH <sub>4</sub> <sup>+</sup> from acidic waters by ionic exchange on natural zeolites. <i>Journal of Hazardous Materials</i> , 2009, 166, 619-627.	12.4	63
22	Susceptibility of mineral phases of steel slags towards carbonation: mineralogical, morphological and chemical assessment. <i>European Journal of Mineralogy</i> , 2013, 25, 533-549.	1.3	59
23	Microscopical study of ancient mortars from Tournai (Belgium). <i>Materials Characterization</i> , 2004, 53, 289-294.	4.4	54
24	Characterisation of pore structure by combining mercury porosimetry and micrography. <i>Materials and Structures/Materiaux Et Constructions</i> , 2001, 34, 76-82.	3.1	51
25	Rilem TC 203-RHM: Repair mortars for historic masonry. Testing of hardened mortars, a process of questioning and interpreting. <i>Materials and Structures/Materiaux Et Constructions</i> , 2009, 42, 853-865.	3.1	47
26	Stability of pyrochlores in alkaline matrices: Solubility of calcium antimonate. <i>Applied Geochemistry</i> , 2011, 26, 809-817.	3.0	47
27	RILEM TC 203-RHM: Repair mortars for historic masonry. <i>Materials and Structures/Materiaux Et Constructions</i> , 2012, 45, 1287-1294.	3.1	47
28	Borate Distribution in Stabilized Stainless-Steel Slag. <i>Journal of the American Ceramic Society</i> , 2008, 91, 548-554.	3.8	44
29	Calorimetric evolution of the early pozzolanic reaction of natural zeolites. <i>Journal of Thermal Analysis and Calorimetry</i> , 2010, 101, 97-105.	3.6	44
30	Towards zero-waste mineral carbon sequestration via two-way valorization of ironmaking slag. <i>Chemical Engineering Journal</i> , 2014, 249, 260-269.	12.7	44
31	The zeolite-“lime pozzolanic reaction: Reaction kinetics and products by in situ synchrotron X-ray powder diffraction. <i>Microporous and Mesoporous Materials</i> , 2009, 126, 40-49.	4.4	43
32	Use of computer assisted image analysis for the determination of the grain-size distribution of sands used in mortars. <i>Cement and Concrete Research</i> , 2006, 36, 1453-1459.	11.0	41
33	Slag Solidification Modeling Using the Scheil-Gulliver Assumptions. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1177-1185.	3.8	39
34	Supplementary Cementitious Materials for Concrete: Characterization Needs. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1488, 8.	0.1	39
35	Potential of inorganic polymers (geopolymers) made of halloysite and volcanic glass for the immobilisation of tailings from gold extraction in Ecuador. <i>Applied Clay Science</i> , 2015, 109-110, 95-106.	5.2	37
36	Hydraulicity in Historic Lime Mortars: A Review. <i>RILEM Bookseries</i> , 2012, , 125-139.	0.4	35

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37	RILEM TC 203-RHM: Repair mortars for historic masonry. <i>Materials and Structures/Materiaux Et Constructions</i> , 2012, 45, 1277-1285.	3.1	34
38	Zeolite occurrence and genesis in the Late-Cretaceous Cayo arc of Coastal Ecuador: Evidence for zeolite formation in cooling marine pyroclastic flow deposits. <i>Applied Clay Science</i> , 2014, 87, 108-119.	5.2	32
39	Gypsum efflorescence on clay brick masonry: Field survey and literature study. <i>Construction and Building Materials</i> , 2015, 85, 57-64.	7.2	32
40	Determination of the wc ratio of hardened cement paste and concrete samples on thin sections using automated image analysis techniques. <i>Cement and Concrete Research</i> , 1995, 25, 827-834.	11.0	27
41	Zeolite mineralogy of the Cayo formation in Guayaquil, Ecuador. <i>Applied Clay Science</i> , 2008, 42, 180-188.	5.2	25
42	Preparation, characterization and reaction kinetics of green cement: Ecuadorian natural mordenite-based geopolymers. <i>Materials and Structures/Materiaux Et Constructions</i> , 2017, 50, 1.	3.1	25
43	RILEM TC 203-RHM: Repair mortars for historic masonry. <i>Materials and Structures/Materiaux Et Constructions</i> , 2012, 45, 1295-1302.	3.1	23
44	Distinguishing between carbonate and non-carbonate precipitates from the carbonation of calcium-containing organic acid leachates. <i>Hydrometallurgy</i> , 2014, 147-148, 90-94.	4.3	23
45	Quantitative mineralogical analysis of hydraulic limes by X-ray diffraction. <i>Cement and Concrete Research</i> , 2007, 37, 1524-1530.	11.0	22
46	Influence of temperature on the cation distribution in calcium mordenite. <i>The Journal of Physical Chemistry</i> , 1987, 91, 5800-5805.	2.9	21
47	Automated air void analysis on hardened concrete. <i>Cement and Concrete Research</i> , 2001, 31, 1027-1031.	11.0	21
48	In situ synchrotron X-ray powder diffraction study of the early age hydration of cements blended with zeolite and quartzite fines and water-reducing agent. <i>Applied Clay Science</i> , 2013, 72, 124-131.	5.2	21
49	Quantitative clay mineralogy as provenance indicator for recent muds in the southern North Sea. <i>Marine Geology</i> , 2018, 398, 48-58.	2.1	20
50	Relating the Cation Exchange Properties of the Boom Clay (Belgium) to Mineralogy and Pore-Water Chemistry. <i>Clays and Clay Minerals</i> , 2018, 66, 449-465.	1.3	19
51	Thermomechanical treatment of two Ecuadorian zeolite-rich tuffs and their potential usage as supplementary cementitious materials. <i>Journal of Thermal Analysis and Calorimetry</i> , 2014, 115, 309-321.	3.6	18
52	Quantitative composition of ancient mortars from the Notre Dame Cathedral in Tournai (Belgium). <i>Materials Characterization</i> , 2009, 60, 580-585.	4.4	17
53	Microscopic analysis of imbibition processes in oolitic limestone. <i>Geophysical Research Letters</i> , 2000, 27, 3533-3536.	4.0	16
54	Raw materials used in ancient mortars from the Cathedral of Notre-Dame in Tournai (Belgium). <i>European Journal of Mineralogy</i> , 2011, 23, 871-882.	1.3	16

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55	Long-term clay raw material selection and use in the region of Classical/Hellenistic to Early Byzantine Sagalassos (SW Turkey). <i>Journal of Archaeological Science</i> , 2012, 39, 1296-1305.	2.4	16
56	Quality assurance and quality control of air entrained concrete. <i>Cement and Concrete Research</i> , 1994, 24, 1267-1276.	11.0	15
57	Natural Clay-Sized Glauconite in the Neogene Deposits of the Campine Basin (Belgium). <i>Clays and Clay Minerals</i> , 2014, 62, 35-52.	1.3	15
58	Mineralogy, Geochemistry, and Diagenesis of Clinoptilolite Tuffs (Miocene) in the Central Simav Graben, Western Turkey. <i>Clays and Clay Minerals</i> , 2008, 56, 622-632.	1.3	14
59	Clay mineralogical constraints on weathering in response to early Eocene hyperthermal events in the Bighorn Basin, Wyoming (Western Interior, USA). <i>Bulletin of the Geological Society of America</i> , 2017, 129, 997-1011.	3.3	14
60	Tracing the primary production location of core-formed glass vessels, Mediterranean Group I. <i>Journal of Archaeological Science: Reports</i> , 2016, 5, 1-9.	0.5	13
61	Understanding the leaching behavior of inorganic polymers made of iron rich slags. <i>Journal of Cleaner Production</i> , 2019, 238, 117736.	9.3	13
62	Evaluating the quantification of the clay mineralogy of the Rupelian Boom Clay in Belgium by a detailed study of size fractions. <i>Applied Clay Science</i> , 2021, 201, 105954.	5.2	12
63	A unique recipe for glass beads at Iron Age Sardis. <i>Journal of Archaeological Science</i> , 2019, 108, 104974.	2.4	9
64	Durability performance of binary and ternary blended cementitious systems with calcined clay: a RILEM TC 282-CCL, review. <i>Materials and Structures/Materiaux Et Constructions</i> , 2022, 55, .	3.1	9
65	Lessons from a lost technology: The secrets of Roman concrete. <i>American Mineralogist</i> , 2013, 98, 1917-1918.	1.9	8
66	The pozzolanic reaction between clinoptilolite and portlandite: a time and spatially resolved IR study. <i>European Journal of Mineralogy</i> , 2010, 22, 767-777.	1.3	7
67	Viaeneite, (Fe,Pb)4S8O, a new mineral with mixed sulphur valencies from Engis, Belgium. <i>European Journal of Mineralogy</i> , 1996, 8, 93-102.	1.3	7
68	The upper Miocene Deurne Member of the Diest Formation revisited: unexpected results from the study of a large temporary outcrop near Antwerp International Airport, Belgium. <i>Geologica Belgica</i> , 2020, 23, 219-252.	1.1	7
69	Hydration and strength evolution of air-cured zeolite-rich tuffs and siltstone blended cement pastes at low water-to-binder ratio. <i>Clay Minerals</i> , 2015, 50, 133-152.	0.6	6
70	Gypsum efflorescence on clay brick masonry: Analysis of potential efflorescence origins. <i>Journal of Building Physics</i> , 2020, 44, 37-66.	2.4	6
71	Min�ralogie des silicates de calcium pr�sents dans des mortiers anciens � Tournai. <i>ArcheoSciences</i> , 2006, , 61-65.	0.1	6
72	Hardening of Calcium Hydroxide and Calcium Silicate Binders Due to Carbonation and Hydration. , 2006, , 589-599.		5

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73	Hydration process of zeolite-rich tuffs and siltstone-blended cement pastes at low W/B ratio, under wet curing condition. <i>European Journal of Environmental and Civil Engineering</i> , 2014, 18, 629-651.	2.1	5
74	Hardening of mortars made from cement, rice husk ash and lime. <i>Proceedings of Institution of Civil Engineers: Construction Materials</i> , 2009, 162, 19-27.	1.1	4
75	Study of composition change and agglomeration of flue gas cleaning residue from a fluidized bed waste incinerator. <i>Environmental Technology (United Kingdom)</i> , 2011, 32, 1637-1647.	2.2	3
76	Portland Cement and other Calcareous Hydraulic Binders. , 0, , 441-479.		3
77	Effect of Calcium Hydroxide and Water to Solid Ratio on Compressive Strength of Mordenite-Based Geopolymer and the Evaluation of its Thermal Transmission Property. , 2018, , .		2
78	The Rietveld structure refinement of an exceptionally pure sample of clinoptilolite from Ecuador and its Na-, K-, and Ca-exchanged forms. <i>Zeitschrift für Kristallographie, Supplement</i> , 2009, 2009, 395-400.	0.5	1
79	Simulieren der kapillaren Wasseraufnahme von porösen Werkstoffen des Bauwesens / Modelling of the Capillary Water Absorption of Porous Building Materials. <i>Restoration of Buildings and Monuments</i> , 2000, 6, 293-306.	0.6	0
80	Reference Materials for Adequate Porosity Measurements. <i>Key Engineering Materials</i> , 2001, 206-213, 681-684.	0.4	0
81	Pozzolanic Potential of the Calcined Clay-Lime System. <i>RILEM Bookseries</i> , 2015, , 567-567.	0.4	0
82	Terrestrial sedimentary archives of episodes of greenhouse warming in ancient river floodplain deposits of the Bighorn Basin, Wyoming. <i>Rendiconti Online Societa Geologica Italiana</i> , 0, 31, 3-4.	0.3	0
83	Halloysite occurrence at the karstified contact of Oligocene sands and Cretaceous calcarenites in Hinnisdael quarries, Vechmaal (NE of Belgium). <i>Geologica Belgica</i> , 2017, 20, 43-52.	1.1	0