

# 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  | 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         |
| 2  | 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        |
| 3  | Gypsum efflorescence on clay brick masonry: Analysis of potential efflorescence origins. <i>Journal of Building Physics</i> , 2020, 44, 37-66.  | 2.4 | 6         |
| 4  | 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.                           | 3.1 | 123       |
| 5  | 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         |
| 6  | A unique recipe for glass beads at Iron Age Sardis. <i>Journal of Archaeological Science</i> , 2019, 108, 104974.   | 2.4 | 9         |
| 7  | Understanding the leaching behavior of inorganic polymers made of iron rich slags. <i>Journal of Cleaner Production</i> , 2019, 238, 117736.  | 9.3 | 13        |
| 8  | 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        |
| 9  | 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        |
| 10 | 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         |
| 11 | 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.                                       | 3.1 | 117       |
| 12 | Report of TC 238-SCM: hydration stoppage methods for phase assemblage studies of blended cementsâ€™ results of a round robin test. <i>Materials and Structures/Materiaux Et Constructions</i> , 2018, 51, 1.                    | 3.1 | 132       |
| 13 | 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        |
| 14 | 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        |
| 15 | 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         |
| 16 | Pozzolanic reactivity of pure calcined clays. <i>Applied Clay Science</i> , 2016, 132-133, 552-560.   | 5.2 | 168       |
| 17 | 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        |
| 18 | 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         |

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|----|--|------|-----------|
| 19 | Pre-treatment of municipal solid waste incineration (MSWI) bottom ash for utilisation in cement mortar. <i>Construction and Building Materials</i> , 2015, 96, 76-85.  | 7.2  | 111       |
| 20 | Pozzolanic Potential of the Calcined Clay-Lime System. <i>RILEM Bookseries</i> , 2015, , 567-567.  | 0.4  | 0         |
| 21 | 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        |
| 22 | Gypsum efflorescence on clay brick masonry: Field survey and literature study. <i>Construction and Building Materials</i> , 2015, 85, 57-64.   | 7.2  | 32        |
| 23 | Multi-scale analysis on the influence of moisture on the mechanical behavior of ferruginous sandstone. <i>Construction and Building Materials</i> , 2014, 54, 78-90.   | 7.2  | 109       |
| 24 | 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        |
| 25 | 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         |
| 26 | 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        |
| 27 | 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        |
| 28 | 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        |
| 29 | 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        |
| 30 | Surface textural analysis of quartz grains by scanning electron microscopy (SEM): From sample preparation to environmental interpretation. <i>Earth-Science Reviews</i> , 2014, 128, 93-104.   | 9.1  | 223       |
| 31 | Accelerated mineral carbonation of stainless steel slags for CO <sub>2</sub> storage and waste valorization: Effect of process parameters on geochemical properties. <i>International Journal of Greenhouse Gas Control</i> , 2013, 17, 32-45. | 4.6  | 167       |
| 32 | In situ synchrotron X-ray powder diffraction study of the early age hydration of cements blended with zeolitite and quartzite fines and water-reducing agent. <i>Applied Clay Science</i> , 2013, 72, 124-131.                                 | 5.2  | 21        |
| 33 | Ultrasound-intensified mineral carbonation. <i>Applied Thermal Engineering</i> , 2013, 57, 154-163.  | 6.0  | 85        |
| 34 | 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        |
| 35 | Lessons from a lost technology: The secrets of Roman concrete. <i>American Mineralogist</i> , 2013, 98, 1917-1918.   | 1.9  | 8         |
| 36 | Supplementary Cementitious Materials for Concrete: Characterization Needs. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1488, 8.   | 0.1  | 39        |

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|----|--|------|-----------|
| 37 | RILEM TC 203-RHM: Repair mortars for historic masonry. Materials and Structures/Materiaux Et Constructions, 2012, 45, 1287-1294.   | 3.1  | 47        |
| 38 | Hydraulicity in Historic Lime Mortars: A Review. RILEM Bookseries, 2012, , 125-139.  | 0.4  | 35        |
| 39 | RILEM TC 203-RHM: Repair mortars for historic masonry. Materials and Structures/Materiaux Et Constructions, 2012, 45, 1295-1302.   | 3.1  | 23        |
| 40 | RILEM TC 203-RHM: Repair mortars for historic masonry. Materials and Structures/Materiaux Et Constructions, 2012, 45, 1277-1285.   | 3.1  | 34        |
| 41 | Supplementary Cementitious Materials. Reviews in Mineralogy and Geochemistry, 2012, 74, 211-278.   | 4.8  | 350       |
| 42 | Long-term clay raw material selection and use in the region of Classical/Hellenistic to Early Byzantine Sagalassos (SW Turkey). Journal of Archaeological Science, 2012, 39, 1296-1305.                            | 2.4  | 16        |
| 43 | Stabilization of basic oxygen furnace slag by hot-stage carbonation treatment. Chemical Engineering Journal, 2012, 203, 239-250.   | 12.7 | 136       |
| 44 | 6. Supplementary Cementitious Materials. , 2012, , 211-278.  |      | 215       |
| 45 | Phase and morphology evolution of calcium carbonate precipitated by carbonation of hydrated lime. Journal of Materials Science, 2012, 47, 6151-6165.   | 3.7  | 207       |
| 46 | Real-time investigation of reaction rate and mineral phase modifications of lime carbonation. Construction and Building Materials, 2012, 35, 741-751.  | 7.2  | 113       |
| 47 | Stability of pyrochlores in alkaline matrices: Solubility of calcium antimonate. Applied Geochemistry, 2011, 26, 809-817.  | 3.0  | 47        |
| 48 | Raw materials used in ancient mortars from the Cathedral of Notre-Dame in Tournai (Belgium). European Journal of Mineralogy, 2011, 23, 871-882.  | 1.3  | 16        |
| 49 | Study of composition change and agglomeration of flue gas cleaning residue from a fluidized bed waste incinerator. Environmental Technology (United Kingdom), 2011, 32, 1637-1647.                                 | 2.2  | 3         |
| 50 | Calorimetric evolution of the early pozzolanic reaction of natural zeolites. Journal of Thermal Analysis and Calorimetry, 2010, 101, 97-105.   | 3.6  | 44        |
| 51 | Early age hydration and pozzolanic reaction in natural zeolite blended cements: Reaction kinetics and products by in situ synchrotron X-ray powder diffraction. Cement and Concrete Research, 2010, 40, 1704-1713. | 11.0 | 93        |
| 52 | The pozzolanic reaction between clinoptilolite and portlandite: a time and spatially resolved IR study. European Journal of Mineralogy, 2010, 22, 767-777.   | 1.3  | 7         |
| 53 | Quantitative composition of ancient mortars from the Notre Dame Cathedral in Tournai (Belgium). Materials Characterization, 2009, 60, 580-585.   | 4.4  | 17        |
| 54 | The zeolite-â€lime pozzolanic reaction: Reaction kinetics and products by in situ synchrotron X-ray powder diffraction. Microporous and Mesoporous Materials, 2009, 126, 40-49.                                    | 4.4  | 43        |

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|----|--|------|-----------|
| 55 | 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        |
| 56 | Pozzolanic reactions of common natural zeolites with lime and parameters affecting their reactivity. <i>Cement and Concrete Research</i> , 2009, 39, 233-240.  | 11.0 | 171       |
| 57 | 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         |
| 58 | 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        |
| 59 | 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         |
| 60 | Assessment of Pb-slag, MSWI bottom ash and boiler and fly ash for using as a fine aggregate in cement mortar. <i>Journal of Hazardous Materials</i> , 2008, 154, 766-777.  | 12.4 | 125       |
| 61 | Borate Distribution in Stabilized Stainless-Steel Slag. <i>Journal of the American Ceramic Society</i> , 2008, 91, 548-554.  | 3.8  | 44        |
| 62 | Zeolite mineralogy of the Cayo formation in Guayaquil, Ecuador. <i>Applied Clay Science</i> , 2008, 42, 180-188.   | 5.2  | 25        |
| 63 | 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        |
| 64 | Quantitative mineralogical analysis of hydraulic limes by X-ray diffraction. <i>Cement and Concrete Research</i> , 2007, 37, 1524-1530.  | 11.0 | 22        |
| 65 | Slag Solidification Modeling Using the Scheil-Gulliver Assumptions. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1177-1185.  | 3.8  | 39        |
| 66 | Microscopy of historic mortars—a review. <i>Cement and Concrete Research</i> , 2006, 36, 1416-1424.  | 11.0 | 260       |
| 67 | 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        |
| 68 | Hardening of Calcium Hydroxide and Calcium Silicate Binders Due to Carbonation and Hydration. , 2006, , 589-599.   |      | 5         |
| 69 | Minéralogie des silicates de calcium présents dans des mortiers anciens à Tournai. <i>ArcheoSciences</i> , 2006, , 61-65.  | 0.1  | 6         |
| 70 | Microscopical study of ancient mortars from Tournai (Belgium). <i>Materials Characterization</i> , 2004, 53, 289-294.  | 4.4  | 54        |
| 71 | Study of ancient mortars from Sagalassos (Turkey) in view of their conservation. <i>Cement and Concrete Research</i> , 2002, 32, 1457-1463.  | 11.0 | 99        |
| 72 | 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        |

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|----|--|------|-----------|
| 73 | Nineteenth century hydraulic restoration mortars in the Saint Michael's Church (Leuven, Belgium). <i>Cement and Concrete Research</i> , 2001, 31, 397-403.   | 11.0 | 156       |
| 74 | Automated air void analysis on hardened concrete. <i>Cement and Concrete Research</i> , 2001, 31, 1027-1031.   | 11.0 | 21        |
| 75 | Reference Materials for Adequate Porosity Measurements. <i>Key Engineering Materials</i> , 2001, 206-213, 681-684.   | 0.4  | 0         |
| 76 | 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         |
| 77 | Microscopic analysis of imbibition processes in oolitic limestone. <i>Geophysical Research Letters</i> , 2000, 27, 3533-3536.  | 4.0  | 16        |
| 78 | Viaeneite, (Fe,Pb) <sub>4</sub> S <sub>8</sub> O, a new mineral with mixed sulphur valencies from Engis, Belgium. <i>European Journal of Mineralogy</i> , 1996, 8, 93-102.   | 1.3  | 7         |
| 79 | 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        |
| 80 | Quality assurance and quality control of air entrained concrete. <i>Cement and Concrete Research</i> , 1994, 24, 1267-1276.  | 11.0 | 15        |
| 81 | Influence of temperature on the cation distribution in calcium mordenite. <i>The Journal of Physical Chemistry</i> , 1987, 91, 5800-5805.  | 2.9  | 21        |
| 82 | Portland Cement and other Calcareous Hydraulic Binders. , 0, , 441-479.  |      | 3         |
| 83 | 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         |