

# Ruben Snellings

## List of Publications by Year in descending order

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88  
papers

6,056  
citations

101543  
36  
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79698  
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90  
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90  
docs citations

90  
times ranked

3278  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydration kinetics of ternary slag-limestone cements: Impact of water to binder ratio and curing temperature. Cement and Concrete Research, 2022, 151, 106647.	11.0	55
2	Fluvial Sediments as SCMs: Characterization, Pozzolan Performance, and Optimization of Equivalent Binder. Journal of Materials in Civil Engineering, 2022, 34, .	2.9	11
3	Insights into CO <sub>2</sub> -mineralization using non-ferrous metallurgy slags: CO <sub>2</sub> (g)-induced dissolution behavior of copper and lead slags. Journal of Environmental Chemical Engineering, 2022, 10, 107338.	6.7	7
4	Report of RILEM TC 267-TRM: Improvement and robustness study of lime mortar strength test for assessing reactivity of SCMs. Materials and Structures/Materiaux Et Constructions, 2022, 55, 1.	3.1	8
5	Report of RILEM TC 267-TRM phase 2: optimization and testing of the robustness of the R3 reactivity tests for supplementary cementitious materials. Materials and Structures/Materiaux Et Constructions, 2022, 55, 1.	3.1	29
6	Sustainable iron-rich cements: Raw material sources and binder types. Cement and Concrete Research, 2022, 157, 106834.	11.0	32
7	Properties and occurrence of clay resources for use as supplementary cementitious materials: a paper of RILEM TC 282-CCL. Materials and Structures/Materiaux Et Constructions, 2022, 55, .	3.1	19
8	Report of RILEM TC 267-TRM phase 3: validation of the R3 reactivity test across a wide range of materials. Materials and Structures/Materiaux Et Constructions, 2022, 55, .	3.1	32
9	Paper of RILEM TC 282-CCL: mineralogical characterization methods for clay resources intended for use as supplementary cementitious material. Materials and Structures/Materiaux Et Constructions, 2022, 55, .	3.1	4
10	Experiments and modelling to understand FeCO <sub>3</sub> cement formation mechanism: time-evolution of CO <sub>2</sub> -species, dissolved-Fe, and pH during CO <sub>2</sub> -induced dissolution of Fe(0). Construction and Building Materials, 2022, 345, 128281.	7.2	7
11	Transformation of mine tailings into cement-bound aggregates for use in concrete by granulation in a high intensity mixer. Journal of Cleaner Production, 2022, 366, 132989.	9.3	10
12	Performance and microstructure development of lime " calcined fluvial sediment binders under different curing conditions. Cement and Concrete Research, 2022, 160, 106903.	11.0	4
13	Sustainable Metal Recovery from Secondary Resources: Screening and Kinetic Studies Using Analogue Heterotrophic Metabolites. Waste and Biomass Valorization, 2021, 12, 2703-2721.	3.4	2
14	Experimental analysis and modelling of mechanical properties and shrinkage of concrete recycling flash calcined dredging sediments. Cement and Concrete Composites, 2021, 115, 103787.	10.7	15
15	Alite-ye™elimate clinker: Hydration kinetics, products and microstructure. Construction and Building Materials, 2021, 266, 121062.	7.2	10
16	Ultrasonic monitoring of variations in dust concentration in a powder classifier. Powder Technology, 2021, 381, 392-400.	4.2	4
17	Detoxified Spent Pot Lining from Aluminum Production as (Alumino-)Silicate Source for Composite Cement and AutoClaved Aerated Concrete. Applied Sciences (Switzerland), 2021, 11, 3715.	2.5	5
18	Classification and Milling Increase Fly Ash Pozzolan Reactivity. Frontiers in Built Environment, 2021, 7, .	2.3	17

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19	Use of Treated Non-Ferrous Metallurgical Slags as Supplementary Cementitious Materials in Cementitious Mixtures. Applied Sciences (Switzerland), 2021, 11, 4028.	2.5	12
20	Siderite-calcite ( $\text{FeCO}_3$ - $\text{CaCO}_3$ ) series cement formation by accelerated carbonation of $\text{CO}_2(\text{g})$ - $\text{H}_2\text{O}$ - $\text{Fe}$ - $\text{Ca}(\text{OH})_2$ systems. Cement and Concrete Composites, 2021, 122, 104137.	10.7	10
21	Clinker-free carbonate-bonded (CFCB) products prepared by accelerated carbonation of steel furnace slags: A parametric overview of the process development. Construction and Building Materials, 2021, 303, 124556.	7.2	13
22	Exploring the Potential for Utilization of Medium and Highly Sulfidic Mine Tailings in Construction Materials: A Review. Sustainability, 2021, 13, 12150.	3.2	22
23	Accelerated carbonation of steel slag monoliths at low $\text{CO}_2$ pressure – microstructure and strength development. Journal of $\text{CO}_2$ Utilization, 2020, 36, 124-134.	6.8	75
24	Environmental assessment of $\text{CO}_2$ mineralisation for sustainable construction materials. International Journal of Greenhouse Gas Control, 2020, 93, 102882.	4.6	53
25	Pre-treatment and utilisation of municipal solid waste incineration bottom ashes towards a circular economy. Construction and Building Materials, 2020, 260, 120485.	7.2	34
26	Effect of ultra-fine fly ash on concrete performance and durability. Construction and Building Materials, 2020, 263, 120493.	7.2	62
27	Evaluation of New Applications of Oil Shale Ashes in Building Materials. Minerals (Basel,) 2020, 10, 1078.	2.0	12
28	Near-zero-waste processing of low-grade, complex primary ores and secondary raw materials in Europe: technology development trends. Resources, Conservation and Recycling, 2020, 160, 104919.	10.8	114
29	Utilising the principles of $\text{FeCO}_3$ scaling for cementation in $\text{H}_2\text{O}$ - $\text{CO}_2(\text{g})$ -Fe system. Corrosion Science, 2020, 169, 108613.	6.6	9
30	The effects of carbonation conditions on the physical and microstructural properties of recycled concrete coarse aggregates. Construction and Building Materials, 2020, 257, 119486.	7.2	45
31	Reactivity of supplementary cementitious materials (SCMs) in cement blends. Cement and Concrete Research, 2019, 124, 105799.	11.0	421
32	Quantification of amorphous siliceous fly ash in hydrated blended cement pastes by X-ray powder diffraction. Journal of Applied Crystallography, 2019, 52, 1358-1370.	4.5	23
33	Activation of Portland cement blended with high volume of fly ash using $\text{Na}_2\text{SO}_4$ . Cement and Concrete Composites, 2019, 104, 103417.	10.7	68
34	Mechanical and environmental properties of carbonated steel slag compacts as a function of mineralogy and $\text{CO}_2$ uptake. Journal of $\text{CO}_2$ Utilization, 2019, 33, 201-214.	6.8	54
35	Supplementary cementitious materials: New sources, characterization, and performance insights. Cement and Concrete Research, 2019, 122, 257-273.	11.0	521
36	Microwave Radiation as a Pre-Treatment for Standard and Innovative Fragmentation Techniques in Concrete Recycling. Materials, 2019, 12, 488.	2.9	19

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37	Early-age hydration and autogenous deformation of cement paste containing flash calcined dredging sediments. Construction and Building Materials, 2019, 200, 104-115.	7.2	30
38	A Rapid, Robust, and Relevant (R3) Reactivity Test for Supplementary Cementitious Materials. ACI Materials Journal, 2019, 116, .	0.2	8
39	Natural Pozzolans. RILEM State-of-the-Art Reports, 2018, , 181-231.	0.7	12
40	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
41	Reactivity tests for supplementary cementitious materials: RILEM TC 267-TRM phase 1. Materials and Structures/Materiaux Et Constructions, 2018, 51, 1.	3.1	144
42	The Use of Municipal Solid Waste Incineration Ash in Various Building Materials: A Belgian Point of View. Materials, 2018, 11, 141.	2.9	175
43	Report of TC 238-SCM: hydration stoppage methods for phase assemblage studies of blended cementsâ€”results of a round robin test. Materials and Structures/Materiaux Et Constructions, 2018, 51, 1.	3.1	132
44	Concrete with Flash-Calcined Dredging Sediments as a Novel Supplementary Cementitious Material. , 2018, , 109-116.		2
45	Recycling of spent Cu-based oxygen carriers into high-strength ceramic proppants. Ceramics International, 2017, 43, 16895-16902.	4.8	2
46	Flash-calcined dredging sediment blended cements: effect on cement hydration and properties. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	3.1	38
47	Development of a new rapid, relevant and reliable (R3) test method to evaluate the pozzolanic reactivity of calcined kaolinitic clays. Cement and Concrete Research, 2016, 85, 1-11.	11.0	375
48	Properties and pozzolanic reactivity of flash calcined dredging sediments. Applied Clay Science, 2016, 129, 35-39.	5.2	94
49	Recycling of autoclaved aerated concrete in floor screeds: Sulfate leaching reduction by ettringite formation. Construction and Building Materials, 2016, 111, 9-14.	7.2	35
50	Rapid screening tests for supplementary cementitious materials: past and future. Materials and Structures/Materiaux Et Constructions, 2016, 49, 3265-3279.	3.1	107
51	The pore solution of blended cements: a review. Materials and Structures/Materiaux Et Constructions, 2016, 49, 3341-3367.	3.1	323
52	Alkali Activation of AOD Stainless Steel Slag Under Steam Curing Conditions. Journal of the American Ceramic Society, 2015, 98, 3062-3074.	3.8	17
53	TC 238-SCM: hydration and microstructure of concrete with SCMs. Materials and Structures/Materiaux Et Constructions, 2015, 48, 835-862.	3.1	189
54	Cementitious binders from activated stainless steel refining slag and the effect of alkali solutions. Journal of Hazardous Materials, 2015, 286, 211-219.	12.4	71

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55	Cation Exchange Properties of Zeolites in Hyper Alkaline Aqueous Media. Environmental Science & Technology, 2015, 49, 1729-1737.	10.0	15
56	Pozzolanic activity of mechanochemically and thermally activated kaolins in cement. Cement and Concrete Research, 2015, 77, 47-59.	11.0	108
57	Fly ash as an assemblage of model Ca-Mg-Na-aluminosilicate glasses. Cement and Concrete Research, 2015, 78, 263-272.	11.0	104
58	Development of a New Rapid, Relevant and Reliable (R3) Testing Method to Evaluate the Pozzolanic Reactivity of Calcined Clays. RILEM Bookseries, 2015, , 539-544.	0.4	4
59	Surface Chemistry of Calcium Aluminosilicate Glasses. Journal of the American Ceramic Society, 2015, 98, 303-314.	3.8	71
60	Cementitious Binders Incorporating Residues. , 2014, , 219-229.		6
61	Investigating the binding potential of continuous casting stainless steel slag by alkali activation. Advances in Cement Research, 2014, 26, 256-270.	1.6	8
62	The Effect of Mg on Slag Reactivity in Blended Cements. Waste and Biomass Valorization, 2014, 5, 369-383.	3.4	21
63	The existence of amorphous phase in Portland cements: Physical factors affecting Rietveld quantitative phase analysis. Cement and Concrete Research, 2014, 59, 139-146.	11.0	112
64	A toolbox of oligopeptide-modified polymers for tailored elastomers. Nature Communications, 2014, 5, 4728.	12.8	32
65	Zeolite occurrence and genesis in the Late-Cretaceous Cayo arc of Coastal Ecuador: Evidence for zeolite formation in cooling marine pyroclastic flow deposits. Applied Clay Science, 2014, 87, 108-119.	5.2	32
66	Use of X-ray diffraction to quantify amorphous supplementary cementitious materials in anhydrous and hydrated blended cements. Cement and Concrete Research, 2014, 64, 89-98.	11.0	177
67	The hydration of cement regenerated from Completely Recyclable Concrete. Construction and Building Materials, 2014, 60, 33-41.	7.2	17
68	Effect of accelerated carbonation on AOD stainless steel slag for its valorisation as a CO2-sequestering construction material. Chemical Engineering Journal, 2014, 246, 39-52.	12.7	121
69	Alite-ye'elite cement: Synthesis and mineralogical analysis. Cement and Concrete Research, 2013, 45, 15-20.	11.0	54
70	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. Applied Clay Science, 2013, 72, 124-131.	5.2	21
71	Solution-Controlled Dissolution of Supplementary Cementitious Material Glasses at pH 13: The Effect of Solution Composition on Glass Dissolution Rates. Journal of the American Ceramic Society, 2013, 96, 2467-2475.	3.8	139
72	Lessons from a lost technology: The secrets of Roman concrete. American Mineralogist, 2013, 98, 1917-1918.	1.9	8

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73	Supplementary Cementitious Materials for Concrete: Characterization Needs. Materials Research Society Symposia Proceedings, 2012, 1488, 8.	0.1	39
74	Supplementary Cementitious Materials. Reviews in Mineralogy and Geochemistry, 2012, 74, 211-278.	4.8	350
75	6. Supplementary Cementitious Materials. , 2012, , 211-278.		215
76	Clinkering Reactions During Firing of Recyclable Concrete. Journal of the American Ceramic Society, 2012, 95, 1741-1749.	3.8	38
77	Stability of pyrochlores in alkaline matrices: Solubility of calcium antimonate. Applied Geochemistry, 2011, 26, 809-817.	3.0	47
78	Calorimetric evolution of the early pozzolanic reaction of natural zeolites. Journal of Thermal Analysis and Calorimetry, 2010, 101, 97-105.	3.6	44
79	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
80	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
81	The zeoliteâ€“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
82	Pozzolanic reactions of common natural zeolites with lime and parameters affecting their reactivity. Cement and Concrete Research, 2009, 39, 233-240.	11.0	171
83	The Rietveld structure refinement of an exceptionally pure sample of clinoptilolite from Ecuador and its Na-, K-, and Ca-exchanged forms. Zeitschrift für Kristallographie, Supplement, 2009, 2009, 395-400.	0.5	1
84	Zeolite mineralogy of the Cayo formation in Guayaquil, Ecuador. Applied Clay Science, 2008, 42, 180-188.	5.2	25
85	Mineralogy, Geochemistry, and Diagenesis of Clinoptilolite Tuffs (Miocene) in the Central Simav Graben, Western Turkey. Clays and Clay Minerals, 2008, 56, 622-632.	1.3	14
86	Portland Cement and other Calcareous Hydraulic Binders. , 0, , 441-479.		3
87	Assessing, Understanding and Unlocking Supplementary Cementitious Materials. RILEM Technical Letters, 0, 1, 50-55.	0.0	190
88	Carbonate-bonded construction materials from alkaline residues. RILEM Technical Letters, 0, 2, 53-58.	0.0	16