Maciej Zajac

List of Publications by Year
in descending order

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55	3,845	109311	161844
papers	citations	35 h-index	54 g-index

55	55	55	1623
all docs	docs citations	times ranked	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	Mechanisms of carbonation hydration hardening in Portland cements. Cement and Concrete Research, 2022, 152, 106687.	11.0	75
3	Effect of sulfate on CO2 binding efficiency of recycled alkaline materials. Cement and Concrete Research, 2022, 157, 106804.	11.0	16
4	CO2 Mineralization Methods in Cement and Concrete Industry. Energies, 2022, 15, 3597.	3.1	26
5	Application of the Rietveld-PONKCS Technique for Quantitative Analysis of Cements and Pitfalls of Hydration Stopping Methods. Advances in Civil Engineering Materials, 2022, 11, 555-568.	0.6	1
6	Effect of alkali and sulfate on early hydration of Portland cements at high water to cement ratio. Construction and Building Materials, 2022, 345, 128283.	7.2	15
7	Semi-dry carbonation of recycled concrete paste. Journal of CO2 Utilization, 2022, 63, 102111.	6.8	28
8	Effect of alkalis on enforced carbonation of cement paste: Mechanism of reaction. Journal of the American Ceramic Society, 2021, 104, 1076-1087.	3.8	15
9	Modelling the effect of the cement components fineness on performance and environmental impact of composite cements. Construction and Building Materials, 2021, 276, 122108.	7.2	10
10	Effect of alkalis on products of enforced carbonation of cement paste. Construction and Building Materials, 2021, 291, 123203.	7.2	27
11	New insights into the role of space on the microstructure and the development of strength of multicomponent cements. Cement and Concrete Composites, 2021, 121, 104070.	10.7	11
12	Understanding of the factors slowing down metakaolin reaction in limestone calcined clay cement (LC3) at late ages. Cement and Concrete Research, 2021, 146, 106477.	11.0	49
13	Impact of limestone fineness on cement hydration at early age. Cement and Concrete Research, 2021, 147, 106515.	11.0	69
14	Factors affecting the reactivity of slag at early and late ages. Cement and Concrete Research, 2021, 150, 106604.	11.0	20
15	Combined influence of carbonation and leaching on freeze-thaw resistance of limestone ternary cement concrete. Construction and Building Materials, 2021, 307, 125087.	7.2	11
16	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
17	Effect of carbonated cement paste on composite cement hydration and performance. Cement and Concrete Research, 2020, 134, 106090.	11.0	111
18	Kinetics of enforced carbonation of cement paste. Cement and Concrete Research, 2020, 131, 106013.	11.0	93

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19	CO2 mineralisation of Portland cement: Towards understanding the mechanisms of enforced carbonation. Journal of CO2 Utilization, 2020, 38, 398-415.	6.8	69
20	Phase assemblage and microstructure of cement paste subjected to enforced, wet carbonation. Cement and Concrete Research, 2020, 130, 105990.	11.0	109
21	Late hydration kinetics: Indications from thermodynamic analysis of pore solution data. Cement and Concrete Research, 2020, 129, 105975.	11.0	53
22	Carbon Capture and Utilization by mineralization of cement pastes derived from recycled concrete. Scientific Reports, 2020, 10, 5614.	3.3	104
23	Application of thermodynamic modelling to hydrated cements. Cement and Concrete Research, 2019, 123, 105779.	11.0	123
24	Structure and reactivity of synthetic CaO-Al2O3-SiO2 glasses. Cement and Concrete Research, 2019, 120, 77-91.	11.0	90
25	Early hydration of ye'elimite: Insights from thermodynamic modelling. Cement and Concrete Research, 2019, 120, 152-163.	11.0	26
26	Development of composite cements characterized by low environmental footprint. Journal of Cleaner Production, 2019, 226, 503-514.	9.3	45
27	Hydration and performance evolution of beliteâ€“ye'elimiteâ€“ferrite cement. Advances in Cement Research, 2019, 31, 124-137.	1.6	30
28	Hydration reactions and stages of clinker composed mainly of stoichiometric ye'elimite. Cement and Concrete Research, 2019, 116, 120-133.	11.0	65
29	Factors influencing the hydration kinetics of ye'elimite; effect of mayenite. Cement and Concrete Research, 2019, 116, 113-119.	11.0	40
30	Stability of the hydrate phase assemblage in Portland composite cements containing dolomite and metakaolin after leaching, carbonation, and chloride exposure. Cement and Concrete Composites, 2018, 89, 89-106.	10.7	57
31	Effect of sulfate additions on hydration and performance of ternary slag-limestone composite cements. Construction and Building Materials, 2018, 164, 451-462.	7.2	66
32	Influence of calcium and magnesium carbonates on hydration kinetics, hydrate assemblage and microstructural development of metakaolin containing composite cements. Cement and Concrete Research, 2018, 106, 91-102.	11.0	69
33	The effect of CaO/SiO 2 molar ratio of CaO-Al 2 O 3 -SiO 2 glasses on their structure and reactivity in alkali activated system. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 194, 163-171.	3.9	68
34	Relationship between cement composition and the freezeâ€“thaw resistance of concretes. Advances in Cement Research, 2018, 30, 387-397.	1.6	9
35	Limitations of the hydrotalcite formation in Portland composite cement pastes containing dolomite and metakaolin. Cement and Concrete Research, 2018, 105, 1-17.	11.0	94
36	Impact of microstructure on the performance of composite cements: Why higher total porosity can result in higher strength. Cement and Concrete Composites, 2018, 90, 178-192.	10.7	69

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37	Chloride-binding capacity of hydrotalcite in cement pastes containing dolomite and metakaolin. Cement and Concrete Research, 2018, 107, 163-181.	11.0	108
38	Effect of sulfate content on the porosity distribution and resulting performance of composite cements. Construction and Building Materials, 2018, 186, 912-919.	7.2	24
39	Early hydration of SCM-blended Portland cements: A pore solution and isothermal calorimetry study. Cement and Concrete Research, 2017, 93, 71-82.	11.0	145
40	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.	3.1	101
41	Influence of limestone on the hydration of ternary slag cements. Cement and Concrete Research, 2017, 100, 96-109.	11.0	222
42	Phase assemblage of composite cements. Cement and Concrete Research, 2017, 99, 172-182.	11.0	95
43	Predictive modelling of hydration and mechanical performance of low Ca composite cements: Possibilities and limitations from industrial perspective. Cement and Concrete Research, 2017, 100, 68-83.	11.0	35
44	Portland metakaolin cement containing dolomite or limestone â€“ Similarities and differences in phase assemblage and compressive strength. Construction and Building Materials, 2017, 157, 214-225.	7.2	52
45	Effect of Slag Reactivity Influenced by Alumina Content on Hydration of Composite Cements. Journal of Advanced Concrete Technology, 2016, 14, 535-547.	1.8	20
46	Effect of retarders on the early hydration of calcium-sulpho-aluminate (CSA) type cements. Cement and Concrete Research, 2016, 84, 62-75.	11.0	130
47	The impact of alumina availability on sulfate resistance of slag composite cements. Construction and Building Materials, 2016, 119, 356-369.	7.2	51
48	The Influence of Limestone and Al2O3 Content in the Slag on the Performance of the Composite Cements. Procedia Engineering, 2015, 108, 402-409.	1.2	19
49	CSA raw mix design: effect on clinker formation and reactivity. Materials and Structures/Materiaux Et Constructions, 2015, 48, 3895-3911.	3.1	61
50	Hydration of quaternary Portland cement blends containing blast-furnace slag, siliceous fly ash and limestone powder. Cement and Concrete Composites, 2015, 55, 374-382.	10.7	278
51	Experimental investigation and modeling of hydration and performance evolution of fly ash cement. Materials and Structures/Materiaux Et Constructions, 2014, 47, 1259-1269.	3.1	36
52	The role of the alumina content of slag, plus the presence of additional sulfate on the hydration and microstructure of Portland cement-slag blends. Cement and Concrete Research, 2014, 66, 91-101.	11.0	135
53	Effect of CaMg(CO3)2 on hydrate assemblages and mechanical properties of hydrated cement pastes at 40Â°C and 60Â°C. Cement and Concrete Research, 2014, 65, 21-29.	11.0	66
54	Influence of limestone and anhydrite on the hydration of Portland cements. Cement and Concrete Composites, 2014, 46, 99-108.	10.7	289

#	Article	IF	Citations
55	CO2 mineralization of demolished concrete wastes into a supplementary cementitious material â€“ a new CCU approach for the cement industry. RILEM Technical Letters, 0, 6, 53-60.	0.0	37