# Maciej Zajac

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/10694158/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 55 papers | 3,845 citations | 125106 35 h-index | 182931 54 g-index |
| 55 all docs | 55 docs citations | 55 times ranked | 1809 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. | 4.6 | 55 |
| 2 | Mechanisms of carbonation hydration hardening in Portland cements. Cement and Concrete Research, 2022, 152, 106687. | 4.6 | 75 |
| 3 | Effect of sulfate on CO2 binding efficiency of recycled alkaline materials. Cement and Concrete Research, 2022, 157, 106804. | 4.6 | 16 |
| 4 | CO2 Mineralization Methods in Cement and Concrete Industry. Energies, 2022, 15, 3597. | 1.6 | 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. | 0.2 | 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. | 3.2 | 15 |
| 7 | Semi-dry carbonation of recycled concrete paste. Journal of CO2 Utilization, 2022, 63, 102111. | 3.3 | 28 |
| 8 | Effect of alkalis on enforced carbonation of cement paste: Mechanism of reaction. Journal of the American Ceramic Society, 2021, 104, 1076-1087. | 1.9 | 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. | 3.2 | 10 |
| 10 | Effect of alkalis on products of enforced carbonation of cement paste. Construction and Building Materials, 2021, 291, 123203. | 3.2 | 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. | 4.6 | 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. | 4.6 | 49 |
| 13 | Impact of limestone fineness on cement hydration at early age. Cement and Concrete Research, 2021, 147, 106515. | 4.6 | 69 |
| 14 | Factors affecting the reactivity of slag at early and late ages. Cement and Concrete Research, 2021, 150, 106604. | 4.6 | 20 |
| 15 | Combined influence of carbonation and leaching on freeze-thaw resistance of limestone ternary cement concrete. Construction and Building Materials, 2021, 307, 125087. | 3.2 | 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. | 1.3 | 123 |
| 17 | Effect of carbonated cement paste on composite cement hydration and performance. Cement and Concrete Research, 2020, 134, 106090. | 4.6 | 111 |
| 18 | Kinetics of enforced carbonation of cement paste. Cement and Concrete Research, 2020, 131, 106013. | 4.6 | 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. | 3.3 | 69 |
| 20 | Phase assemblage and microstructure of cement paste subjected to enforced, wet carbonation. Cement and Concrete Research, 2020, 130, 105990. | 4.6 | 109 |
| 21 | Late hydration kinetics: Indications from thermodynamic analysis of pore solution data. Cement and Concrete Research, 2020, 129, 105975. | 4.6 | 53 |
| 22 | Carbon Capture and Utilization by mineralization of cement pastes derived from recycled concrete. Scientific Reports, 2020, 10, 5614. | 1.6 | 104 |
| 23 | Application of thermodynamic modelling to hydrated cements. Cement and Concrete Research, 2019, 123, 105779. | 4.6 | 123 |
| 24 | Structure and reactivity of synthetic CaO-Al2O3-SiO2 glasses. Cement and Concrete Research, 2019, 120, 77-91. | 4.6 | 90 |
| 25 | Early hydration of ye'elimite: Insights from thermodynamic modelling. Cement and Concrete Research, 2019, 120, 152-163. | 4.6 | 26 |
| 26 | Development of composite cements characterized by low environmental footprint. Journal of Cleaner Production, 2019, 226, 503-514. | 4.6 | 45 |
| 27 | Hydration and performance evolution of beliteâ€“ye'elimiteâ€“ferrite cement. Advances in Cement Research, 2019, 31, 124-137. | 0.7 | 30 |
| 28 | Hydration reactions and stages of clinker composed mainly of stoichiometric ye'elimite. Cement and Concrete Research, 2019, 116, 120-133. | 4.6 | 65 |
| 29 | Factors influencing the hydration kinetics of ye'elimite; effect of mayenite. Cement and Concrete Research, 2019, 116, 113-119. | 4.6 | 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. | 4.6 | 57 |
| 31 | Effect of sulfate additions on hydration and performance of ternary slag-limestone composite cements. Construction and Building Materials, 2018, 164, 451-462. | 3.2 | 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. | 4.6 | 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. | 2.0 | 68 |
| 34 | Relationship between cement composition and the freezeâ€“thaw resistance of concretes. Advances in Cement Research, 2018, 30, 387-397. | 0.7 | 9 |
| 35 | Limitations of the hydrotalcite formation in Portland composite cement pastes containing dolomite and metakaolin. Cement and Concrete Research, 2018, 105, 1-17. | 4.6 | 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. | 4.6 | 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. | 4.6 | 108 |
| 38 | Effect of sulfate content on the porosity distribution and resulting performance of composite cements. Construction and Building Materials, 2018, 186, 912-919. | 3.2 | 24 |
| 39 | Early hydration of SCM-blended Portland cements: A pore solution and isothermal calorimetry study. Cement and Concrete Research, 2017, 93, 71-82. | 4.6 | 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. | 1.3 | 101 |
| 41 | Influence of limestone on the hydration of ternary slag cements. Cement and Concrete Research, 2017, 100, 96-109. | 4.6 | 222 |
| 42 | Phase assemblage of composite cements. Cement and Concrete Research, 2017, 99, 172-182. | 4.6 | 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. | 4.6 | 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. | 3.2 | 52 |
| 45 | Effect of Slag Reactivity Influenced by Alumina Content on Hydration of Composite Cements. Journal of Advanced Concrete Technology, 2016, 14, 535-547. | 0.8 | 20 |
| 46 | Effect of retarders on the early hydration of calcium-sulpho-aluminate (CSA) type cements. Cement and Concrete Research, 2016, 84, 62-75. | 4.6 | 130 |
| 47 | The impact of alumina availability on sulfate resistance of slag composite cements. Construction and Building Materials, 2016, 119, 356-369. | 3.2 | 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. | 1.3 | 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. | 4.6 | 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. | 1.3 | 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. | 4.6 | 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. | 4.6 | 66 |
| 54 | Influence of limestone and anhydrite on the hydration of Portland cements. Cement and Concrete Composites, 2014, 46, 99-108. | 4.6 | 289 |

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|---|---|---|---|
| 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 |