Caijun Shi

List of Publications by Year
in descending order

57 papers	10,345 citations	61984 43 h-index	138484 58 g-index
59 all docs	59 docs citations	59 times ranked	4640 citing authors

#	Article	IF	Citations
1	New cements for the 21st century: The pursuit of an alternative to Portland cement. Cement and Concrete Research, 2011, 41, 750-763.	11.0	1,106
2	Advances in understanding alkali-activated materials. Cement and Concrete Research, 2015, 78, 110-125.	11.0	954
3	A review on ultra high performance concrete: Part I. Raw materials and mixture design. Construction and Building Materials, 2015, 101, 741-751.	7.2	794
4	Chloride binding of cement-based materials subjected to external chloride environment â€“ A review. Construction and Building Materials, 2009, 23, 1-13.	7.2	586
5	A review on ultra high performance concrete: Part II. Hydration, microstructure and properties. Construction and Building Materials, 2015, 96, 368-377.	7.2	554
6	Effects of steel fiber content and shape on mechanical properties of ultra high performance concrete. Construction and Building Materials, 2016, 103, 8-14.	7.2	502
7	Characteristics and pozzolanic reactivity of glass powders. Cement and Concrete Research, 2005, 35, 987-993.	11.0	462
8	Recent progress in low-carbon binders. Cement and Concrete Research, 2019, 122, 227-250.	11.0	391
9	A review on the use of waste glasses in the production of cement and concrete. Resources, Conservation and Recycling, 2007, 52, 234-247.	10.8	383
10	A calorimetric study of early hydration of alkali-slag cements. Cement and Concrete Research, 1995, 25, 1333-1346.	11.0	326
11	Static and dynamic compressive properties of ultra-high performance concrete (UHPC) with hybrid steel fiber reinforcements. Cement and Concrete Composites, 2017, 79, 148-157.	10.7	296
12	Microstructural changes in alkali-activated slag mortars induced by accelerated carbonation. Cement and Concrete Research, 2017, 100, 214-226.	11.0	246
13	Durability of alkali-activated materials in aggressive environments: A review on recent studies. Construction and Building Materials, 2017, 152, 598-613.	7.2	225
14	Investigation of mechanical properties and shrinkage of ultra-high performance concrete: Influence of steel fiber content and shape. Composites Part B: Engineering, 2019, 174, 107021.	12.0	217
15	On the measurement of evolution of structural build-up of cement paste with time by static yield stress test vs. small amplitude oscillatory shear test. Cement and Concrete Research, 2017, 99, 183-189.	11.0	174
16	How do fiber shape and matrix composition affect fiber pullout behavior and flexural properties of UHPC?. Cement and Concrete Composites, 2018, 90, 193-201.	10.7	172
17	A review on mixture design methods for geopolymer concrete. Composites Part B: Engineering, 2019, 178, 107490.	12.0	164
18	A critical review of waste glass powder â€“ Multiple roles of utilization in cement-based materials and construction products. Journal of Environmental Management, 2019, 242, 440-449.	7.8	162

#	Article	IF	Citations
19	An overview on the reuse of waste glasses in alkali-activated materials. Resources, Conservation and Recycling, 2019, 144, 297-309.	10.8	145
20	Comparative study on flexural properties of ultra-high performance concrete with supplementary cementitious materials under different curing regimes. Construction and Building Materials, 2017, 136, 307-313.	7.2	137
21	Some factors affecting early hydration of alkali-slag cements. Cement and Concrete Research, 1996, 26, 439-447.	11.0	119
22	A mixture proportioning method for the development of performance-based alkali-activated slag-based concrete. Cement and Concrete Composites, 2018, 93, 163-174.	10.7	119
23	Understanding the roles of activators towards setting and hardening control of alkali-activated slag cement. Composites Part B: Engineering, 2019, 171, 34-45.	12.0	116
24	Rheology of alkali-activated materials: A review. Cement and Concrete Composites, 2021, 121, 104061.	10.7	106
25	Composition design and performance of alkali-activated cements. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	3.1	104
26	Compressive strength, pore structure and chloride transport properties of alkali-activated slag/fly ash mortars. Cement and Concrete Composites, 2019, 104, 103392.	10.7	104
27	Uniaxial Compression Behavior of Ultra-High Performance Concrete with Hybrid Steel Fiber. Journal of Materials in Civil Engineering, 2016, 28, .	2.9	103
28	Alkali-silica reaction in waterglass-activated slag mortars incorporating fly ash and metakaolin. Cement and Concrete Research, 2018, 108, 10-19.	11.0	103
29	Effect of mineral admixtures on the structural build-up of cement paste. Construction and Building Materials, 2018, 160, 117-126.	7.2	103
30	Mechanical and fracture properties of ultra-high performance geopolymer concrete: Effects of steel fiber and silica fume. Cement and Concrete Composites, 2020, 112, 103665.	10.7	101
31	Small amplitude oscillatory shear technique to evaluate structural build-up of cement paste. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	3.1	86
32	Mixture design of concrete using simplex centroid design method. Cement and Concrete Composites, 2018, 89, 76-88.	10.7	85
33	A review on alkali-aggregate reactions in alkali-activated mortars/concretes made with alkali-reactive aggregates. Materials and Structures/Materiaux Et Constructions, 2015, 48, 621-628.	3.1	84
34	Development of ultra-high performance geopolymer concrete (UHPGC): Influence of steel fiber on mechanical properties. Cement and Concrete Composites, 2020, 112, 103670.	10.7	82
35	An overview on the efficiency of different pretreatment techniques for recycled concrete aggregate. Journal of Cleaner Production, 2020, 263, 121264.	9.3	81
36	Effects of alkali dosage and silicate modulus on alkali-silica reaction in alkali-activated slag mortars. Cement and Concrete Research, 2018, 111, 104-115.	11.0	79

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37	Chloride binding of alkali-activated slag/fly ash cements. Construction and Building Materials, 2019, 226, 21-31.	7.2	73
38	Effect of alkali dosage on alkali-silica reaction in sodium hydroxide activated slag mortars. Construction and Building Materials, 2017, 143, 16-23.	7.2	66
39	Carbonation induced phase evolution in alkali-activated slag/fly ash cements: The effect of silicate modulus of activators. Construction and Building Materials, 2019, 223, 566-582.	7.2	64
40	Autogenous and drying shrinkage of alkaliâ€activated slag mortars. Journal of the American Ceramic Society, 2019, 102, 4963-4975.	3.8	60
41	Comparison of alkaliâ€“silica reactions in alkali-activated slag and Portland cement mortars. Materials and Structures/Materiaux Et Constructions, 2015, 48, 743-751.	3.1	59
42	Effect of Na2O concentration and water/binder ratio on carbonation of alkali-activated slag/fly ash cements. Construction and Building Materials, 2021, 269, 121258.	7.2	49
43	Effects of Chloride Ion Binding on Microstructure of Cement Pastes. Journal of Materials in Civil Engineering, 2017, 29, .	2.9	43
44	Shear tests on reinforced slag-based geopolymer concrete beams with transverse reinforcement. Engineering Structures, 2020, 219, 110966.	5.3	34
45	Reaction mechanism of sulfate attack on alkali-activated slag/fly ash cements. Construction and Building Materials, 2022, 318, 126052.	7.2	34
46	The effect of different types of class F fly ashes on the mechanical properties of geopolymers cured at ambient environment. Cement and Concrete Composites, 2022, 130, 104528.	10.7	30
47	Flexural behavior of alkali-activated slag-based concrete beams. Engineering Structures, 2021, 229, 111644.	5.3	23
48	Advances in immobilization of radionuclide wastes by alkali activated cement and related materials. Cement and Concrete Composites, 2022, 126, 104377.	10.7	21
49	Chloride binding behavior of synthesized reaction products in alkali-activated slag. Composites Part B: Engineering, 2022, 238, 109919.	12.0	20
50	Mechanical properties and microstructure of circulating fluidized bed fly ash and red mud-based geopolymer. Construction and Building Materials, 2022, 340, 127599.	7.2	18
51	Evolution of elastic behavior of alite paste at early hydration stages. Journal of the American Ceramic Society, 2020, 103, 6490-6504.	3.8	17
52	New insights into the effect of gypsum on hydration and elasticity development of C3S paste during setting. Cement and Concrete Research, 2022, 159, 106860.	11.0	17
53	Design of high performance concrete with multiple performance requirements for #2 Dongting Lake Bridge. Construction and Building Materials, 2018, 165, 825-832.	7.2	14
54	A review on testing methods for autogenous shrinkage measurement of cement-based materials. Journal of Sustainable Cement-Based Materials, 2013, 2, 161-171.	3.1	10

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55	Relationship between the composition and hydration-microstructure-mechanical properties of cement-metakaolin-limestone ternary system. Construction and Building Materials, 2021, 302, 124175.	7.2	10
56	Synthesis and characteristics of pectiniform polyurethaneâ€modified polycarboxylate at room temperature. Journal of Applied Polymer Science, 2018, 135, 45873.	2.6	3
57	Effects of applied voltage on chloride binding and microstructure of cement pastes subjected to chloride solutions. Materials and Structures/Materiaux Et Constructions, 2019, 52, 1.	3.1	3