

# Hyeong-Ki Kim

## List of Publications by Year in descending order

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Version: 2024-02-01

62  
papers

3,336  
citations

126907

33  
h-index

144013

57  
g-index

62  
all docs

62  
docs citations

62  
times ranked

2426  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced effect of carbon nanotube on mechanical and electrical properties of cement composites by incorporation of silica fume. <i>Composite Structures</i> , 2014, 107, 60-69.	5.8	280
2	Workability, and mechanical, acoustic and thermal properties of lightweight aggregate concrete with a high volume of entrained air. <i>Construction and Building Materials</i> , 2012, 29, 193-200.	7.2	235
3	Use of power plant bottom ash as fine and coarse aggregates in high-strength concrete. <i>Construction and Building Materials</i> , 2011, 25, 1115-1122.	7.2	204
4	Improved piezoresistive sensitivity and stability of CNT/cement mortar composites with low water/binder ratio. <i>Composite Structures</i> , 2014, 116, 713-719.	5.8	178
5	Fresh and hardened properties of ultra-high performance concrete incorporating coal bottom ash and slag powder. <i>Construction and Building Materials</i> , 2017, 131, 459-466.	7.2	124
6	Microbially mediated calcium carbonate precipitation on normal and lightweight concrete. <i>Construction and Building Materials</i> , 2013, 38, 1073-1082.	7.2	120
7	Influence of cement flow and aggregate type on the mechanical and acoustic characteristics of porous concrete. <i>Applied Acoustics</i> , 2010, 71, 607-615.	3.3	119
8	Heating and heat-dependent mechanical characteristics of CNT-embedded cementitious composites. <i>Composite Structures</i> , 2016, 136, 162-170.	5.8	110
9	Influence of silica fume additions on electromagnetic interference shielding effectiveness of multi-walled carbon nanotube/cement composites. <i>Construction and Building Materials</i> , 2012, 30, 480-487.	7.2	109
10	Electromagnetic interference shielding characteristics and shielding effectiveness of polyaniline-coated films. <i>Thin Solid Films</i> , 2011, 519, 3492-3496.	1.8	103
11	Utilization of sieved and ground coal bottom ash powders as a coarse binder in high-strength mortar to improve workability. <i>Construction and Building Materials</i> , 2015, 91, 57-64.	7.2	97
12	Coal bottom ash in field of civil engineering: A review of advanced applications and environmental considerations. <i>KSCE Journal of Civil Engineering</i> , 2015, 19, 1802-1818.	1.9	83
13	Acoustic absorption modeling of porous concrete considering the gradation and shape of aggregates and void ratio. <i>Journal of Sound and Vibration</i> , 2010, 329, 866-879.	3.9	77
14	Flow, water absorption, and mechanical characteristics of normal- and high-strength mortar incorporating fine bottom ash aggregates. <i>Construction and Building Materials</i> , 2012, 26, 249-256.	7.2	75
15	Effects of coarser fine aggregate on tensile properties of ultra high performance concrete. <i>Cement and Concrete Composites</i> , 2017, 84, 28-35.	10.7	74
16	Utilization of power plant bottom ash as aggregates in fiber-reinforced cellular concrete. <i>Waste Management</i> , 2010, 30, 274-284.	7.4	73
17	Alkali-activated, cementless, controlled low-strength materials (CLSM) utilizing industrial by-products. <i>Construction and Building Materials</i> , 2013, 49, 738-746.	7.2	73
18	Flexural stress and crack sensing capabilities of MWNT/cement composites. <i>Composite Structures</i> , 2017, 175, 86-100.	5.8	67

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19	The role of carbon nanotube on hydration kinetics and shrinkage of cement composite. Composites Part B: Engineering, 2019, 169, 55-64.	12.0	63
20	Effects of quartz-based mine tailings on characteristics and leaching behavior of ultra-high performance concrete. Construction and Building Materials, 2018, 166, 110-117.	7.2	62
21	Abrasion resistance of ultra high performance concrete incorporating coarser aggregate. Construction and Building Materials, 2018, 165, 11-16.	7.2	62
22	Chloride-induced corrosion of steel fiber near the surface of ultra-high performance concrete and its effect on flexural behavior with various thickness. Construction and Building Materials, 2019, 224, 206-213.	7.2	62
23	Effect of chloride content on mechanical properties of ultra high performance concrete. Cement and Concrete Composites, 2017, 84, 175-187.	10.7	61
24	Chloride penetration monitoring in reinforced concrete structure using carbon nanotube/cement composite. Construction and Building Materials, 2015, 96, 29-36.	7.2	60
25	Carbon nanotube/cement composites for crack monitoring of concrete structures. Composite Structures, 2017, 180, 741-750.	5.8	60
26	Utilization of excavated soil in coal ash-based controlled low strength material (CLSM). Construction and Building Materials, 2016, 124, 598-605.	7.2	59
27	Improved chloride resistance of high-strength concrete amended with coal bottom ash for internal curing. Construction and Building Materials, 2014, 71, 334-343.	7.2	57
28	Use of recycled aggregates as internal curing agent for alkali-activated slag system. Construction and Building Materials, 2018, 159, 286-296.	7.2	56
29	Effects of a defoamer on the compressive strength and tensile behavior of alkali-activated slag-based cementless composite reinforced by polyethylene fiber. Composite Structures, 2017, 172, 166-172.	5.8	50
30	Utilization of circulating fluidized bed combustion ash in producing controlled low-strength materials with cement or sodium carbonate as activator. Construction and Building Materials, 2018, 159, 642-651.	7.2	44
31	Internal curing effect of raw and carbonated recycled aggregate on the properties of high-strength slag-cement mortar. Construction and Building Materials, 2018, 165, 64-71.	7.2	40
32	Recycling of arsenic-rich mine tailings in controlled low-strength materials. Journal of Cleaner Production, 2016, 118, 151-161.	9.3	38
33	Examining the potential of calcined oyster shell waste as additive in high volume slag cement. Construction and Building Materials, 2020, 230, 116973.	7.2	38
34	Utilization of by-product in controlled low-strength material for geothermal systems: Engineering performances, environmental impact, and cost analysis. Journal of Cleaner Production, 2018, 172, 909-920.	9.3	36
35	Effects of the type of activator on the self-healing ability of fiber-reinforced alkali-activated slag-based composites at an early age. Construction and Building Materials, 2019, 224, 980-994.	7.2	24
36	Fluctuation of electrical properties of carbon-based nanomaterials/cement composites: Case studies and parametric modeling. Cement and Concrete Composites, 2019, 102, 55-70.	10.7	23

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37	Effects of crumb rubber particles on mechanical properties and sustainability of ultra-high-ductile slag-based composites. <i>Construction and Building Materials</i> , 2021, 272, 121959.	7.2	23
38	Use of circulating fluidized bed combustion bottom ash as a secondary activator in high-volume slag cement. <i>Construction and Building Materials</i> , 2020, 234, 117240.	7.2	22
39	Mechanical properties and self-healing capacity of eco-friendly ultra-high ductile fiber-reinforced slag-based composites. <i>Composite Structures</i> , 2019, 229, 111401.	5.8	21
40	Incorporation of CFBC ash in sodium silicate-activated slag system: Modification of microstructures and its effect on shrinkage. <i>Cement and Concrete Research</i> , 2019, 123, 105771.	11.0	19
41	Flowability and electrical properties of cement composites with mechanical dispersion of carbon nanotube. <i>Construction and Building Materials</i> , 2021, 293, 123436.	7.2	19
42	Hydration kinetics modeling of sodium silicate-activated slag: A comparative study. <i>Construction and Building Materials</i> , 2020, 242, 118144.	7.2	17
43	Evaluation of time to shrinkage-induced crack initiation in OPC and slag cement matrices incorporating circulating fluidized bed combustion bottom ash. <i>Construction and Building Materials</i> , 2020, 257, 119507.	7.2	16
44	Utilization of controlled low strength material (CLSM) as a novel grout for geothermal systems: Laboratory and field experiments. <i>Journal of Building Engineering</i> , 2020, 29, 101110.	3.4	10
45	Parametric modeling of autogenous shrinkage of sodium silicate-activated slag. <i>Construction and Building Materials</i> , 2020, 262, 120747.	7.2	10
46	On the expansive cracking of a cement matrix containing atomized basic oxygen furnace slag with a metallic iron. <i>Construction and Building Materials</i> , 2020, 264, 119806.	7.2	8
47	Effect of chloride penetration on electrical resistivity of CNT/CF/cement composites and its application as chloride sensor for reinforced mortar. <i>Cement and Concrete Composites</i> , 2022, 133, 104662.	10.7	8
48	A Study on Mechanical Characteristics of Cement Composites Fabricated with Nano-Silica and Carbon Nanotube. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 152.	2.5	7
49	Self-healing of Portland and slag cement binder systems incorporating circulating fluidized bed combustion bottom ash. <i>Construction and Building Materials</i> , 2022, 314, 125571.	7.2	7
50	Electrical resistivity stability of CNT/cement composites after further hydration: A simple evaluation with an accelerated method. <i>Construction and Building Materials</i> , 2022, 317, 125830.	7.2	7
51	Mechanical and Fiber-Bridging Behavior of Slag-Based Composite with High Tensile Ductility. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4300.	2.5	6
52	On the quantification of degrees of reaction and hydration of sodium silicate-activated slag cements. <i>Materials and Structures/Materiaux Et Constructions</i> , 2020, 53, 1.	3.1	6
53	Practical considerations of porosity, strength, and acoustic absorption of structural pervious concrete. <i>Case Studies in Construction Materials</i> , 2021, 15, e00764.	1.7	6
54	Mechanical and Chemical Characteristics of Bottom Ash Aggregates Cold-bonded with Fly Ash. <i>Journal of the Korean Ceramic Society</i> , 2014, 51, 57-63.	2.3	5

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55	Properties of Normal-Strength Mortar Containing Coarsely-Crushed Bottom Ash Considering Standard Particle Size Distribution of Fine Aggregate. Journal of the Korea Concrete Institute, 2015, 27, 531-539.	0.2	5
56	Feasibility study on measurement of water absorption in fine aggregate with macroporous surface via centrifugal compaction. Construction and Building Materials, 2015, 95, 421-430.	7.2	4
57	Effect of Carbonation on Abrasion Resistance of Alkali-Activated Slag with Various Activators. Materials, 2019, 12, 2812.	2.9	4
58	Deep-Learning-Based Segmentation of Fresh or Young Concrete Sections from Images of Construction Sites. Materials, 2021, 14, 6311.	2.9	4
59	Coal bottom ash. , 2022, , 29-60.		3
60	Effect of fiber addition on fresh and hardened properties of spun cast concrete. Construction and Building Materials, 2016, 125, 306-315.	7.2	2
61	Structural Performance and Reinforcement Improvement of Structural Walls Using Strain-Hardening Cementitious Composites. Sustainability, 2021, 13, 3607.	3.2	1
62	Effects of Crushed Coal Bottom Ash on the Properties of Mortar with Various Water-to-binder Ratios. Journal of the Korean Institute of Resources Recycling, 2016, 25, 29-40.	0.4	0