

Zhengwu Jiang

List of Publications by Year in descending order

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40
papers

1,385
citations

394421

19
h-index

345221

36
g-index

40
all docs

40
docs citations

40
times ranked

1075
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent Advances in Intrinsic Self-Healing Cementitious Materials. <i>Advanced Materials</i> , 2018, 30, e1705679.	21.0	197
2	Influence of mineral additives and environmental conditions on the self-healing capabilities of cementitious materials. <i>Cement and Concrete Composites</i> , 2015, 57, 116-127.	10.7	170
3	Autogenous relative humidity change and autogenous shrinkage of high-performance cement pastes. <i>Cement and Concrete Research</i> , 2005, 35, 1539-1545.	11.0	128
4	Self-Healing Efficiency of Cementitious Materials Containing Microcapsules Filled with Healing Adhesive: Mechanical Restoration and Healing Process Monitored by Water Absorption. <i>PLoS ONE</i> , 2013, 8, e81616.	2.5	78
5	Preparation and Properties of Melamine Urea-Formaldehyde Microcapsules for Self-Healing of Cementitious Materials. <i>Materials</i> , 2016, 9, 152.	2.9	74
6	Non-Ureolytic Bacterial Carbonate Precipitation as a Surface Treatment Strategy on Cementitious Materials. <i>Journal of Materials in Civil Engineering</i> , 2014, 26, 983-991.	2.9	73
7	A multiphase micromechanical model for hybrid fiber reinforced concrete considering the aggregate and ITZ effects. <i>Construction and Building Materials</i> , 2016, 114, 839-850.	7.2	68
8	Internal relative humidity distribution in high-performance cement paste due to moisture diffusion and self-desiccation. <i>Cement and Concrete Research</i> , 2006, 36, 320-325.	11.0	62
9	Migration and transformation of sulfur in the municipal sewage sludge during disposal in cement kiln. <i>Waste Management</i> , 2018, 77, 537-544.	7.4	62
10	A multi-phase micromechanical model for unsaturated concrete repaired using the electrochemical deposition method. <i>International Journal of Solids and Structures</i> , 2013, 50, 3875-3885.	2.7	48
11	Investigation on the potential of waste cooking oil as a grinding aid in Portland cement. <i>Journal of Environmental Management</i> , 2016, 184, 545-551.	7.8	47
12	Effects of Calcium Source on Biochemical Properties of Microbial CaCO ₃ Precipitation. <i>Frontiers in Microbiology</i> , 2015, 6, 1366.	3.5	37
13	Healing effectiveness of cracks rehabilitation in reinforced concrete using electrodeposition method. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2008, 23, 917-922.	1.0	35
14	Differential-scheme based micromechanical framework for saturated concrete repaired by the electrochemical deposition method. <i>Materials and Structures/Materiaux Et Constructions</i> , 2016, 49, 5183-5193.	3.1	27
15	Micromechanical framework for saturated concrete repaired by the electrochemical deposition method with interfacial transition zone effects. <i>International Journal of Damage Mechanics</i> , 2017, 26, 210-228.	4.2	27
16	Approach to the management of magnesium slag via the production of Portland cement clinker. <i>Journal of Material Cycles and Waste Management</i> , 2018, 20, 1701-1709.	3.0	26
17	Self-healing of cracks in concrete with various crystalline mineral additives in underground environment. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2014, 29, 938-944.	1.0	24
18	A multiphase micromechanical model for unsaturated concrete repaired by electrochemical deposition method with the bonding effects. <i>International Journal of Damage Mechanics</i> , 2018, 27, 1307-1324.	4.2	24

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19	Differential-scheme based micromechanical framework for unsaturated concrete repaired by the electrochemical deposition method. <i>Acta Mechanica</i> , 2017, 228, 415-431.	2.1	20
20	Reaction-degree-based multi-scale predictions for the effective properties of ultra-high-performance concrete. <i>Magazine of Concrete Research</i> , 2021, , 1-12.	2.0	19
21	Prediction of Compressive Strength of Concrete with Manufactured Sand by Ensemble Classification and Regression Tree Method. <i>Journal of Materials in Civil Engineering</i> , 2021, 33, .	2.9	19
22	Stochastic micromechanical predictions for the probabilistic behavior of saturated concrete repaired by the electrochemical deposition method. <i>International Journal of Damage Mechanics</i> , 2020, 29, 435-453.	4.2	18
23	Production of recycled cellulose fibers from waste paper via ultrasonic wave processing. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	2.6	11
24	Crack Extension and Possibility of Debonding in Encapsulation-Based Self-Healing Materials. <i>Materials</i> , 2017, 10, 589.	2.9	11
25	Insight into the Mechanical Performance of the UHPC Repaired Cementitious Composite System after Exposure to High Temperatures. <i>Materials</i> , 2021, 14, 4095.	2.9	11
26	Effect of different grinding aids on property of granulated blast furnace slag powder. <i>Materials and Structures/Materiaux Et Constructions</i> , 2015, 48, 3885-3893.	3.1	10
27	Interactive Effect of Mechanical Fatigue Load and the Fatigue Effect of Freeze-Thaw on Combined Damage of Concrete. <i>Journal of Materials in Civil Engineering</i> , 2015, 27, .	2.9	10
28	Silicon carbide waste as a source of mixture materials for cement mortar. <i>Frontiers of Environmental Science and Engineering</i> , 2017, 11, 1.	6.0	9
29	Preparation and Self-Healing Properties of Clinker/PVP Microsphere in Cement Paste. <i>Materials</i> , 2020, 13, 589.	2.9	7
30	Properties of bamboo charcoal and cement-based composite materials and their microstructure. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2017, 32, 1374-1378.	1.0	6
31	Preparation and Characterization of Self-Healing Mortar Based on "Build-In" Carbonation. <i>Materials</i> , 2020, 13, 644.	2.9	6
32	Electrochemical deposition induced continuum damage-healing framework for the cementitious composite. <i>International Journal of Damage Mechanics</i> , 0, , 105678952199187.	4.2	6
33	Hybrid photoanode films based on sparse ZnO rod array-TiO ₂ nanoparticles in dye-sensitized solar cells. <i>Science China: Physics, Mechanics and Astronomy</i> , 2012, 55, 1183-1188.	5.1	5
34	Effect of Waste Paper Fiber on Properties of Cement-based Mortar and Relative Mechanism. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2018, 33, 419-426.	1.0	5
35	Self-regulating Humidity Activated Carbon Material Prepared from Bamboo for the Room. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2019, 34, 267-274.	1.0	2
36	An Improved Micromechanical Framework for Saturated Concrete Repaired by the Electrochemical Deposition Method considering the Imperfect Bonding. <i>Journal of Engineering (United States)</i> , 2016, 2016, 1-11.	1.0	1

#	ARTICLE	IF	CITATIONS
37	Design and Preparation of White High-Strength Concrete with Ground Limestone Powder by Means of Response Surface Methodology. <i>Materials</i> , 2022, 15, 3359.	2.9	1
38	Experimental Application of Cement-Stabilized Pavement Base with Low-Grade Metamorphic Rock Aggregates. <i>Buildings</i> , 2022, 12, 589.	3.1	1
39	Some superconvergence results of high-degree finite element method for a second order elliptic equation with variable coefficients. <i>Open Mathematics</i> , 2014, 12, .	1.0	0
40	Modification on the Performance of the Hemihydrate Gypsum with the Plant Source Polymer of Dry Matcha Powder. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2018, 33, 1452-1458.	1.0	0