Peng Zhang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8432606/publications.pdf

Version: 2024-02-01

61 papers	2,503 citations	186209 28 h-index	197736 49 g-index
61 all docs	61 docs citations	61 times ranked	1563 citing authors

#	Article	IF	Citations
1	Influence of freeze-thaw cycles on capillary absorption and chloride penetration into concrete. Cement and Concrete Research, 2017, 100, 60-67.	4.6	323
2	Water repellent surface impregnation for extension of service life of reinforced concrete structures in marine environments: The role of cracks. Cement and Concrete Composites, 2010, 32, 101-109.	4.6	201
3	Water absorption and chloride diffusivity of concrete under the coupling effect of uniaxial compressive load and freezeâ€“thaw cycles. Construction and Building Materials, 2019, 209, 566-576.	3.2	161
4	Application of neutron imaging to investigate fundamental aspects of durability of cement-based materials: A review. Cement and Concrete Research, 2018, 108, 152-166.	4.6	136
5	Alternation of traditional cement mortars using fly ash-based geopolymer mortars modified by slag. Journal of Cleaner Production, 2018, 203, 746-756.	4.6	115
6	Neutron imaging of water penetration into cracked steel reinforced concrete. Physica B: Condensed Matter, 2010, 405, 1866-1871.	1.3	100
7	Neutron radiography, a powerful method to determine time-dependent moisture distributions in concrete. Nuclear Engineering and Design, 2011, 241, 4758-4766.	0.8	90
8	Steel reinforcement corrosion in concrete under combined actions: The role of freeze-thaw cycles, chloride ingress, and surface impregnation. Construction and Building Materials, 2017, 148, 113-121.	3.2	84
9	Water and chloride ions migration in porous cementitious materials: An experimental and molecular dynamics investigation. Cement and Concrete Research, 2017, 102, 161-174.	4.6	83
10	Effect of Air Entrainment on the Mechanical Properties, Chloride Migration, and Microstructure of Ordinary Concrete and Fly Ash Concrete. Journal of Materials in Civil Engineering, 2018, 30, .	1.3	78
11	Water transport in the nano-pore of the calcium silicate phase: reactivity, structure and dynamics. Physical Chemistry Chemical Physics, 2015, 17, 1411-1423.	1.3	75
12	Influence of exposure environments and moisture content on water repellency of surface impregnation of cement-based materials. Journal of Materials Research and Technology, 2020, 9, 12115-12125.	2.6	71
13	Comparison of Mercury Intrusion Porosimetry and multi-scale X-ray CT on characterizing the microstructure of heat-treated cement mortar. Materials Characterization, 2020, 160, 110085.	1.9	66
14	Coupled effects of sustained compressive loading and freezeâ€“thaw cycles on water penetration into concrete. Structural Concrete, 2021, 22, E944.	1.5	52
15	Study on the catalytic pyrolysis of coal volatiles over hematite for the production of light tar. Journal of Analytical and Applied Pyrolysis, 2020, 151, 104927.	2.6	49
16	Application of neutron radiography in observing and quantifying the time-dependent moisture distributions in multi-cracked cement-based composites. Cement and Concrete Composites, 2017, 78, 13-20.	4.6	47
17	Insights on Capillary Adsorption of Aqueous Sodium Chloride Solution in the Nanometer Calcium Silicate Channel: A Molecular Dynamics Study. Journal of Physical Chemistry C, 2017, 121, 13786-13797.	1.5	47
18	Self-healing behaviour of multiple microcracks of strain hardening cementitious composites (SHCC). Construction and Building Materials, 2018, 169, 705-715.	3.2	46

#	Article	IF	Citations
19	A novel Zn(<scp>ii</scp>) dithiocarbamate/ZnS nanocomposite for highly efficient Cr⁶⁺ removal from aqueous solutions. RSC Advances, 2017, 7, 35075-35085.	1.7	44
20	Application of Ag/AgCl Sensor for Chloride Monitoring of Mortar under Dry-Wet Cycles. Sensors, 2020, 20, 1394.	2.1	44
21	Application of three self-developed ECT sensors for monitoring the moisture content in sand and mortar. Construction and Building Materials, 2021, 267, 121008.	3.2	40
22	Application of ferronickel slag as fine aggregate in recycled aggregate concrete and the effects on transport properties. Journal of Cleaner Production, 2021, 304, 127149.	4.6	40
23	Collaborative disposal of multisource solid waste: Influence of an admixture on the properties, pore structure and durability of foam concrete. Journal of Materials Research and Technology, 2021, 14, 1778-1790.	2.6	35
24	Catalytic upgrading of coal volatiles with Fe2O3 and hematite by TG-FTIR and Py-GC/MS. Fuel, 2022, 313, 122667.	3.4	33
25	Structural, dynamic and mechanical evolution of water confined in the nanopores of disordered calcium silicate sheets. Microfluidics and Nanofluidics, 2015, 19, 1309-1323.	1.0	31
26	Effects of different composite mineral admixtures on the early hydration and long-term properties of cement-based materials: A comparative study. Construction and Building Materials, 2021, 294, 123547.	3.2	31
27	Application of Natural Plant Fibers in Cement-Based Composites and the Influence on Mechanical Properties and Mass Transport. Materials, 2019, 12, 3498.	1.3	29
28	Effects of magnesia expansive agents on the self-healing performance of microcracks in strain-hardening cement-based composites (SHCC). Materials Today Communications, 2020, 25, 101421.	0.9	29
29	3D neutron tomography of steel reinforcement corrosion in cement-based composites. Construction and Building Materials, 2018, 162, 561-565.	3.2	28
30	Bond behaviour of reinforced recycled concrete after rapid freezing-thawing cycles. Cold Regions Science and Technology, 2019, 157, 133-138.	1.6	28
31	Water-resistance properties of high-belite sulphoaluminate cement-based ultra-light foamed concrete treated with different water repellents. Construction and Building Materials, 2019, 228, 116798.	3.2	25
32	Properties and activation modification of eco-friendly cementitious materials incorporating high-volume hydrated cement powder from construction waste. Construction and Building Materials, 2022, 316, 125788.	3.2	24
33	Influences of thermal damage on water transport in heat-treated cement mortar: Experimental and theoretical analyses. Construction and Building Materials, 2021, 288, 123100.	3.2	22
34	Bond behavior of steel bar embedded in recycled coarse aggregate concrete under lateral compression load. Construction and Building Materials, 2017, 150, 529-537.	3.2	21
35	Visualization of rapid penetration of water into cracked cement mortar using neutron radiography. Materials Letters, 2017, 195, 1-4.	1.3	20
36	Smart Campuses: Extensive Review of the Last Decade of Research and Current Challenges. IEEE Access, 2021, 9, 124200-124234.	2.6	19

#	Article	IF	Citations
37	Visualization and quantification of water movement in porous cement-based materials by real time thermal neutron radiography: Theoretical analysis and experimental study. Science China Technological Sciences, 2010, 53, 1198-1207.	2.0	15
38	Effect of Nano-CaCO₃ on the Mechanical Properties and Durability of Concrete Incorporating Fly Ash. Advances in Materials Science and Engineering, 2020, 2020, 1-10.	1.0	14
39	Quasi-elastic neutron scattering (QENS) and its application for investigating the hydration of cement-based materials: State-of-the-art. Materials Characterization, 2021, 172, 110890.	1.9	14
40	A novel microporous amorphous-ZnO@TiO₂/graphene ternary nanocomposite with enhanced photocatalytic activity. RSC Advances, 2017, 7, 36787-36792.	1.7	13
41	Performance Analysis of a Recycled Concrete Interfacial Transition Zone in a Rapid Carbonization Environment. Advances in Materials Science and Engineering, 2018, 2018, 1-8.	1.0	13
42	Preparation and Physical Properties of High-Belite Sulphoaluminate Cement-Based Foam Concrete Using an Orthogonal Test. Materials, 2019, 12, 984.	1.3	12
43	Bond Stress between Steel-Reinforced Bars and Fly Ash-Based Geopolymer Concrete. Advances in Materials Science and Engineering, 2020, 2020, 1-11.	1.0	11
44	The Effect of Water Repellent Surface Impregnation on Durability of Cement-Based Materials. Advances in Materials Science and Engineering, 2017, 2017, 1-9.	1.0	9
45	Influence of substrate moisture conditions on microstructure of repair mortar and water imbibition in repair-old mortar composites. Measurement: Journal of the International Measurement Confederation, 2021, 183, 109769.	2.5	7
46	Aqueous processing and effects of V2O5 on microwave dielectric properties of multilayer Li1.075Nb0.625Ti0.45O3 ceramics. Electronic Materials Letters, 2014, 10, 111-116.	1.0	5
47	Preparation and Characteristics of Integral Water Repellent Cement-Based Materials. Materials Science Forum, 2011, 675-677, 1189-1192.	0.3	4
48	Carbonation of Water Repellent-Treated Concrete. Advances in Materials Science and Engineering, 2017, 2017, 1-8.	1.0	4
49	Preparation and dieletrical properties of Li1.075Nb0.625Ti0.45O3 powders by hydrothermal method. Electronic Materials Letters, 2012, 8, 401-404.	1.0	3
50	Capillary Absorption Dynamics for Cementitious Material Considering Water Evaporation and Tortuosity of Capillary Pores. Advanced Materials Research, 0, 821-822, 1213-1218.	0.3	3
51	Steel reinforcement corrosion in strain hardening cementitious composites (SHCC): the role of multiple microcracks and surface impregnation. Journal of Sustainable Cement-Based Materials, 2022, 11, 452-464.	1.7	3
52	Study on steep slope stability of coal mine under open-pit and underground mining. , 2011, , .		2
53	Self-healing of Cracks in Strain Hardening Cementitious Composites Under Different Environmental Conditions. RILEM Bookseries, 2018, , 600-607.	0.2	2
54	Preparation of SiC_w/Al₂O₃ Composite Sheets through Gel-Tape-Casting Process. Materials Science Forum, 2011, 675-677, 119-122.	0.3	1

#	Article	IF	Citations
55	Influence of the Amount of Steel Fibers on Fracture Energy and Drying Shrinkage of HPFRCC. Advances in Materials Science and Engineering, 2020, 2020, 1-15.	1.0	1
56	Research and application of an extended role-based access control. , 2011, , .		0
57	Study on Ultra-Strength Mortar Prepared with Mineral Admixture. Materials Science Forum, 2011, 675-677, 1073-1076.	0.3	0
58	Alkali Reactivity of Construction Spoil Gravel from Qingdao Jiaozhou Bay Subsea Tunnel. Applied Mechanics and Materials, 0, 94-96, 1391-1394.	0.2	0
59	Surface Impregnation of Concrete Damaged by Elevated Temperature. Materials Science Forum, 0, 675-677, 567-570.	0.3	0
60	Influence of Ox Blood on Water Absorption of and Chloride Penetration into Concrete. Advanced Materials Research, 0, 261-263, 496-500.	0.3	0
61	Research on Modification of Steady State Migration Test for Cementitious Materials. Key Engineering Materials, 2013, 539, 166-171.	0.4	0