

# Waiching Tang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

80  
papers

2,043  
citations

26  
h-index

43  
g-index

85  
ext. papers

2,643  
ext. citations

5.1  
avg, IF

5.46  
L-index

#	Paper	IF	Citations
80	Red Mud <b>2022</b> , 577-606		
79	Experimental study on thermal response of a PCM energy pile in unsaturated clay. <i>Renewable Energy</i> , <b>2022</b> , 185, 790-803	8.1	0
78	Experimental Study of 3D Concrete Printing Configurations Based on the Buildability Evaluation. <i>Applied Sciences (Switzerland)</i> , <b>2022</b> , 12, 2939	2.6	3
77	Effect of Architectural Building Design Parameters on Thermal Comfort and Energy Consumption in Higher Education Buildings. <i>Buildings</i> , <b>2022</b> , 12, 329	3.2	3
76	Prediction of Self-Healing of Engineered Cementitious Composite Using Machine Learning Approaches. <i>Applied Sciences (Switzerland)</i> , <b>2022</b> , 12, 3605	2.6	2
75	Modelling the Roles of Community-Based Organisations in Post-Disaster Transformative Adaptation. <i>GeoHazards</i> , <b>2022</b> , 3, 178-198	2.3	
74	Evaluation of design options for green product development: a combined Cuckoo search and life cycle assessment approach. <i>International Journal of Life Cycle Assessment</i> , <b>2022</b> , 27, 665	4.6	
73	Effects of thermal conductive fillers on energy storage performance of Form-Stable phase change material integrated in Cement-Based composites. <i>Applied Thermal Engineering</i> , <b>2022</b> , 212, 118570	5.8	0
72	Experimental investigation on mechanical properties of clay soil reinforced with carbon fiber. <i>Construction and Building Materials</i> , <b>2021</b> , 280, 122517	6.7	6
71	Parametric analysis and optimisation of energy efficiency of a lightweight building integrated with different configurations and types of PCM. <i>Renewable Energy</i> , <b>2021</b> , 168, 865-877	8.1	16
70	Effects of nano silica on the properties of cement-based materials: A comprehensive review. <i>Construction and Building Materials</i> , <b>2021</b> , 282, 122715	6.7	16
69	Influence and mechanisms of active silica in solid waste on hydration of tricalcium aluminate in the resulting composite cement. <i>Materials Today Communications</i> , <b>2021</b> , 27, 102262	2.5	1
68	Hydration Characteristics of Tricalcium Aluminate in the Presence of Nano-Silica. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	6
67	Mechanical and Thermo-Physical Performances of Gypsum-Based PCM Composite Materials Reinforced with Carbon Fiber. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 468	2.6	2
66	Development of novel form-stable phase change material (PCM) composite using recycled expanded glass for thermal energy storage in cementitious composite. <i>Renewable Energy</i> , <b>2021</b> , 175, 14-28	8.1	10
65	Modelling transformative adaptation: Case of post-earthquake Lyttelton, New Zealand. <i>Environmental Science and Policy</i> , <b>2021</b> , 125, 247-262	6.2	1
64	Chemicals of concern in construction and demolition waste fine residues: A systematic literature review. <i>Journal of Environmental Management</i> , <b>2021</b> , 299, 113654	7.9	1

63	Thermo-Mechanical Performance of a Phase Change Energy Pile in Saturated Sand. <i>Symmetry</i> , <b>2020</b> , 12, 1781	2.7	6
62	Static liquefaction behavior of short discrete carbon fiber reinforced silty sand. <i>Geosynthetics International</i> , <b>2020</b> , 27, 606-619	3.3	4
61	Experimental Investigation of Chloride Uptake Performances of Hydrocalumite-Like Ca-Al LDHs with Different Microstructures. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 3760	2.6	4
60	Development of a stable inorganic phase change material for thermal energy storage in buildings. <i>Solar Energy Materials and Solar Cells</i> , <b>2020</b> , 208, 110420	6.4	15
59	Thermal and Mechanical Properties of Cement Mortar Composite Containing Recycled Expanded Glass Aggregate and Nano Titanium Dioxide. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 2246	2.6	16
58	Thermal performance and corrosion resistance of structural-functional concrete made with inorganic PCM. <i>Construction and Building Materials</i> , <b>2020</b> , 249, 118768	6.7	18
57	Properties of self-compacting concrete with recycled concrete aggregates <b>2020</b> , 219-248		4
56	Study on the interaction mechanism between slags and alkali silicate activators: A hydration kinetics approach. <i>Construction and Building Materials</i> , <b>2020</b> , 250, 118900	6.7	8
55	Effect of carbon nanotubes on properties of alkali activated slag [A mechanistic study. <i>Journal of Cleaner Production</i> , <b>2020</b> , 245, 119021	10.3	9
54	Influence of Surface Treatment of Recycled Aggregates on Mechanical Properties and Bond Strength of Self-Compacting Concrete. <i>Sustainability</i> , <b>2019</b> , 11, 4182	3.6	15
53	Investigation of the Role of Nano-Titanium on Corrosion and Thermal Performance of Structural Concrete with Macro-Encapsulated PCM. <i>Molecules</i> , <b>2019</b> , 24,	4.8	10
52	Influence of red mud on mechanical and durability performance of self-compacting concrete. <i>Journal of Hazardous Materials</i> , <b>2019</b> , 379, 120802	12.8	30
51	Development of high performance PCM cement composites for passive solar buildings. <i>Energy and Buildings</i> , <b>2019</b> , 194, 33-45	7	27
50	Development of thermal energy storage lightweight structural cementitious composites by means of macro-encapsulated PCM. <i>Construction and Building Materials</i> , <b>2019</b> , 225, 182-195	6.7	27
49	A practical ranking system for evaluation of industry viable phase change materials for use in concrete. <i>Construction and Building Materials</i> , <b>2018</b> , 177, 272-286	6.7	16
48	Development of vegetation concrete technology for slope protection and greening. <i>Construction and Building Materials</i> , <b>2018</b> , 179, 605-613	6.7	22
47	Experimental study of carbon fiber reinforced alkali-activated slag composites with micro-encapsulated PCM for energy storage. <i>Construction and Building Materials</i> , <b>2018</b> , 161, 442-451	6.7	37
46	Discussion and experiments on the limits of chloride, sulphate and shell content in marine fine aggregates for concrete. <i>Construction and Building Materials</i> , <b>2018</b> , 159, 725-733	6.7	12

45	Experimental Investigation on Graphene Oxide/SrCl <sub>2</sub> ·6H <sub>2</sub> O Modified CaCl <sub>2</sub> ·6H <sub>2</sub> O and the Resulting Thermal Performances. <i>Materials</i> , <b>2018</b> , 11,	3.5	5
44	Effect of carbon fiber and nanosilica on shear properties of silty soil and the mechanisms. <i>Construction and Building Materials</i> , <b>2018</b> , 189, 286-295	6.7	32
43	Influence of red mud on fresh and hardened properties of self-compacting concrete. <i>Construction and Building Materials</i> , <b>2018</b> , 178, 288-300	6.7	56
42	Effect of carbon fibers grafted with carbon nanotubes on mechanical properties of cement-based composites. <i>Construction and Building Materials</i> , <b>2018</b> , 181, 713-720	6.7	31
41	Mechanical and Durability Properties of Concrete Using Dredged Marine Sand. <i>Materials Science Forum</i> , <b>2017</b> , 890, 406-410	0.4	1
40	Experimental observations and SVM-based prediction of properties of polypropylene fibres reinforced self-compacting composites incorporating nano-CuO. <i>Construction and Building Materials</i> , <b>2017</b> , 143, 589-598	6.7	36
39	Development of novel composite PCM for thermal energy storage using CaCl <sub>2</sub> ·6H <sub>2</sub> O with graphene oxide and SrCl <sub>2</sub> ·6H <sub>2</sub> O. <i>Energy and Buildings</i> , <b>2017</b> , 156, 163-172	7	31
38	Effect of Graphene Oxide (GO) on the Morphology and Microstructure of Cement Hydration Products. <i>Nanomaterials</i> , <b>2017</b> , 7,	5.4	21
37	Engineering and microstructural assessment of fibre-reinforced self-compacting concrete containing recycled coarse aggregate. <i>Journal of Cleaner Production</i> , <b>2017</b> , 168, 605-613	10.3	91
36	A critical review on research progress of graphene/cement based composites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2017</b> , 102, 273-296	8.4	165
35	Development of structural-functional integrated energy storage concrete with innovative macro-encapsulated PCM by hollow steel ball. <i>Applied Energy</i> , <b>2017</b> , 185, 107-118	10.7	78
34	Structural-functional integrated concrete with macro-encapsulated inorganic PCM <b>2017</b> ,		6
33	Development of Vegetation-Pervious Concrete in Grid Beam System for Soil Slope Protection. <i>Materials</i> , <b>2017</b> , 10,	3.5	13
32	Chloride Diffusion and Acid Resistance of Concrete Containing Zeolite and Tuff as Partial Replacements of Cement and Sand. <i>Materials</i> , <b>2017</b> , 10,	3.5	32
31	Effect of Nano-CuO on Engineering and Microstructure Properties of Fibre-Reinforced Mortars Incorporating Metakaolin: Experimental and Numerical Studies. <i>Materials</i> , <b>2017</b> , 10,	3.5	11
30	Effect of Summer Ventilation on the Thermal Performance and Energy Efficiency of Buildings Utilizing Phase Change Materials. <i>Energies</i> , <b>2017</b> , 10, 1214	3.1	10
29	Evaluation of carbonation resistance of paint coated concrete for buildings. <i>Construction and Building Materials</i> , <b>2016</b> , 107, 299-306	6.7	20
28	Development of Hollow Steel Ball Macro-Encapsulated PCM for Thermal Energy Storage Concrete. <i>Materials</i> , <b>2016</b> , 9,	3.5	25

27	Properties of Self-Compacting Concrete with Recycled Coarse Aggregate. <i>Advances in Materials Science and Engineering</i> , <b>2016</b> , 2016, 1-11	1.5	23
26	Experimental Investigation of the Effect of Manufactured Sand and Lightweight Sand on the Properties of Fresh and Hardened Self-Compacting Lightweight Concretes. <i>Materials</i> , <b>2016</b> , 9,	3.5	6
25	Fracture Properties of Polystyrene Aggregate Concrete after Exposure to High Temperatures. <i>Materials</i> , <b>2016</b> , 9,	3.5	11
24	Study on Utilization of Carboxyl Group Decorated Carbon Nanotubes and Carbonation Reaction for Improving Strengths and Microstructures of Cement Paste. <i>Nanomaterials</i> , <b>2016</b> , 6,	5.4	13
23	Robust evaluation of self-healing efficiency in cementitious materials – A review. <i>Construction and Building Materials</i> , <b>2015</b> , 81, 233-247	6.7	83
22	Experimental study on effects of CO2 concentrations on concrete carbonation and diffusion mechanisms. <i>Construction and Building Materials</i> , <b>2015</b> , 93, 522-527	6.7	102
21	Experimental Study on the Influence of Water Absorption of Recycled Coarse Aggregates on Properties of the Resulting Concretes. <i>Journal of Materials in Civil Engineering</i> , <b>2015</b> , 27, 04014138	3	37
20	Creep and creep recovery properties of polystyrene aggregate concrete. <i>Construction and Building Materials</i> , <b>2014</b> , 51, 338-343	6.7	30
19	Experimental assessment of position of macro encapsulated phase change material in concrete walls on indoor temperatures and humidity levels. <i>Energy and Buildings</i> , <b>2014</b> , 71, 80-87	7	99
18	Thermophysical and Mechanical Properties of Hardened Cement Paste with Microencapsulated Phase Change Materials for Energy Storage. <i>Materials</i> , <b>2014</b> , 7, 8070-8087	3.5	26
17	Shear strengthening of polystyrene aggregate concrete beams with near surface mounted GFRP bars. <i>Materials Research Innovations</i> , <b>2010</b> , 14, 138-145	1.9	5
16	Mechanical and fracture properties of normal- and high-strength concretes with fly ash after exposure to high temperatures. <i>Magazine of Concrete Research</i> , <b>2009</b> , 61, 323-330	2	25
15	The effect of high temperature curing on the strength and carbonation of pozzolanic structural lightweight concretes. <i>Construction and Building Materials</i> , <b>2009</b> , 23, 1306-1310	6.7	25
14	Fracture properties of concrete with waste compact disc shred. <i>Materials Research Innovations</i> , <b>2008</b> , 12, 179-183	1.9	1
13	Fracture properties of normal and lightweight high-strength concrete. <i>Magazine of Concrete Research</i> , <b>2008</b> , 60, 237-244	2	19
12	Study of short term shrinkage and creep of lightweight concrete. <i>Materials Research Innovations</i> , <b>2008</b> , 12, 151-154	1.9	7
11	Phase constitution at interfacial between lightweight aggregate/concrete cement paste composite. <i>Materials Research Innovations</i> , <b>2008</b> , 12, 123-126	1.9	2
10	The effect of aggregate absorption on pore area at interfacial zone of lightweight concrete. <i>Construction and Building Materials</i> , <b>2008</b> , 22, 623-628	6.7	55

9	Comparison of carbonation of lightweight concrete with normal weight concrete at similar strength levels. <i>Construction and Building Materials</i> , <b>2008</b> , 22, 1648-1655	6.7	33
8	Bond performance of polystyrene aggregate concrete (PAC) reinforced with glass-fibre-reinforced polymer (GFRP) bars. <i>Building and Environment</i> , <b>2008</b> , 43, 98-107	6.5	26
7	Performance of FRP bonding systems under fatigue loading. <i>Engineering Structures</i> , <b>2008</b> , 30, 3129-3140	4.7	98
6	Mechanical and drying shrinkage properties of structural-graded polystyrene aggregate concrete. <i>Cement and Concrete Composites</i> , <b>2008</b> , 30, 403-409	8.6	104
5	The effects of aggregate properties on lightweight concrete. <i>Building and Environment</i> , <b>2007</b> , 42, 3025-3039	3.9	123
4	Flexural strengthening of reinforced lightweight polystyrene aggregate concrete beams with near-surface mounted GFRP bars. <i>Building and Environment</i> , <b>2006</b> , 41, 1381-1393	6.5	49
3	Fibre reinforced polymer materials for prestressed concrete structures. <i>Structural Survey</i> , <b>2003</b> , 21, 95-101		1
2	Strength and durability performance of HPC incorporating pozzolans at elevated temperatures. <i>Structural Survey</i> , <b>2002</b> , 20, 123-128		5
1	Application of FRP bars as reinforcement in civil engineering structures. <i>Structural Survey</i> , <b>2002</b> , 20, 62-72		24