# Waiching Tang

List of Publications by Year
in descending order

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| 83 | 3,315 | 117453 | 155451 |
|---|---|---|---|
| papers | citations | 34 h-index | 55 g-index |

| 85 | 85 | 85 | 2603 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A critical review on research progress of graphene/cement based composites. Composites Part A: Applied Science and Manufacturing, 2017, 102, 273-296. | 3.8 | 254 |
| 2 | Experimental study on effects of CO2 concentrations on concrete carbonation and diffusion mechanisms. Construction and Building Materials, 2015, 93, 522-527. | 3.2 | 160 |
| 3 | The effects of aggregate properties on lightweight concrete. Building and Environment, 2007, 42, 3025-3029. | 3.0 | 152 |
| 4 | Experimental assessment of position of macro encapsulated phase change material in concrete walls on indoor temperatures and humidity levels. Energy and Buildings, 2014, 71, 80-87. | 3.1 | 135 |
| 5 | Mechanical and drying shrinkage properties of structural-graded polystyrene aggregate concrete. Cement and Concrete Composites, 2008, 30, 403-409. | 4.6 | 131 |
| 6 | Performance of FRP bonding systems under fatigue loading. Engineering Structures, 2008, 30, 3129-3140. | 2.6 | 122 |
| 7 | Development of structural-functional integrated energy storage concrete with innovative macro-encapsulated PCM by hollow steel ball. Applied Energy, 2017, 185, 107-118. | 5.1 | 120 |
| 8 | Robust evaluation of self-healing efficiency in cementitious materials â€“ A review. Construction and Building Materials, 2015, 81, 233-247. | 3.2 | 119 |
| 9 | Engineering and microstructural assessment of fibre-reinforced self-compacting concrete containing recycled coarse aggregate. Journal of Cleaner Production, 2017, 168, 605-613. | 4.6 | 115 |
| 10 | Influence of red mud on fresh and hardened properties of self-compacting concrete. Construction and Building Materials, 2018, 178, 288-300. | 3.2 | 88 |
| 11 | The effect of aggregate absorption on pore area at interfacial zone of lightweight concrete. Construction and Building Materials, 2008, 22, 623-628. | 3.2 | 72 |
| 12 | Effect of carbon fiber and nanosilica on shear properties of silty soil and the mechanisms. Construction and Building Materials, 2018, 189, 286-295. | 3.2 | 70 |
| 13 | Influence of red mud on mechanical and durability performance of self-compacting concrete. Journal of Hazardous Materials, 2019, 379, 120802. | 6.5 | 64 |
| 14 | Effect of carbon fibers grafted with carbon nanotubes on mechanical properties of cement-based composites. Construction and Building Materials, 2018, 181, 713-720. | 3.2 | 62 |
| 15 | Flexural strengthening of reinforced lightweight polystyrene aggregate concrete beams with near-surface mounted GFRP bars. Building and Environment, 2006, 41, 1381-1393. | 3.0 | 61 |
| 16 | Effects of nano silica on the properties of cement-based materials: A comprehensive review. Construction and Building Materials, 2021, 282, 122715. | 3.2 | 60 |
| 17 | Development of novel composite PCM for thermal energy storage using CaCl2Â·6H2O with graphene oxide and SrCl2Â·6H2O. Energy and Buildings, 2017, 156, 163-172. | 3.1 | 56 |
| 18 | Experimental study of carbon fiber reinforced alkali-activated slag composites with micro-encapsulated PCM for energy storage. Construction and Building Materials, 2018, 161, 442-451. | 3.2 | 56 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Parametric analysis and optimisation of energy efficiency of a lightweight building integrated with different configurations and types of PCM. Renewable Energy, 2021, 168, 865-877. | 4.3 | 56 |
| 20 | Development of novel form-stable phase change material (PCM) composite using recycled expanded glass for thermal energy storage in cementitious composite. Renewable Energy, 2021, 175, 14-28. | 4.3 | 55 |
| 21 | Experimental observations and SVM-based prediction of properties of polypropylene fibres reinforced self-compacting composites incorporating nano-CuO. Construction and Building Materials, 2017, 143, 589-598. | 3.2 | 54 |
| 22 | Chloride Diffusion and Acid Resistance of Concrete Containing Zeolite and Tuff as Partial Replacements of Cement and Sand. Materials, 2017, 10, 372. | 1.3 | 54 |
| 23 | Development of thermal energy storage lightweight structural cementitious composites by means of macro-encapsulated PCM. Construction and Building Materials, 2019, 225, 182-195. | 3.2 | 52 |
| 24 | Development of high performance PCM cement composites for passive solar buildings. Energy and Buildings, 2019, 194, 33-45. | 3.1 | 52 |
| 25 | Experimental Study on the Influence of Water Absorption of Recycled Coarse Aggregates on Properties of the Resulting Concretes. Journal of Materials in Civil Engineering, 2015, 27, . | 1.3 | 51 |
| 26 | Comparison of carbonation of lightweight concrete with normal weight concrete at similar strength levels. Construction and Building Materials, 2008, 22, 1648-1655. | 3.2 | 47 |
| 27 | Mechanical and fracture properties of normal- and high-strength concretes with fly ash after exposure to high temperatures. Magazine of Concrete Research, 2009, 61, 323-330. | 0.9 | 47 |
| 28 | Thermal performance and corrosion resistance of structural-functional concrete made with inorganic PCM. Construction and Building Materials, 2020, 249, 118768. | 3.2 | 45 |
| 29 | Development of vegetation concrete technology for slope protection and greening. Construction and Building Materials, 2018, 179, 605-613. | 3.2 | 42 |
| 30 | Development of Hollow Steel Ball Macro-Encapsulated PCM for Thermal Energy Storage Concrete. Materials, 2016, 9, 59. | 1.3 | 41 |
| 31 | Creep and creep recovery properties of polystyrene aggregate concrete. Construction and Building Materials, 2014, 51, 338-343. | 3.2 | 39 |
| 32 | Effect of Graphene Oxide (GO) on the Morphology and Microstructure of Cement Hydration Products. Nanomaterials, 2017, 7, 429. | 1.9 | 39 |
| 33 | Properties of Self-Compacting Concrete with Recycled Coarse Aggregate. Advances in Materials Science and Engineering, 2016, 2016, 1-11. | 1.0 | 37 |
| 34 | Development of a stable inorganic phase change material for thermal energy storage in buildings. Solar Energy Materials and Solar Cells, 2020, 208, 110420. | 3.0 | 37 |
| 35 | Application of FRP bars as reinforcement in civil engineering structures. Structural Survey, 2002, 20, 62-72. | 1.0 | 35 |
| 36 | Bond performance of polystyrene aggregate concrete (PAC) reinforced with glass-fibre-reinforced polymer (GFRP) bars. Building and Environment, 2008, 43, 98-107. | 3.0 | 32 |

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|---|---|---|---|
| 37 | Thermophysical and Mechanical Properties of Hardened Cement Paste with Microencapsulated Phase Change Materials for Energy Storage. Materials, 2014, 7, 8070-8087. | 1.3 | 32 |
| 38 | Development of Vegetation-Pervious Concrete in Grid Beam System for Soil Slope Protection. Materials, 2017, 10, 96. | 1.3 | 31 |
| 39 | Thermal and Mechanical Properties of Cement Mortar Composite Containing Recycled Expanded Glass Aggregate and Nano Titanium Dioxide. Applied Sciences (Switzerland), 2020, 10, 2246. | 1.3 | 31 |
| 40 | Evaluation of carbonation resistance of paint coated concrete for buildings. Construction and Building Materials, 2016, 107, 299-306. | 3.2 | 28 |
| 41 | The effect of high temperature curing on the strength and carbonation of pozzolanic structural lightweight concretes. Construction and Building Materials, 2009, 23, 1306-1310. | 3.2 | 27 |
| 42 | Effect of Architectural Building Design Parameters on Thermal Comfort and Energy Consumption in Higher Education Buildings. Buildings, 2022, 12, 329. | 1.4 | 27 |
| 43 | Fracture properties of normal and lightweight high-strength concrete. Magazine of Concrete Research, 2008, 60, 237-244. | 0.9 | 25 |
| 44 | Influence of Surface Treatment of Recycled Aggregates on Mechanical Properties and Bond Strength of Self-Compacting Concrete. Sustainability, 2019, 11, 4182. | 1.6 | 24 |
| 45 | Study on Utilization of Carboxyl Group Decorated Carbon Nanotubes and Carbonation Reaction for Improving Strengths and Microstructures of Cement Paste. Nanomaterials, 2016, 6, 153. | 1.9 | 22 |
| 46 | Discussion and experiments on the limits of chloride, sulphate and shell content in marine fine aggregates for concrete. Construction and Building Materials, 2018, 159, 725-733. | 3.2 | 22 |
| 47 | A practical ranking system for evaluation of industry viable phase change materials for use in concrete. Construction and Building Materials, 2018, 177, 272-286. | 3.2 | 21 |
| 48 | Prediction of Self-Healing of Engineered Cementitious Composite Using Machine Learning Approaches. Applied Sciences (Switzerland), 2022, 12, 3605. | 1.3 | 21 |
| 49 | Effect of carbon nanotubes on properties of alkali activated slag â€“ A mechanistic study. Journal of Cleaner Production, 2020, 245, 119021. | 4.6 | 20 |
| 50 | Experimental study on thermal response of a PCM energy pile in unsaturated clay. Renewable Energy, 2022, 185, 790-803. | 4.3 | 20 |
| 51 | Hydration Characteristics of Tricalcium Aluminate in the Presence of Nano-Silica. Nanomaterials, 2021, 11, 199. | 1.9 | 18 |
| 52 | Experimental investigation on mechanical properties of clay soil reinforced with carbon fiber. Construction and Building Materials, 2021, 280, 122517. | 3.2 | 18 |
| 53 | Effect of Nano-CuO on Engineering and Microstructure Properties of Fibre-Reinforced Mortars Incorporating Metakaolin: Experimental and Numerical Studies. Materials, 2017, 10, 1215. | 1.3 | 15 |
| 54 | Investigation of the Role of Nano-Titanium on Corrosion and Thermal Performance of Structural Concrete with Macro-Encapsulated PCM. Molecules, 2019, 24, 1360. | 1.7 | 15 |

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|---|---|---|---|
| 55 | Experimental Investigation of Chloride Uptake Performances of Hydrocalumite-Like Ca-Al LDHs with Different Microstructures. Applied Sciences (Switzerland), 2020, 10, 3760. | 1.3 | 14 |
| 56 | Fracture Properties of Polystyrene Aggregate Concrete after Exposure to High Temperatures. Materials, 2016, 9, 630. | 1.3 | 13 |
| 57 | Thermo-Mechanical Performance of a Phase Change Energy Pile in Saturated Sand. Symmetry, 2020, 12, 1781. | 1.1 | 13 |
| 58 | Study on the interaction mechanism between slags and alkali silicate activators: A hydration kinetics approach. Construction and Building Materials, 2020, 250, 118900. | 3.2 | 13 |
| 59 | Effect of Summer Ventilation on the Thermal Performance and Energy Efficiency of Buildings Utilizing Phase Change Materials. Energies, 2017, 10, 1214. | 1.6 | 12 |
| 60 | Mechanical and Thermo-Physical Performances of Gypsum-Based PCM Composite Materials Reinforced with Carbon Fiber. Applied Sciences (Switzerland), 2021, 11, 468. | 1.3 | 12 |
| 61 | Chemicals of concern in construction and demolition waste fine residues: A systematic literature review. Journal of Environmental Management, 2021, 299, 113654. | 3.8 | 12 |
| 62 | Experimental Investigation on Graphene Oxide/SrCl2Â·6H2O Modified CaCl2Â·6H2O and the Resulting Thermal Performances. Materials, 2018, 11, 1507. | 1.3 | 11 |
| 63 | Static liquefaction behavior of short discrete carbon fiber reinforced silty sand. Geosynthetics International, 2020, 27, 606-619. | 1.5 | 10 |
| 64 | Study of short term shrinkage and creep of lightweight concrete. Materials Research Innovations, 2008, 12, 151-154. | 1.0 | 9 |
| 65 | Experimental Investigation of the Effect of Manufactured Sand and Lightweight Sand on the Properties of Fresh and Hardened Self-Compacting Lightweight Concretes. Materials, 2016, 9, 735. | 1.3 | 8 |
| 66 | Influence and mechanisms of active silica in solid waste on hydration of tricalcium aluminate in the resulting composite cement. Materials Today Communications, 2021, 27, 102262. | 0.9 | 8 |
| 67 | Strength and durability performance of HPC incorporating pozzolans at elevated temperatures. Structural Survey, 2002, 20, 123-128. | 1.0 | 7 |
| 68 | Structural-functional integrated concrete with macro-encapsulated inorganic PCM. AIP Conference Proceedings, 2017, , . | 0.3 | 7 |
| 69 | Properties of self-compacting concrete with recycled concrete aggregates. , 2020, , 219-248. | | 7 |
| 70 | Experimental Study of 3D Concrete Printing Configurations Based on the Buildability Evaluation. Applied Sciences (Switzerland), 2022, 12, 2939. | 1.3 | 7 |
| 71 | Shear strengthening of polystyrene aggregate concrete beams with near surface mounted GFRP bars. Materials Research Innovations, 2010, 14, 138-145. | 1.0 | 5 |
| 72 | Effects of thermal conductive fillers on energy storage performance of Form-Stable phase change material integrated in Cement-Based composites. Applied Thermal Engineering, 2022, 212, 118570. | 3.0 | 4 |

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|---|---|---|---|
| 73 | Phase constitution at interfacial between lightweight aggregate/concrete cement paste composite. Materials Research Innovations, 2008, 12, 123-126. | 1.0 | 3 |
| 74 | Fibre reinforced polymer materials for prestressed concrete structures. Structural Survey, 2003, 21, 95-101. | 1.0 | 2 |
| 75 | Mechanical and Durability Properties of Concrete Using Dredged Marine Sand. Materials Science Forum, 0, 890, 406-410. | 0.3 | 2 |
| 76 | Evaluation of design options for green product development: a combined Cuckoo search and life cycle assessment approach. International Journal of Life Cycle Assessment, 2022, 27, 665-679. | 2.2 | 2 |
| 77 | Fracture properties of concrete with waste compact disc shred. Materials Research Innovations, 2008, 12, 179-183. | 1.0 | 1 |
| 78 | Special Issue on Green Concrete for a Better Sustainable Environment. Applied Sciences (Switzerland), 2020, 10, 2572. | 1.3 | 1 |
| 79 | Modelling transformative adaptation: Case of post-earthquake Lyttelton, New Zealand. Environmental Science and Policy, 2021, 125, 247-262. | 2.4 | 1 |
| 80 | Investigation of Permeability of Structural Lightweight Aggregate Concrete. Advanced Science Letters, 2012, 15, 176-178. | 0.2 | 0 |
| 81 | Functionality assessment of concrete containing a dual-layer coated macro-encapsulated PCM. International Journal of Smart Grid and Clean Energy, 2019, , 517-521. | 0.4 | 0 |
| 82 | Red Mud. , 2022, , 577-606. | | 0 |
| 83 | Modelling the Roles of Community-Based Organisations in Post-Disaster Transformative Adaptation. GeoHazards, 2022, 3, 178-198. | 0.8 | 0 |