

# Mingjiang Tao

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

2,553  
citations

279798

23  
h-index

197818

49  
g-index

61  
all docs

61  
docs citations

61  
times ranked

2309  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental feasibility study of geopolymers as the next-generation soil stabilizer. <i>Construction and Building Materials</i> , 2013, 47, 1468-1478.	7.2	334
2	Review on solid-solid phase change materials for thermal energy storage: Molecular structure and thermal properties. <i>Applied Thermal Engineering</i> , 2017, 127, 1427-1441.	6.0	296
3	Synthesis factors affecting mechanical properties, microstructure, and chemical composition of red mud-fly ash based geopolymers. <i>Fuel</i> , 2014, 134, 315-325.	6.4	178
4	Durability of red mud-fly ash based geopolymer and leaching behavior of heavy metals in sulfuric acid solutions and deionized water. <i>Construction and Building Materials</i> , 2016, 124, 373-382.	7.2	137
5	Effects of Warm-Mix Asphalt Additives on Workability and Mechanical Properties of Reclaimed Asphalt Pavement Material. <i>Transportation Research Record</i> , 2009, 2126, 151-160.	1.9	125
6	Surface microstructure of bitumen characterized by atomic force microscopy. <i>Advances in Colloid and Interface Science</i> , 2015, 218, 17-33.	14.7	117
7	Effect of Soil Moisture Content and Dry Density on Cohesive Soil-Geosynthetic Interactions Using Large Direct Shear Tests. <i>Journal of Materials in Civil Engineering</i> , 2007, 19, 540-549.	2.9	116
8	Application of Shakedown Theory in Characterizing Traditional and Recycled Pavement Base Materials. <i>Journal of Transportation Engineering</i> , 2010, 136, 214-222.	0.9	101
9	Durability of Cement Stabilized Low Plasticity Soils. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2008, 134, 203-213.	3.0	96
10	A systematic AFM-based method to measure adhesion differences between micron-sized domains in asphalt binders. <i>Fuel</i> , 2013, 113, 443-447.	6.4	96
11	Preparation of a geopolymer from red mud slurry and class F fly ash and its behavior at elevated temperatures. <i>Construction and Building Materials</i> , 2019, 221, 308-317.	7.2	92
12	Calcium-free geopolymer as a stabilizer for sulfate-rich soils. <i>Applied Clay Science</i> , 2015, 108, 199-207.	5.2	82
13	Reaction kinetics of red mud-fly ash based geopolymers: Effects of curing temperature on chemical bonding, porosity, and mechanical strength. <i>Cement and Concrete Composites</i> , 2018, 93, 175-185.	10.7	70
14	A multiscale investigation of reaction kinetics, phase formation, and mechanical properties of metakaolin geopolymers. <i>Cement and Concrete Composites</i> , 2017, 78, 21-32.	10.7	67
15	Freeze-thaw durability of red mud slurry-class F fly ash-based geopolymer: Effect of curing conditions. <i>Construction and Building Materials</i> , 2019, 215, 381-390.	7.2	55
16	Modeling the Polymerization Process for Geopolymer Synthesis through Reactive Molecular Dynamics Simulations. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6760-6773.	3.1	49
17	Coating performance, durability and anti-corrosion mechanism of organic modified geopolymer composite for marine concrete protection. <i>Cement and Concrete Composites</i> , 2022, 129, 104495.	10.7	42
18	A numerical study of adaptive building enclosure systems using solid-solid phase change materials with variable transparency. <i>Energy and Buildings</i> , 2018, 167, 240-252.	6.7	34

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19	Earth pressure balance shield tunneling in sandy gravel deposits: a case study of application of soil conditioning. <i>Bulletin of Engineering Geology and the Environment</i> , 2020, 79, 5013-5030.	3.5	31
20	Effects of gravel content and particle size on abrasivity of sandy gravel mixtures. <i>Engineering Geology</i> , 2018, 243, 26-35.	6.3	26
21	Bitumen's microstructures are correlated with its bulk thermal and rheological properties. <i>Fuel</i> , 2019, 254, 115509.	6.4	26
22	Onset of erosion of a granular bed in a channel driven by fluid flow. <i>Physics of Fluids</i> , 2015, 27, 013301.	4.0	25
23	Time- and Composition-Dependent Evolution of Distinctive Microstructures in Bitumen. <i>Energy &amp; Fuels</i> , 2018, 32, 67-80.	5.1	25
24	Performance of Geogrid-Reinforced and PTC Pile-Supported Embankment in a Highway Widening Project over Soft Soils. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2019, 145, .	3.0	25
25	Development of a methodology and a tool for the assessment of vulnerability of roadways to flood-induced damage. <i>Journal of Flood Risk Management</i> , 2017, 10, 301-313.	3.3	24
26	Understanding Free Volume Characteristics of Ethylene-Propylene-Diene Monomer (EPDM) through Molecular Dynamics Simulations. <i>Materials</i> , 2019, 12, 612.	2.9	21
27	Cohesive Slope Surface Failure and Evaluation. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2005, 131, 898-906.	3.0	20
28	Laboratory Comparison of Rejuvenated 50% Reclaimed Asphalt Pavement Hot-Mix Asphalt with Conventional 20% RAP Mix. <i>Transportation Research Record</i> , 2017, 2633, 69-79.	1.9	20
29	Effect of curing condition and carbonization enhancement on mechanical properties of fly ash -desulfurization gypsum - steel slag blocks. <i>Journal of CO2 Utilization</i> , 2020, 38, 282-290.	6.8	20
30	A cement paste-tail sealant interface modified with a silane coupling agent for enhancing waterproofing performance in a concrete lining system. <i>RSC Advances</i> , 2019, 9, 7165-7175.	3.6	19
31	Characteristics of underwater cast and cured geopolymers. <i>Cement and Concrete Composites</i> , 2020, 114, 103783.	10.7	19
32	Thermo-optically responsive phase change materials for passive temperature regulation. <i>Solar Energy</i> , 2020, 197, 222-228.	6.1	17
33	Enhanced Performance of Stabilized By-Product Gypsum. <i>Journal of Materials in Civil Engineering</i> , 2005, 17, 617-623.	2.9	15
34	Numerical Parametric Study of Strip Footing on Reinforced Embankment Soils. <i>Transportation Research Record</i> , 2007, 2004, 132-140.	1.9	15
35	Thermal optimization of a novel thermo-optically responsive SS-PCM coatings for building enclosures. <i>Energy and Buildings</i> , 2021, 247, 111129.	6.7	11
36	Combined Model Framework for Asphalt Pavement Condition Determination After Flooding. <i>Transportation Research Record</i> , 2017, 2639, 64-72.	1.9	10

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37	A framework for the assessment of contribution of base layer performance towards resilience of flexible pavement to flooding. <i>International Journal of Pavement Engineering</i> , 2020, 21, 1223-1234.	4.4	10
38	Laboratory Evaluation of Geogrid Base Reinforcement and Corresponding Instrumentation Program. <i>Geotechnical Testing Journal</i> , 2009, 32, 516-525.	1.0	10
39	Investigation of Moisture Susceptibility of Warm-Mix Asphalt Mixes through Laboratory Mechanical Testing. <i>Transportation Research Record</i> , 2012, 2295, 27-34.	1.9	8
40	Stabilizing blended calcium sulfate materials for roadway base construction. <i>Construction and Building Materials</i> , 2010, 24, 1861-1868.	7.2	7
41	Effects of pre-setting chemical exchanges on geopolymers cast in saline waters. <i>Construction and Building Materials</i> , 2021, 308, 125020.	7.2	7
42	Practical Method to Understand the Effect of Aggregate Drying on the Moisture Content of Hot-Mix Asphalt. <i>Transportation Research Record</i> , 2011, 2208, 90-96.	1.9	6
43	Statistical Approach to Determining Ground Vibration Monitoring Distance during Pile Driving. <i>Practice Periodical on Structural Design and Construction</i> , 2013, 18, 196-204.	1.3	6
44	The influence of Graphene quality on performance of a Si/Graphene nanocomposite anode. <i>Materials Science and Technology</i> , 2019, 35, 725-730.	1.6	6
45	Simple Procedure to Assess Performance and Cost Benefits of Using Recycled Materials in Pavement Construction. <i>Journal of Materials in Civil Engineering</i> , 2008, 20, 718-725.	2.9	5
46	Semi-infinite plates dragged through granular beds. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2012, 2012, P07013.	2.3	5
47	Drag on intruders in granular beds: A boundary layer approach. <i>Physical Review E</i> , 2013, 88, 030201.	2.1	5
48	Field Testing Sections with Stabilized Blended Calcium Sulfate as Base Courses. <i>Journal of Materials in Civil Engineering</i> , 2007, 19, 329-339.	2.9	4
49	Optimize Drainable Unbound Aggregate through Laboratory Tests. , 2008, , .		4
50	Evaluation of trench backfills at highway cross-drains. <i>International Journal of Pavement Engineering</i> , 2005, 6, 77-87.	4.4	3
51	A Parametric Study on Factors Affecting Ground Vibrations during Pile Driving through Finite Element Simulations. , 2011, , .		3
52	Impact of Flooding on Roadways. <i>Developments in Geotechnical Engineering</i> , 2018, , 385-397.	0.6	3
53	Safe Mining Assessment of Artisanal Barite Mining Activities in Nigeria. <i>Mining</i> , 2021, 1, 224-240.	2.4	3
54	Physicochemical Studies for Risk Identification, Assessment, and Characterization of Artisanal Barite Mining in Nigeria. <i>Sustainability</i> , 2021, 13, 12982.	3.2	2

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55	Discussion of "Effect of Gas on Pore Pressure in Wet Landfills" by Scott Merry, Wolfgang Fritz, Muniram Budhu, and Krzysztof Jesionek. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2007, 133, 1470-1472.	3.0	0
56	Swelling Behavior of Compacted Cohesive Soils " An Absorbed Energy Approach. , 2009, , .		0
57	Closure to "A Parametric Study on Factors Affecting Ground Vibrations during Pile Driving through Finite Element Simulations" by Mo Zhang and Mingjiang Tao. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2012, 138, 1300-1300.	3.0	0
58	Investigation of Moisture Content-Induced Variations in Unbound Aggregates' Resilient Modulus Through Suction Stress Concept. , 2013, , .		0
59	Fiber-based optical trapping for cell mechanics study and microrheology. , 2016, , .		0
60	Bioinspired Building Envelopes. , 2020, , 343-354.		0
61	Closure to "Performance of Geogrid-Reinforced and PTC Pile-Supported Embankment in a Highway Widening Project over Soft Soils" by Mengxuan Zhao, Chunyuan Liu, Tahar El-Korchi, Haichao Song, and Mingjiang Tao. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, 07020030.	3.0	0