Hao Wang

List of Publications by Year
in descending order

227	8,073	38742 50	66911 78
papers	citations	h-index	g-index

228	228	228	3595
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular dynamics study of oxidative aging effect on asphalt binder properties. Fuel, 2017, 188, 1-10.	6.4	354
2	Energy harvesting technologies in roadway and bridge for different applications â€“ A comprehensive review. Applied Energy, 2018, 212, 1083-1094.	10.1	341
3	Study of cohesion and adhesion properties of asphalt concrete with molecular dynamics simulation. Computational Materials Science, 2016, 112, 161-169.	3.0	223
4	Geopolymer, green alkali activated cementitious material: Synthesis, applications and challenges. Construction and Building Materials, 2019, 224, 930-949.	7.2	190
5	Effect of Mineral Filler Characteristics on Asphalt Mastic and Mixture Rutting Potential. Transportation Research Record, 2011, 2208, 33-39.	1.9	153
6	Rheological properties and anti-aging performance of asphalt binder modified with wood lignin. Construction and Building Materials, 2017, 151, 801-808.	7.2	141
7	Impact of minerals and water on bitumen-mineral adhesion and debonding behaviours using molecular dynamics simulations. Construction and Building Materials, 2018, 171, 214-222.	7.2	141
8	Molecular dynamics study of interfacial mechanical behavior between asphalt binder and mineral aggregate. Construction and Building Materials, 2016, 121, 246-254.	7.2	138
9	Dynamic Analysis and in Situ Validation of Perpetual Pavement Response to Vehicular Loading. Transportation Research Record, 2008, 2087, 29-39.	1.9	125
10	Property Characterization of Asphalt Binders and Mixtures Modified by Different Crumb Rubbers. Journal of Materials in Civil Engineering, 2017, 29, .	2.9	124
11	Evaluation of durability and functional performance of porous polyurethane mixture in porous pavement. Journal of Cleaner Production, 2018, 188, 12-19.	9.3	118
12	Investigation of rheological and chemical properties asphalt binder rejuvenated with waste vegetable oil. Construction and Building Materials, 2018, 180, 455-463.	7.2	118
13	Micromechanical analysis of asphalt mixture fracture with adhesive and cohesive failure. Engineering Fracture Mechanics, 2014, 132, 104-119.	4.3	114
14	Analytical approach for evaluating temperature field of thermal modified asphalt pavement and urban heat island effect. Applied Thermal Engineering, 2017, 113, 739-748.	6.0	114
15	Molecular dynamics simulation of asphalt-aggregate interface adhesion strength with moisture effect. International Journal of Pavement Engineering, 2017, 18, 414-423.	4.4	111
16	Simulation of tyreâ€“pavement interaction for predicting contact stresses at static and various rolling conditions. International Journal of Pavement Engineering, 2012, 13, 310-321.	4.4	110
17	Pavement temperature prediction: Theoretical models and critical affecting factors. Applied Thermal Engineering, 2019, 158, 113755.	6.0	110
18	Dynamic Analysis of Thin Asphalt Pavements by Using Cross-Anisotropic Stress-Dependent Properties for Granular Layer. Transportation Research Record, 2010, 2154, 156-163.	1.9	106

#	Article	IF	Citations
19	Moisture effect on nanostructure and adhesion energy of asphalt on aggregate surface: A molecular dynamics study. Applied Surface Science, 2020, 510, 145435.	6.1	103
20	Evaluation of thermal conductivity of asphalt concrete with heterogeneous microstructure. Applied Thermal Engineering, 2015, 84, 368-374.	6.0	100
21	Experimental study on anti-icing and deicing performance of polyurethane concrete as road surface layer. Construction and Building Materials, 2018, 161, 598-605.	7.2	95
22	Effect of drying procedures on pore structure and phase evolution of alkali-activated cements. Cement and Concrete Composites, 2019, 96, 194-203.	10.7	95
23	Combined Effect of Moving Wheel Loading and Three-Dimensional Contact Stresses on Perpetual Pavement Responses. Transportation Research Record, 2009, 2095, 53-61.	1.9	94
24	Laboratory testing and numerical simulation of piezoelectric energy harvester for roadway applications. Applied Energy, 2018, 224, 438-447.	10.1	87
25	Finite element modeling and parametric analysis of viscoelastic and nonlinear pavement responses under dynamic FWD loading. Construction and Building Materials, 2017, 141, 23-35.	7.2	85
26	Optimized design of layered bridge transducer for piezoelectric energy harvesting from roadway. Energy, 2017, 141, 1133-1145.	8.8	82
27	Molecular dynamics study of rejuvenator effect on RAP binder: Diffusion behavior and molecular structure. Construction and Building Materials, 2018, 158, 1046-1054.	7.2	82
28	Evaluating engineering properties and environmental impact of pervious concrete with fly ash and slag. Journal of Cleaner Production, 2019, 237, 117714.	9.3	81
29	Diffusion and interaction mechanism of rejuvenating agent with virgin and recycled asphalt binder: a molecular dynamics study. Molecular Simulation, 2018, 44, 1433-1443.	2.0	80
30	Importance of Nonlinear Anisotropic Modeling of Granular Base for Predicting Maximum Viscoelastic Pavement Responses under Moving Vehicular Loading. Journal of Engineering Mechanics - ASCE, 2013, 139, 29-38.	2.9	78
31	Alleviating urban heat island effect using high-conductivity permeable concrete pavement. Journal of Cleaner Production, 2019, 237, 117722.	9.3	76
32	Prediction of dynamic modulus of asphalt mixture using micromechanical method with radial distribution functions. Materials and Structures/Materiaux Et Constructions, 2019, 52, 1.	3.1	76
33	Effects of polymerized sulfur on rheological properties, morphology and stability of SBS modified asphalt. Construction and Building Materials, 2017, 150, 860-871.	7.2	75
34	Life cycle assessment of asphalt pavement recycling for greenhouse gas emission with temporal aspect. Journal of Cleaner Production, 2018, 187, 148-157.	9.3	73
35	Heterogeneity effect of mechanical property on creep behavior of asphalt mixture based on micromechanical modeling and virtual creep test. Mechanics of Materials, 2017, 104, 49-59.	3.2	70
36	Development of ANN-GA program for backcalculation of pavement moduli under FWD testing with viscoelastic and nonlinear parameters. International Journal of Pavement Engineering, 2019, 20, 490-498.	4.4	69

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37	Effect of Surface Friction on Tireâ€“Pavement Contact Stresses during Vehicle Maneuvering. Journal of Engineering Mechanics - ASCE, 2014, 140, .	2.9	67
38	Evaluation of pavement responses and performance with thermal modified asphalt mixture. Materials and Design, 2016, 111, 88-97.	7.0	66
39	Laboratory performance characteristics of high modulus asphalt mixture with high-content RAP. Construction and Building Materials, 2015, 101, 975-982.	7.2	61
40	Characterisation of interface bonding between hot-mix asphalt overlay and concrete pavements: modelling andin-situresponse to accelerated loading. International Journal of Pavement Engineering, 2012, 13, 181-196.	4.4	60
41	Determination of Effective Thermal Conductivity of Asphalt Concrete with Random Aggregate Microstructure. Journal of Materials in Civil Engineering, 2015, 27, .	2.9	58
42	Life-cycle assessment of airport pavement design alternatives for energy and environmental impacts. Journal of Cleaner Production, 2016, 133, 163-171.	9.3	58
43	Evaluation of Surface-Related Pavement Damage due to Tire Braking. Road Materials and Pavement Design, 2010, 11, 101-121.	4.0	57
44	Virtual testing of asphalt mixture with two-dimensional and three-dimensional random aggregate structures. International Journal of Pavement Engineering, 2017, 18, 824-836.	4.4	56
45	Thermal behaviors and harmful volatile constituents released from asphalt components at high temperature. Journal of Hazardous Materials, 2019, 373, 741-752.	12.4	55
46	Phase behavior and hot storage characteristics of asphalt modified with various polyethylene: Experimental and numerical characterizations. Construction and Building Materials, 2019, 203, 608-620.	7.2	55
47	Impact Quantification of Wide-Base Tire Loading on Secondary Road Flexible Pavements. Journal of Transportation Engineering, 2011, 137, 630-639.	0.9	54
48	Evaluation of pavement surface friction subject to various pavement preservation treatments. Construction and Building Materials, 2013, 48, 194-202.	7.2	53
49	Experimental study on rheological characteristics and performance of high modulus asphalt binder with different modifiers. Construction and Building Materials, 2017, 155, 26-36.	7.2	52
50	Laboratory investigation of phase change effect of polyethylene glycolon on asphalt binder and mixture performance. Construction and Building Materials, 2019, 212, 1-9.	7.2	52
51	Near-Surface Pavement Failure under Multiaxial Stress State in Thick Asphalt Pavement. Transportation Research Record, 2010, 2154, 91-99.	1.9	51
52	Comparative Study of Asphalt Pavement Responses under FWD and Moving Vehicular Loading. Journal of Transportation Engineering, 2016, 142, .	0.9	51
53	Molecular dynamics simulation of diffusion coefficients between different types of rejuvenator and aged asphalt binder. International Journal of Pavement Engineering, 2020, 21, 966-976.	4.4	51
54	Laboratory testing and analysis of dynamic and static resilient modulus of subgrade soil under various influencing factors. Construction and Building Materials, 2019, 195, 178-186.	7.2	49

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55	Preparation and effectiveness of composite phase change material for performance improvement of Open Graded Friction Course. Journal of Cleaner Production, 2019, 214, 259-269.	9.3	48
56	Evaluation of permanent deformation of asphalt mixtures using different laboratory performance tests. Construction and Building Materials, 2014, 53, 561-567.	7.2	46
57	Laboratory Investigation of Crumb Rubber Modified Asphalt Binder and Mixtures with Warm-Mix Additives. International Journal of Civil Engineering, 2017, 15, 185-194.	2.0	46
58	Analysis of thermal conductivity of porous concrete using laboratory measurements and microstructure models. Construction and Building Materials, 2019, 218, 90-98.	7.2	45
59	Performance evaluation of metakaolin geopolymer modified by different solid wastes. Journal of Cleaner Production, 2019, 226, 114-121.	9.3	45
60	Compatibility of cured phase-inversion waterborne epoxy resin emulsified asphalt. Construction and Building Materials, 2019, 229, 116942.	7.2	44
61	Effects of Interface Conditions on Reflective Cracking Development in Hot-Mix Asphalt Overlays. Road Materials and Pavement Design, 2010, 11, 307-334.	4.0	43
62	Evaluation of Vehicle Braking Performance on Wet Pavement Surface using an Integrated Tire-Vehicle Modeling Approach. Transportation Research Record, 2019, 2673, 295-307.	1.9	43
63	Quantifying greenhouse gas emission of asphalt pavement preservation at construction and use stages using life-cycle assessment. International Journal of Sustainable Transportation, 2020, 14, 25-34.	4.1	41
64	Random Modeling of Three-Dimensional Heterogeneous Microstructure of Asphalt Concrete for Mechanical Analysis. Journal of Engineering Mechanics - ASCE, 2018, 144, .	2.9	40
65	Improved Chemical System for Molecular Simulations of Asphalt. Energy & Fuels, 2019, 33, 3187-3198.	5.1	40
66	Performance Comparison between Different Sourced Bioasphalts and Asphalt Mixtures. Journal of Materials in Civil Engineering, 2018, 30, .	2.9	38
67	Image-aided random aggregate packing for computational modeling of asphalt concrete microstructure. Construction and Building Materials, 2018, 177, 467-476.	7.2	38
68	Analysis of Near-Surface Cracking under Critical Loading Conditions Using Uncracked and Cracked Pavement Models. Journal of Transportation Engineering, 2013, 139, 992-1000.	0.9	37
69	Energy harvesting and evaluation of a novel piezoelectric bridge transducer. Sensors and Actuators A: Physical, 2019, 285, 348-354.	4.1	37
70	Modeling and Optimization of Acoustic Absorption for Porous Asphalt Concrete. Journal of Engineering Mechanics - ASCE, 2016, 142, .	2.9	36
71	Modeling and testing of road surface aggregate wearing behaviour. Construction and Building Materials, 2017, 131, 129-137.	7.2	36
72	Self-healing of asphalt binder with cohesive failure: Insights from molecular dynamics simulation. Construction and Building Materials, 2020, 262, 120538.	7.2	36

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73	Glass fiber reinforced asphalt membrane for interlayer bonding between asphalt overlay and concrete pavement. Construction and Building Materials, 2015, 101, 918-925.	7.2	35
74	Influence of Temperature on the Mechanical Response of Asphalt Mixtures Using Microstructural Analysis and Finite-Element Simulations. Journal of Materials in Civil Engineering, 2018, 30, .	2.9	35
75	A case study on geogrid-reinforced and pile-supported widened highway embankment. Geosynthetics International, 2020, 27, 261-274.	2.9	35
76	Damage mechanism of soil-rock mixture after freeze-thaw cycles. Journal of Central South University, 2019, 26, 13-24.	3.0	34
77	Investigation of permeability of open graded asphalt mixture considering effects of anisotropy and two-dimensional flow. Construction and Building Materials, 2017, 145, 318-325.	7.2	32
78	Combustion kinetics of asphalt binder components and the release processes of gaseous products. Combustion and Flame, 2019, 206, 322-333.	5.2	32
79	Numerical and experimental evaluation of adhesion properties of asphalt-aggregate interfaces using molecular dynamics simulation and atomic force microscopy. Road Materials and Pavement Design, 2022, 23, 1564-1584.	4.0	32
80	Numerical Simulation of an Indirect Tensile Test for Asphalt Mixtures Using Discrete Element Method Software. Journal of Materials in Civil Engineering, 2018, 30, .	2.9	31
81	Prediction of airfield pavement responses from surface deflections: comparison between the traditional backcalculation approach and the ANN model. Road Materials and Pavement Design, 2021, 22, 1930-1945.	4.0	31
82	Influences of Preheating Temperature of RAP on Properties of Hot-Mix Recycled Asphalt Mixture. Journal of Testing and Evaluation, 2016, 44, 20150157.	0.7	30
83	FEM-BEM analysis of tyre-pavement noise on porous asphalt surfaces with different textures. International Journal of Pavement Engineering, 2019, 20, 1090-1097.	4.4	29
84	Experimental Study of High-Performance Deicing Asphalt Mixture for Mechanical Performance and Anti-Icing Effectiveness. Journal of Materials in Civil Engineering, 2018, 30, .	2.9	28
85	Phase field simulation and microscopic observation of phase separation and thermal stability of polymer modified asphalt. Construction and Building Materials, 2019, 204, 132-143.	7.2	28
86	Evaluation of Self-Healing Performance of Asphalt Concrete for Low-Temperature Fracture Using Semicircular Bending Test. Journal of Materials in Civil Engineering, 2018, 30, .	2.9	27
87	Evaluation of Hydroplaning Risk on Permeable Friction Course using Tireâ€“Waterâ€“Pavement Interaction Model. Transportation Research Record, 2018, 2672, 408-417.	1.9	27
88	Molecular interaction of Asphalt-Aggregate interface modified by silane coupling agents at dry and wet conditions. Applied Surface Science, 2022, 572, 151365.	6.1	27
89	Life-cycle assessment and multi-criteria performance evaluation of pervious concrete pavement with fly ash. Resources, Conservation and Recycling, 2022, 177, 105969.	10.8	27
90	Performance Analysis of Piezoelectric Energy Harvesting in Pavement: Laboratory Testing and Field Simulation. Transportation Research Record, 2019, 2673, 115-124.	1.9	26

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91	Structural assessment of asphalt pavement condition using backcalculated modulus and field data. Construction and Building Materials, 2019, 211, 943-951.	7.2	26
92	Impact of Wide-Base Tires on Pavements: Results from Instrumentation Measurements and Modeling Analysis. Transportation Research Record, 2012, 2304, 169-176.	1.9	25
93	Three-Dimensional Finite Element Modeling of Instrumented Airport Runway Pavement Responses. Transportation Research Record, 2013, 2367, 76-83.	1.9	25
94	Strength Mechanism and Influence Factors for Cold Recycled Asphalt Mixture. Advances in Materials Science and Engineering, 2015, 2015, 1-10.	1.8	25
95	Fracture simulation of asphalt concrete with randomly generated aggregate microstructure. Road Materials and Pavement Design, 2018, 19, 1674-1691.	4.0	25
96	A study on renewed perspectives of electrified road for wireless power transfer of electric vehicles. Renewable and Sustainable Energy Reviews, 2022, 158, 112110.	16.4	25
97	Directional distribution of three-dimensional connected voids in porous asphalt mixture and flow simulation of permeability anisotropy. International Journal of Pavement Engineering, 2020, 21, 1550-1562.	4.4	24
98	Geopolymer pervious concrete modified with granulated blast furnace slag: Microscale characterization and mechanical strength. Journal of Cleaner Production, 2021, 328, 129469.	9.3	24
99	Experimental measurement and microstructure-based simulation of thermal conductivity of unbound aggregates. Construction and Building Materials, 2018, 189, 8-18.	7.2	23
100	Flexible Pavement Response Analysis under Dynamic Loading at Different Vehicle Speeds and Pavement Surface Roughness Conditions. Journal of Transportation Engineering Part B: Pavements, 2020, 146, 04020040.	1.5	23
101	Investigation of Prony series model related asphalt mixture properties under different confining pressures. Construction and Building Materials, 2018, 166, 147-157.	7.2	22
102	Prediction of Asphalt Pavement Responses from FWD Surface Deflections Using Soft Computing Methods. Journal of Transportation Engineering Part B: Pavements, 2018, 144, 04018014.	1.5	22
103	Performance evaluation of bio-based asphalt and asphalt mixture and effects of physical and chemical modification. Road Materials and Pavement Design, 2020, 21, 1470-1489.	4.0	22
104	Asphalt pavement modulus backcalculation using surface deflections under moving loads. Computer-Aided Civil and Infrastructure Engineering, 2020, 35, 1246-1260.	9.8	22
105	Coarse grained modeling of nanostructure and asphaltene aggregation in asphalt binder using dissipative particle dynamics. Construction and Building Materials, 2022, 314, 125605.	7.2	22
106	Effects of Curing Time and Reheating on Performance of Warm Stone-Matrix Asphalt. Journal of Materials in Civil Engineering, 2012, 24, 1422-1428.	2.9	21
107	Influence of the chemical composition and the morphology of crumb rubbers on the rheological and self-healing properties of bitumen. Construction and Building Materials, 2019, 210, 555-563.	7.2	21
108	Improvement of Asphalt-Aggregate Adhesion Using Plant Ash Byproduct. Materials, 2019, 12, 605.	2.9	21

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109	Multi-aspect engineering properties and sustainability impacts of geopolymer pervious concrete. Composites Part B: Engineering, 2022, 242, 110035.	12.0	21
110	Dynamic evolution of emitted volatiles from thermal decomposed bituminous materials. Construction and Building Materials, 2014, 64, 47-53.	7.2	20
111	Shear Strength between Poroelastic Road Surface and Sublayer with Different Bonding Agents. Journal of Materials in Civil Engineering, 2018, 30, .	2.9	20
112	Mechanical properties of metakaolin-based geopolymer with glass fiber reinforcement and vibration preparation. Journal of Non-Crystalline Solids, 2020, 544, 120173.	3.1	20
113	Computational Analysis of Thermal Conductivity of Asphalt Mixture Using Virtually Generated Three-Dimensional Microstructure. Journal of Materials in Civil Engineering, 2017, 29, .	2.9	19
114	Life-cycle cost analysis of optimal timing of pavement preservation. Frontiers of Structural and Civil Engineering, 2017, 11, 17-26.	2.9	19
115	Investigation of Los Angeles value and alternate aggregate gradations in OGFC mixtures. Construction and Building Materials, 2016, 110, 278-285.	7.2	18
116	Expansion and contraction of clogged open graded friction course exposed to freeze-thaw cycles and degradation of mechanical performance. Construction and Building Materials, 2018, 182, 167-177.	7.2	18
117	Interface Shear Performance between Porous Polyurethane Mixture and Asphalt Sublayer. Applied Sciences (Switzerland), 2018, 8, 623.	2.5	18
118	Prediction of Bridge Component Ratings Using Ordinal Logistic Regression Model. Mathematical Problems in Engineering, 2019, 2019, 1-11.	1.1	18
119	A prediction model of permanent strain of unbound gravel materials based on performance of single-size gravels under repeated loads. Construction and Building Materials, 2020, 246, 118492.	7.2	18
120	Characterization of the interconnected pore and its relationship to the directional permeability of porous asphalt mixture. Construction and Building Materials, 2021, 269, 121233.	7.2	18
121	Dynamic Pavement Response Analysis under Moving Truck Loads with Random Amplitudes. Journal of Transportation Engineering Part B: Pavements, 2020, 146, 04020020.	1.5	17
122	Life-cycle assessment of climate change impact on time-dependent carbon-footprint of asphalt pavement. Transportation Research, Part D: Transport and Environment, 2021, 91, 102697.	6.8	17
123	Mechanistic-empirical analysis of asphalt pavement fatigue cracking under vehicular dynamic loads. Construction and Building Materials, 2021, 284, 122877.	7.2	17
124	Rheological Properties of Asphalt Binder Partially Substituted with Wood Lignin. , 2013, , .		16
125	Derivation of pay adjustment for in-place air void of asphalt pavement from life-cycle cost analysis. Road Materials and Pavement Design, 2015, 16, 505-517.	4.0	16
126	Investigation of shear failure in airport asphalt pavements under aircraft ground manoeuvring. Road Materials and Pavement Design, 2017, 18, 1288-1303.	4.0	16

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127	Deterministic and probabilistic life-cycle cost analysis of pavement overlays with different pre-overlay conditions. Road Materials and Pavement Design, 2019, 20, 58-73.	4.0	16
128	Airfield Flexible Pavement Responses under Heavy Aircraft and High Tire Pressure Loading. Transportation Research Record, 2015, 2501, 31-39.	1.9	15
129	Numerical evaluation of surface-initiated cracking in flexible pavement overlays with field observations. Road Materials and Pavement Design, 2017, 18, 221-234.	4.0	15
130	Evaluation of Clustered Traffic Inputs for Mechanistic-Empirical Pavement Design: Case Study in New Jersey. Transportation Research Record, 2019, 2673, 332-348.	1.9	15
131	Investigation of unbound granular material behavior using precision unbound material analyzer and repeated load triaxial test. Transportation Geotechnics, 2019, 18, 1-9.	4.5	15
132	Computational investigation of hydroplaning risk of wide-base truck tyres on roadway. International Journal of Pavement Engineering, 2020, 21, 122-133.	4.4	15
133	Potential benefit of photovoltaic pavement for mitigation of urban heat island effect. Applied Thermal Engineering, 2021, 191, 116883.	6.0	15
134	Exploring the energy-saving potential of electromagnetic induction pavement via magnetic concentrating technique. Energy, 2020, 211, 118650.	8.8	14
135	Development of elasto-plastic constitutive model for unbound granular materials under repeated loads. Transportation Geotechnics, 2020, 23, 100347.	4.5	14
136	Influences by Air Voids on the Low-Temperature Cracking Property of Dense-Graded Asphalt Concrete Based on Micromechanical Modeling. Advances in Materials Science and Engineering, 2016, 2016, 1-10.	1.8	13
137	Computational Analysis of Thermal Conductivity of Asphalt Mixture Based on a Multiscale Mathematical Model. Journal of Engineering Mechanics - ASCE, 2018, 144, .	2.9	13
138	Formation Mechanism of Residual Stresses in Micro-Injection Molding of PMMA: A Molecular Dynamics Simulation. Polymers, 2020, 12, 1368.	4.5	13
139	Probability prediction of pavement surface low temperature in winter based on bayesian structural time series and neural network. Cold Regions Science and Technology, 2022, 194, 103434.	3.5	13
140	Centrifuge Model Test and Numerical Analysis of Embankment Widening on Soft Ground. , 2004, , 548.		12
141	Evaluation of Effects of Variations in Aggregate Base Layer Properties on Flexible Pavement Performance. Transportation Research Record, 2015, 2524, 119-129.	1.9	12
142	Piezoelectric energy harvesting using a novel cymbal transducer design. , 2016, , .		12
143	Microstructural Modeling of Rheological Mechanical Response for Asphalt Mixture Using an Image-Based Finite Element Approach. Materials, 2019, 12, 2041.	2.9	12
144	Comparison analysis of dynamic modulus of asphalt mixture: indirect tension and uniaxial compression test. Transportmetrica A: Transport Science, 2019, 15, 165-178.	2.0	12

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145	Multi-objective optimization of pavement preservation strategy considering agency cost and environmental impact. International Journal of Sustainable Transportation, 2021, 15, 826-836.	4.1	12
146	Application and validation of fly ash based geopolymer mortar as grouting material in porous asphalt concrete. Construction and Building Materials, 2022, 332, 127154.	7.2	12
147	Molecular simulation and experimental analysis of interaction and compatibility between asphalt binder and Styrene-Butadiene-Styrene. Construction and Building Materials, 2022, 342, 128028.	7.2	12
148	Stress and deformation due to embankment widening with different treatment techniques. Central South University, 2011, 18, 1304-1310.	0.5	11
149	Short-Term Performance of Plant-Mixed Warm Stone Mastic Asphalt: Laboratory Testing and Field Evaluation. Transportation Research Record, 2012, 2306, 86-94.	1.9	11
150	Analytical prediction and field validation of transient temperature field in asphalt pavements. Journal of Central South University, 2015, 22, 4872-4881.	3.0	11
151	Multi-wheel gear loading effect on load-induced failure potential of airfield flexible pavement. International Journal of Pavement Engineering, 2020, 21, 805-816.	4.4	11
152	Comparison between responses of reinforced and unreinforced embankments due to road widening. Central South University, 2009, 16, 857-864.	0.5	10
153	DEVELOPMENT OF OVERWEIGHT PERMIT FEE USING MECHANISTIC-EMPIRICAL PAVEMENT DESIGN AND LIFE-CYCLE COST ANALYSIS. Transport, 2016, 31, 156-166.	1.2	10
154	Mechanical Properties of Poroelastic Road Surface with Different Material Compositions. Journal of Materials in Civil Engineering, 2020, 32, .	2.9	10
155	Evaluating fatigue behavior of asphalt mixtures under alternate tensionâ€“compression loading model using new alternate biaxial splitting method. Construction and Building Materials, 2014, 54, 106-112.	7.2	9
156	Mass loss evolution of bituminous fractions at different heating rates and constituent conformation of emitted volatiles. Energy Science and Engineering, 2019, 7, 2782-2796.	4.0	9
157	Computational investigation on surface water distribution and permeability of porous asphalt pavement. International Journal of Pavement Engineering, 2022, 23, 1226-1238.	4.4	9
158	Developed compound flame retardant for bitumen based on thermal properties of four components. Construction and Building Materials, 2020, 250, 118692.	7.2	9
159	Research on transversely isotropic permeability of asphalt pavement: Laboratory tests and computational simulation. Construction and Building Materials, 2020, 251, 118958.	7.2	9
160	Three-dimensional microstructure based model for evaluating the coefficient of thermal expansion and contraction of asphalt concrete. Construction and Building Materials, 2021, 284, 122764.	7.2	9
161	Life-Cycle Assessment of Carbon Footprint of Bike-Share and Bus Systems in Campus Transit. Sustainability, 2021, 13, 158.	3.2	9
162	Quantification of Traffic Impact on Pavement Damage for Axle-Weight-Distance Based Road Charge. , 2015, , .		8

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163	Experimental and Simulation Study of Phase Microstructure and Storage Stability of Asphalt Modified with Ethylene-Vinyl Acetate. Journal of Materials in Civil Engineering, 2019, 31, .	2.9	8
164	Numerical simulation of dynamic repetitive load test of unbound aggregate using precision unbound material analyzer. Road Materials and Pavement Design, 2020, 21, 1675-1693.	4.0	8
165	Analysis of Pore Characteristics and Flow Pattern of Open-Graded Asphalt Mixture in Different Directions. Journal of Materials in Civil Engineering, 2020, 32, .	2.9	8
166	Comparison Analysis of Airfield Pavement Life Estimated from Different Pavement Condition Indexes. Journal of Transportation Engineering Part B: Pavements, 2021, 147, 04021002.	1.5	8
167	Non-intrusive movable energy harvesting devices: Materials, designs, and their prospective uses on transportation infrastructures. Renewable and Sustainable Energy Reviews, 2022, 160, 112340.	16.4	8
168	Numerical analysis on thermal regime of wide embankment in permafrost regions of Qinghaiâ^'Tibet Plateau. Journal of Central South University, 2016, 23, 3346-3355.	3.0	7
169	Piezoelectric energy harvesting from pavement. , 2020, , 367-382.		7
170	SAPAVE: an improved semi-analytical FE program for dynamic viscoelastic analysis of asphalt pavement. International Journal of Pavement Engineering, 2022, 23, 3024-3035.	4.4	7
171	Dynamic pavement response analysis under wide-base tyre considering vehicle-tyreâ€“pavement interaction. Road Materials and Pavement Design, 2022, 23, 1650-1666.	4.0	7
172	Impact analysis of traffic loading on pavement performance using support vector regression model. International Journal of Pavement Engineering, 2022, 23, 3716-3728.	4.4	7
173	Finite element analysis of thermal-induced reflective cracking in composite pavement with mitigation strategies. Engineering Fracture Mechanics, 2022, 266, 108396.	4.3	7
174	Impact of Non-Uniform Aircraft Tire Pressure on Airfield Pavement Responses. , 2011, , .		6
175	Finite element modeling of mechanical responses of concrete pavement with partial depth repair. Construction and Building Materials, 2020, 240, 117960.	7.2	6
176	Mechanistic Modeling and Economic Analysis of Piezoelectric Energy Harvesting Potential in Airport Pavements. Transportation Research Record, 2020, 2674, 64-75.	1.9	6
177	Finite Element Analysis of Composite Repair for Damaged Steel Pipeline. Coatings, 2021, 11, 301.	2.6	6
178	Dynamic response analysis of airport pavements during aircraft taxiing for evaluating pavement bearing capacity. Journal of Zhejiang University: Science A, 2021, 22, 736-750.	2.4	6
179	Energy harvesting array materials with thin piezoelectric plates for traffic data monitoring. Construction and Building Materials, 2021, 302, 124147.	7.2	6
180	Life-Cycle Cost Analysis of Pay Adjustment for Initial Smoothness of Asphalt Pavement Overlay. Journal of Testing and Evaluation, 2020, 48, 1350-1364.	0.7	6

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181	Evaluation of Surface-Related Pavement Damage due to Tire Braking. Road Materials and Pavement Design, 2010, 11, 101-121.	4.0	6
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