

Qiao Dong

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1178608/publications.pdf>

Version: 2024-02-01

107
papers

3,108
citations

136885

32
h-index

189801

50
g-index

109
all docs

109
docs citations

109
times ranked

1842
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of initial defects on the fatigue behaviour of cement-stabilized macadam base through DEM. International Journal of Pavement Engineering, 2022, 23, 4845-4856.	2.2	5
2	Investigation of the oxidation ageing of RAP asphalt blend binders and mixtures. International Journal of Pavement Engineering, 2022, 23, 571-587.	2.2	12
3	Data Analysis in Pavement Engineering: An Overview. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 22020-22039.	4.7	13
4	Recycling and applications of steel slag aggregates. , 2022, , 269-288.		0
5	Application of waste oil in asphalt rejuvenation and modification: A comprehensive review. Construction and Building Materials, 2022, 340, 127784.	3.2	35
6	Long-term mechanical properties of in situ semi-rigid base materials. Road Materials and Pavement Design, 2021, 22, 1692-1707.	2.0	40
7	Effect of filler in asphalt mastic on rheological behaviour and susceptibility to rutting. International Journal of Pavement Engineering, 2021, 22, 87-96.	2.2	19
8	Recycling of steel slag aggregate in portland cement concrete: An overview. Journal of Cleaner Production, 2021, 282, 124447.	4.6	108
9	LCA and LCCA based multi-objective optimization of pavement maintenance. Journal of Cleaner Production, 2021, 283, 124583.	4.6	51
10	Influence of mesoscale heterogeneous and initial defects on the fracture of cement-treated base materials. Construction and Building Materials, 2021, 272, 121669.	3.2	13
11	Fatigue damage numerical simulation of cement-treated base materials by discrete element method. Construction and Building Materials, 2021, 276, 122142.	3.2	19
12	Classification of pavement climatic regions through unsupervised and supervised machine learnings. Journal of Infrastructure Preservation and Resilience, 2021, 2, .	1.5	13
13	An Advanced Otsu Method Integrated with Edge Detection and Decision Tree for Crack Detection in Highway Transportation Infrastructure. Advances in Materials Science and Engineering, 2021, 2021, 1-12.	1.0	20
14	3D Visualization of Airport Pavement Quality Based on BIM and WebGL Integration. Journal of Transportation Engineering Part B: Pavements, 2021, 147, .	0.8	16
15	Meso-cracking characteristics of rubberized cement-stabilized aggregate by discrete element method. Journal of Cleaner Production, 2021, 316, 128374.	4.6	16
16	Evaluation of fatigue performance of cement-treated composites based on residual strength through discrete element method. Construction and Building Materials, 2021, 306, 124904.	3.2	5
17	Investigating the bio-rejuvenator effects on aged asphalt through exploring molecular evolution and chemical transformation of asphalt components during oxidative aging and regeneration. Journal of Cleaner Production, 2021, 329, 129711.	4.6	36
18	Developing a load-temperature master curve for the permanent deformation of asphalt mixtures by the power function model. Road Materials and Pavement Design, 2020, 21, 1359-1373.	2.0	2

#	ARTICLE	IF	CITATIONS
19	Development of a Turpentine Cutback Asphalt Mixture for Porous Pavement Pothole Repair. Journal of Materials in Civil Engineering, 2020, 32, .	1.3	27
20	Meso-scale cracking behavior of Cement Treated Base material. Construction and Building Materials, 2020, 239, 117823.	3.2	30
21	Material Properties of Porous Asphalt Pavement Cold Patch Mixtures with Different Solvents. Journal of Materials in Civil Engineering, 2020, 32, .	1.3	21
22	Correlation investigation of fatigue indices of fine aggregate matrix (FAM) and asphalt mixture containing reclaimed asphalt pavement materials. Construction and Building Materials, 2020, 262, 120646.	3.2	17
23	Micro-scale characterization of the heterogeneous properties of in-service cement-treated base material. Construction and Building Materials, 2020, 264, 120696.	3.2	14
24	Optimal Timing for Pavement Maintenance Based on the Relationship between Pre- and Post-Treatment Performance Models. , 2020, , .		0
25	Deep reinforcement learning for long-term pavement maintenance planning. Computer-Aided Civil and Infrastructure Engineering, 2020, 35, 1230-1245.	6.3	85
26	Effect of cohesive and adhesive parameters on the moisture resistance of thin friction course (TFC) with varying mix design parameters. Construction and Building Materials, 2020, 258, 119420.	3.2	8
27	Three-Stage Evolution of Air Voids and Deformation of Porous-Asphalt Mixtures in High-Temperature Permanent Deformation. Journal of Materials in Civil Engineering, 2020, 32, .	1.3	20
28	Effect of binder film distribution on the fatigue characteristics of asphalt Binder/Filler composite based on image analysis method. Construction and Building Materials, 2020, 260, 119876.	3.2	15
29	Mesoscale numerical simulation of fracture of cement treated base material during semi circular bending test with discrete element model. Construction and Building Materials, 2020, 261, 119981.	3.2	20
30	A multiphysics evaluation of the rejuvenator effects on aged asphalt using molecular dynamics simulations. Journal of Cleaner Production, 2020, 259, 120629.	4.6	106
31	Performance Evaluation of Asphalt Pavement Resurfacing Treatments Using Structural Equation Modeling. Journal of Transportation Engineering Part B: Pavements, 2020, 146, 04019043.	0.8	3
32	Microscopic characterizations of pervious concrete using recycled Steel Slag Aggregate. Journal of Cleaner Production, 2020, 254, 120149.	4.6	44
33	Factors affecting the rutting resistance of asphalt pavement based on the field cores using multi-sequenced repeated loading test. Construction and Building Materials, 2020, 253, 118902.	3.2	19
34	Mechanical performance study of pervious concrete using steel slag aggregate through laboratory tests and numerical simulation. Journal of Cleaner Production, 2020, 262, 121208.	4.6	49
35	Low- and intermediate-temperature behaviour of polymer-modified asphalt binders, mastics, fine aggregate matrices, and mixtures with Reclaimed Asphalt Pavement material. Road Materials and Pavement Design, 2020, 21, 1872-1901.	2.0	33
36	Multi-Scale 3D Display of the Internal Quality of the Pavement Based on BIM. , 2019, , .		3

#	ARTICLE	IF	CITATIONS
37	Fractal evaluation of the rutting development for multilayer pavement by wheel tracking test. <i>Construction and Building Materials</i> , 2019, 222, 706-716.	3.2	8
38	Evaluation of aggregate packing based on thickness distribution of asphalt binder, mastic and mortar within asphalt mixtures using multiscale methods. <i>Construction and Building Materials</i> , 2019, 222, 717-730.	3.2	32
39	Framework of a 3D GIS Based Airport Pavement Management System. , 2019, , .		1
40	Improving the Quality of Pavement Performance Data in Pavement Management System. , 2019, , .		0
41	Factors affecting raveling resistance of cold-mixed ultra-thin chip seal. <i>International Journal of Pavement Research and Technology</i> , 2019, 12, 553-560.	1.3	5
42	Rutting and fatigue cracking performance of SBS-RAP blended binders with a rejuvenator. <i>Construction and Building Materials</i> , 2019, 203, 294-303.	3.2	63
43	Establishment of Prediction Models of Asphalt Pavement Performance based on a Novel Data Calibration Method and Neural Network. <i>Transportation Research Record</i> , 2019, 2673, 66-82.	1.0	47
44	Investigation of the internal structure change of two-layer asphalt mixtures during the wheel tracking test based on 2D image analysis. <i>Construction and Building Materials</i> , 2019, 209, 66-76.	3.2	62
45	Bayesian Analysis of Pavement Maintenance Failure Probability with Markov Chain Monte Carlo Simulation. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2019, 145, 04019001.	0.8	9
46	Effectiveness and Cost-Effectiveness Evaluation of Pavement Treatments Using Life-Cycle Cost Analysis. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2019, 145, 04019006.	0.8	22
47	Contributions of condition measurements on the latent pavement condition by confirmatory factor analysis. <i>Transportmetrica A: Transport Science</i> , 2019, 15, 2-17.	1.3	7
48	Effects of Loading Rate and Temperature on Cracking Resistance Characteristics of Asphalt Mixtures Using Nonnotched Semicircular Bending Tests. <i>Journal of Testing and Evaluation</i> , 2019, 47, 2649-2663.	0.4	10
49	Application of secondary steel slag in subgrade: Performance evaluation and enhancement. <i>Journal of Cleaner Production</i> , 2018, 181, 102-108.	4.6	51
50	Influence of Measurement Variability of International Roughness Index on Uncertainty of Network-Level Pavement Evaluation. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2018, 144, 04018007.	0.8	13
51	Characterization and identification of asphalt mixtures based on Convolutional Neural Network methods using X-ray scanning images. <i>Construction and Building Materials</i> , 2018, 174, 72-80.	3.2	52
52	Evaluation of permanent deformation of multilayer porous asphalt courses using an advanced multiply-repeated load test. <i>Construction and Building Materials</i> , 2018, 160, 19-29.	3.2	28
53	Reduction of moisture susceptibility of cold asphalt mixture with Portland cement and bentonite nanoclay additives. <i>Journal of Cleaner Production</i> , 2018, 176, 320-328.	4.6	46
54	Rutting resistance of porous asphalt mixture under coupled conditions of high temperature and rainfall. <i>Construction and Building Materials</i> , 2018, 174, 293-301.	3.2	30

#	ARTICLE	IF	CITATIONS
55	Development of Permanent Deformation Master Curves of Asphalt Mixtures by Load-Temperature Superposition. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	1.3	4
56	Effects of distance and rescue time to medical facilities on traffic mortality utilizing GIS. <i>International Journal of Injury Control and Safety Promotion</i> , 2018, 25, 329-335.	1.0	7
57	Fatigue damage model of stone matrix asphalt with polymer modified binder based on tensile strain evolution and residual strength degradation using digital image correlation methods. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 123, 30-38.	2.5	51
58	Application of analytic hierarchy process in network level pavement maintenance decision-making. <i>International Journal of Pavement Research and Technology</i> , 2018, 11, 345-354.	1.3	39
59	Research on the fatigue equation of asphalt mixtures based on actual stress ratio using semi-circular bending test. <i>Construction and Building Materials</i> , 2018, 158, 996-1002.	3.2	45
60	Comparison of Relaxation Modulus Converted from Frequency- and Time-Dependent Viscoelastic Functions through Numerical Methods. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 2447.	1.3	20
61	Influence of Aggregate Geometric Features on Permanent Deformation of Asphalt Mixture Based on Image Processing and Data Mining. , 2018, , .		0
62	Analysis of the Influence of Materials and Construction Practices on Slurry Seal Performance Using LTPP Data. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2018, 144, 04018046.	0.8	12
63	Access to trauma centers for road crashes in the United States. <i>Journal of Safety Research</i> , 2018, 65, 21-27.	1.7	7
64	Effectiveness Evaluation of Asphalt Pavement Maintenance Treatments Based on Equivalent Area Method. , 2018, , 379-388.		2
65	Laboratory Observation and Evaluation of Asphalt Blends of Reclaimed Asphalt Pavement Binder with Virgin Binder using SEM/EDS. <i>Transportation Research Record</i> , 2018, 2672, 69-78.	1.0	45
66	Evaluation of Semi-rigid Base Performance Through Numerical Simulation and Data Mining of Pavement Deflection Basin. , 2018, , 364-371.		5
67	Performance and Effectiveness Evaluation of Pavement Maintenance Treatments through Data Mining. , 2018, , .		0
68	Evaluation of Susceptibility of High-Temperature Performance of Asphalt Mixture to Morphological Feature of Aggregates by Fractal Theory. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, 06018018.	1.3	10
69	Case study: performance effectiveness and cost-benefit analyses of open-graded friction course pavements in Tennessee. <i>International Journal of Pavement Engineering</i> , 2017, 18, 957-970.	2.2	27
70	Optimal Thresholds for Pavement Preventive Maintenance Treatments Using LTPP Data. <i>Journal of Transportation Engineering Part A: Systems</i> , 2017, 143, .	0.8	37
71	Laboratory and Field Study of Electroosmosis Dewatering for Pavement Subgrade Soil. <i>Journal of Cold Regions Engineering - ASCE</i> , 2017, 31, .	0.5	10
72	Estimating Factors Contributing to Frequency and Severity of Large Truck-Involved Crashes. <i>Journal of Transportation Engineering Part A: Systems</i> , 2017, 143, .	0.8	35

#	ARTICLE	IF	CITATIONS
73	Correlations between road crash mortality rate and distance to trauma centers. Journal of Transport and Health, 2017, 6, 50-59.	1.1	6
74	Development of distress condition index of asphalt pavements using LTPP data through structural equation modeling. Transportation Research Part C: Emerging Technologies, 2016, 68, 58-69.	3.9	78
75	Effectiveness Analyses of Flexible Pavement Preventive Maintenance Treatments with LTPP SPS-3 Experiment Data. Journal of Transportation Engineering, 2016, 142, .	0.9	37
76	Influence of Pavement Condition Data Variability on Network-Level Maintenance Decision. Transportation Research Record, 2016, 2589, 20-31.	1.0	11
77	Failure Probability of Resurfaced Preventive Maintenance Treatments. Transportation Research Record, 2015, 2481, 65-74.	1.0	33
78	Sample Size and Precision for Pavement Inspection in a Maintenance Quality Assurance Program. , 2015, , .		0
79	Statistical Analyses of Field Serviceability of Throw-and-Roll Pothole Patches. Journal of Transportation Engineering, 2015, 141, .	0.9	25
80	Calibration and Application of Treatment Performance Models in a Pavement Management System in Tennessee. Journal of Transportation Engineering, 2015, 141, .	0.9	23
81	Soil Resilient Modulus Regressed from Physical Properties and Influence of Seasonal Variation on Asphalt Pavement Performance. Journal of Transportation Engineering, 2015, 141, .	0.9	19
82	Development of an Innovative Uniaxial Compression Test to Evaluate Permanent Deformation of Asphalt Mixtures. Journal of Materials in Civil Engineering, 2015, 27, .	1.3	23
83	Laboratory characterization of controlled low-strength materials. Materials & Design, 2015, 65, 806-813.	5.1	25
84	Field and laboratory evaluation of winter season pavement pothole patching materials. International Journal of Pavement Engineering, 2014, 15, 279-289.	2.2	50
85	Establishment of Performance Models and Effectiveness Evaluation of Pavement Maintenance Treatments at Different Traffic Levels. , 2014, , .		1
86	Use of Finite Element Analysis and Fatigue Failure Model to Estimate Costs of Pavement Damage Caused by Heavy Vehicles. Transportation Research Record, 2014, 2455, 54-62.	1.0	12
87	Laboratory Evaluation of Utilizing Waste Heavy Clay and Foundry Sand Blends as Construction Materials. Journal of Materials in Civil Engineering, 2014, 26, 04014065.	1.3	8
88	Evaluation of Influence Factors on Crack Initiation of LTPP Resurfaced-Asphalt Pavements Using Parametric Survival Analysis. Journal of Performance of Constructed Facilities, 2014, 28, 412-421.	1.0	61
89	Laboratory Evaluation on Resilient Modulus and Rate Dependencies of RAP Used as Unbound Base Material. Journal of Materials in Civil Engineering, 2014, 26, 379-383.	1.3	52
90	Investigation on Service Time and Effective Cost of Typical Pothole Patches in Tennessee. , 2014, , .		5

#	ARTICLE	IF	CITATIONS
91	Long-Term Cost-Effectiveness of Asphalt Pavement Pothole Patching Methods. Transportation Research Record, 2014, 2431, 49-56.	1.0	23
92	Validating MEPDG with Tennessee Pavement Performance Data. Journal of Transportation Engineering, 2013, 139, 306-312.	0.9	17
93	Rubber modified concrete improved by chemically active coating and silane coupling agent. Construction and Building Materials, 2013, 48, 116-123.	3.2	192
94	Laboratory Evaluation on the Mechanical Properties of Asphalt Concrete Incorporating Industrial Waste. , 2013, , .		1
95	Investigation into Laboratory Abrasion Test Methods for Pervious Concrete. Journal of Materials in Civil Engineering, 2013, 25, 886-892.	1.3	74
96	Cost-Effectiveness Analyses of Maintenance Treatments for Low- and Moderate-Traffic Asphalt Pavements in Tennessee. Journal of Transportation Engineering, 2013, 139, 797-803.	0.9	37
97	Analyzing Influence Factors of Transverse Cracking on LTPP Resurfaced Asphalt Pavements through NB and ZINB Models. Journal of Transportation Engineering, 2013, 139, 889-895.	0.9	24
98	Evaluation of Effectiveness and Cost-Effectiveness of Asphalt Pavement Rehabilitations Utilizing LTPP Data. Journal of Transportation Engineering, 2012, 138, 681-689.	0.9	59
99	Laboratory Test and Numerical Simulation of Bond Performance between Basalt Fiber Reinforced Polymer Rebar and Concrete. Journal of Testing and Evaluation, 2012, 40, 20120153.	0.4	17
100	Performance comparison of laboratory and field produced pervious concrete mixtures. Construction and Building Materials, 2011, 25, 3187-3192.	3.2	126
101	Laboratory Evaluation of Abrasion Resistance of Portland Cement Pervious Concrete. Journal of Materials in Civil Engineering, 2011, 23, 697-702.	1.3	89
102	Cost-Effectiveness Evaluation of Pavement Maintenance Treatments by OPTime. , 2010, , .		7
103	Laboratory Evaluation of Moisture Susceptibility of Hot-Mix Asphalt Containing Cementitious Fillers. Journal of Materials in Civil Engineering, 2010, 22, 667-673.	1.3	79
104	Shanghai Experience with Warm Mix Asphalt. , 2010, , .		2
105	Laboratory evaluation of incorporating waste ceramic materials into Portland cement and asphaltic concrete. Construction and Building Materials, 2009, 23, 3451-3456.	3.2	110
106	Evaluation and Application of Long-Lasting Asphalt Mixture. Transportation Research Record, 2009, 2127, 137-145.	1.0	0
107	A Laboratory Study on Cracking Potential of Binder Course Asphalt Mixtures Used in Semi-Rigid Pavements. , 2007, , .		0