

# Guoyang Lu

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

1,247  
citations

331259

21  
h-index

377514

34  
g-index

47  
all docs

47  
docs citations

47  
times ranked

747  
citing authors

#	ARTICLE	IF	CITATIONS
1	Reclamation of waste oils in asphalt modification towards enhanced low-temperature performance of pavement in cold region. <i>International Journal of Pavement Engineering</i> , 2023, 24, .	2.2	3
2	Effects of aging on rheological, chemical, and micromechanical properties of waterborne epoxy resin modified bitumen emulsion. <i>International Journal of Pavement Engineering</i> , 2023, 24, .	2.2	3
3	Effect of filler on performance of porous asphalt pavement using multiscale finite element method. <i>International Journal of Pavement Engineering</i> , 2022, 23, 3244-3254.	2.2	7
4	The hydro-mechanical interaction in novel polyurethane-bound pervious pavement by considering the saturation states in unbound granular base course. <i>International Journal of Pavement Engineering</i> , 2022, 23, 3677-3690.	2.2	23
5	Using recycled waste glass fiber reinforced polymer (GFRP) as filler to improve the performance of asphalt mastics. <i>Journal of Cleaner Production</i> , 2022, 336, 130357.	4.6	21
6	Estimation of Hydraulic Properties in Permeable Pavement Subjected to Clogging Simulation. <i>Advances in Civil Engineering</i> , 2022, 2022, 1-13.	0.4	1
7	Chemical and physical effects of polyurethane-precursor-based reactive modifier on the low-temperature performance of bitumen. <i>Construction and Building Materials</i> , 2022, 328, 127055.	3.2	20
8	Volatile organic compounds (VOCs) inhibition and energy consumption reduction mechanisms of using isocyanate additive in bitumen chemical modification. <i>Journal of Cleaner Production</i> , 2022, 368, 133070.	4.6	9
9	Study on the Water Stability of Polyurethane Concrete from Perspective of Polyurethane-Aggregate Interface. <i>Journal of Materials in Civil Engineering</i> , 2022, 34, .	1.3	5
10	Evaluation of polyurethane dense graded concrete prepared using the vacuum assisted resin transfer molding technology. <i>Construction and Building Materials</i> , 2021, 269, 121340.	3.2	19
11	Green tunnel pavement: Polyurethane ultra-thin friction course and its performance characterization. <i>Journal of Cleaner Production</i> , 2021, 289, 125131.	4.6	31
12	Rheological Behavior of Warm Mix Asphalt Modified with Foaming Process and Surfactant Additive. <i>Crystals</i> , 2021, 11, 410.	1.0	10
13	The State-of-the-Art Review on Applications of Intrusive Sensing, Image Processing Techniques, and Machine Learning Methods in Pavement Monitoring and Analysis. <i>Engineering</i> , 2021, 7, 845-856.	3.2	120
14	Influence of Different Fillers on Mechanical Properties of Porous Asphalt Mixtures Using Microstructural Finite-Element Analysis. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2021, 147, 04021004.	0.8	6
15	Influence of microstructure evolution of bitumen on its micromechanical property by finite element simulation. <i>Construction and Building Materials</i> , 2021, 293, 123522.	3.2	7
16	Comparison of the Polishing Resistances of Concrete Pavement Surface Textures Prepared with Different Technologies Using the Aachen Polishing Machine. <i>Journal of Materials in Civil Engineering</i> , 2021, 33, .	1.3	3
17	Use of Polyurethane Precursor-Based Modifier as an Eco-Friendly Approach to Improve Performance of Asphalt. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2021, 147, .	0.8	9
18	Gene-editable materials for future transportation infrastructure: a review for polyurethane-based pavement. <i>Journal of Infrastructure Preservation and Resilience</i> , 2021, 2, .	1.5	15

#	ARTICLE	IF	CITATIONS
19	New innovations in pavement materials and engineering: A review on pavement engineering research 2021. <i>Journal of Traffic and Transportation Engineering (English Edition)</i> , 2021, 8, 815-999.	2.0	59
20	Fatigue performance of long-term aged crumb rubber modified bitumen containing warm-mix additives. <i>Construction and Building Materials</i> , 2020, 239, 117824.	3.2	50
21	Numerical analysis for the influence of saturation on the base course of permeable pavement with a novel polyurethane binder. <i>Construction and Building Materials</i> , 2020, 240, 117930.	3.2	34
22	Experimental investigation on the development of pore clogging in novel porous pavement based on polyurethane. <i>Construction and Building Materials</i> , 2020, 258, 120378.	3.2	20
23	In-situ and numerical investigation on the dynamic response of unbounded granular material in permeable pavement. <i>Transportation Geotechnics</i> , 2020, 25, 100396.	2.0	14
24	Dynamic Response of Fully Permeable Pavements: Development of Pore Pressures under Different Modes of Loading. <i>Journal of Materials in Civil Engineering</i> , 2020, 32, .	1.3	19
25	Effect of binder film distribution on the fatigue characteristics of asphalt Binder/Filler composite based on image analysis method. <i>Construction and Building Materials</i> , 2020, 260, 119876.	3.2	15
26	Sustainable High-Ductility Concrete with Rapid Self-Healing Characteristic by Adding Magnesium Oxide and Superabsorbent Polymer. <i>Advances in Materials Science and Engineering</i> , 2020, 2020, 1-12.	1.0	4
27	Improving the polishing resistance of cement mortar by using recycled ceramic. <i>Resources, Conservation and Recycling</i> , 2020, 158, 104796.	5.3	33
28	Investigation of the Hydraulic Properties of Pervious Pavement Mixtures: Characterization of Darcy and Non-Darcy Flow Based on Pore Microstructures. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2020, 146, 04020012.	0.8	21
29	Accelerated Healing in Asphalt Concrete via Laboratory Microwave Heating. <i>Journal of Testing and Evaluation</i> , 2020, 48, 739-757.	0.4	28
30	Parameter optimisation of a 2D finite element model to investigate the microstructural fracture behaviour of asphalt mixtures. <i>Theoretical and Applied Fracture Mechanics</i> , 2019, 103, 102319.	2.1	33
31	Analyzing the effects of clogging of PA internal structure with artificial soiling experiments. <i>International Journal of Transportation Science and Technology</i> , 2019, 8, 383-393.	2.0	5
32	Sustainable Green Pavement Using Bio-Based Polyurethane Binder in Tunnel. <i>Materials</i> , 2019, 12, 1990.	1.3	23
33	Investigation of the microstructural fracture behaviour of asphalt mixtures using the finite element method. <i>Construction and Building Materials</i> , 2019, 227, 117078.	3.2	31
34	Characterization of Bitumen Modified with Pyrolytic Carbon Black from Scrap Tires. <i>Sustainability</i> , 2019, 11, 1631.	1.6	29
35	Comparison of Mechanical Responses of Asphalt Mixtures under Uniform and Non-Uniform Loads Using Microscale Finite Element Simulation. <i>Materials</i> , 2019, 12, 3058.	1.3	7
36	Performance Evaluation of Pervious Pavement Using Accelerated Pavement Testing System. , 2019, , .		2

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37	Experimental study on the polyurethane-bound pervious mixtures in the application of permeable pavements. <i>Construction and Building Materials</i> , 2019, 202, 838-850.	3.2	86
38	Laboratory and Numerical Investigation of Microwave Heating Properties of Asphalt Mixture. <i>Materials</i> , 2019, 12, 146.	1.3	37
39	The environmental impact evaluation on the application of permeable pavement based on life cycle analysis. <i>International Journal of Transportation Science and Technology</i> , 2019, 8, 351-357.	2.0	24
40	Numerical Simulation of Crack Propagation in Flexible Asphalt Pavements Based on Cohesive Zone Model Developed from Asphalt Mixtures. <i>Materials</i> , 2019, 12, 1278.	1.3	29
41	Development of a sustainable pervious pavement material using recycled ceramic aggregate and bio-based polyurethane binder. <i>Journal of Cleaner Production</i> , 2019, 220, 1052-1060.	4.6	91
42	Investigations on microstructure characteristics of porous pavement based on X-ray CT scanning. <i>Japanese Geotechnical Society Special Publication</i> , 2019, 7, 609-614.	0.2	0
43	Influence of temperature on polishing behaviour of asphalt road surfaces. <i>Wear</i> , 2018, 402-403, 49-56.	1.5	17
44	Effect of Aging on Chemical and Rheological Properties of Bitumen. <i>Polymers</i> , 2018, 10, 1345.	2.0	68
45	The State of the Art: Application of Green Technology in Sustainable Pavement. <i>Advances in Materials Science and Engineering</i> , 2018, 2018, 1-19.	1.0	32
46	Evaluation of morphological characteristics of fine aggregate in asphalt pavement. <i>Construction and Building Materials</i> , 2017, 139, 1-8.	3.2	42
47	Suitability of PoroElastic Road Surface (PERS) for urban roads in cold regions: Mechanical and functional performance assessment. <i>Journal of Cleaner Production</i> , 2017, 165, 1340-1350.	4.6	82