Wen-Juan Sun

List of Publications by Year
in descending order

44 papers	2,250 citations	236833 25 h-index	265120 42 g-index
45 all docs	45 docs citations	45 times ranked	1532 citing authors

#	Article	IF	Citations
1	Overview of Interdependency Models of Critical Infrastructure for Resilience Assessment. Natural Hazards Review, 2022, 23, .	0.8	14
2	A Deep Learning Method for Pavement Crack Identification Based on Limited Field Images. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 22156-22165.	4.7	13
3	Quantitative Models for Interdependent Functionality and Recovery of Critical Infrastructure Systems. , 2022, , 127-229.		2
4	Policy-based disaster recovery planning model for interdependent infrastructure systems under uncertainty. Structure and Infrastructure Engineering, 2021, 17, 555-578.	2.0	12
5	Resilience metrics and measurement methods for transportation infrastructure: the state of the art. Sustainable and Resilient Infrastructure, 2020, 5, 168-199.	1.7	148
6	Risk Assessment Using a New Consulting Process in Fuzzy AHP. Journal of Construction Engineering and Management - ASCE, 2020, 146, .	2.0	180
7	Applications of artificial intelligence for disaster management. Natural Hazards, 2020, 103, 2631-2689.	1.6	138
8	Model for Estimating the Impact of Interdependencies on System Recovery. Journal of Infrastructure Systems, 2020, 26, .	1.0	11
9	Prediction Model of Shield Performance During Tunneling via Incorporating Improved Particle Swarm Optimization Into ANFIS. IEEE Access, 2020, 8, 39659-39671.	2.6	92
10	Two Underground Pedestrian Passages Using Pipe Jacking: Case Study. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	30
11	Flood risk assessment in metro systems of mega-cities using a GIS-based modeling approach. Science of the Total Environment, 2018, 626, 1012-1025.	3.9	287
12	A multiscale DEM-FEM approach to investigate the tireâ€“pavement friction. International Journal of Pavement Engineering, 2018, 19, 399-406.	2.2	10
13	Framework for determining material genome of granular materials: Material characterization and numerical simulation at multiple spatial scales. International Journal of Pavement Research and Technology, 2018, 11, 195-204.	1.3	3
14	The State of the Art: Application of Green Technology in Sustainable Pavement. Advances in Materials Science and Engineering, 2018, 2018, 1-19.	1.0	32
15	Vortex-induced vibrations of a square cylinder under linear shear flow. Fluid Dynamics Research, 2017, 49, 025502.	0.6	8
16	Mixed-Mode Iâ€“II Cracking Characterization of Mortar Using Phase-Field Method. Journal of Engineering Mechanics - ASCE, 2017, 143, 04017033.	1.6	23
17	A multi-scale approach of Mode I Crack in ettringite. Road Materials and Pavement Design, 2017, 18, 33-42.	2.0	18
18	Experimental investigation of the relationship between mineral content and aggregate morphological characteristics using the improved FTI system and XRD method. Construction and Building Materials, 2017, 155, 981-991.	3.2	11

#	Article	IF	Citations
19	Mechanical properties of rock materials with related to mineralogical characteristics and grain size through experimental investigation: a comprehensive review. Frontiers of Structural and Civil Engineering, 2017, 11, 322-328.	1.2	35
20	Effect of coarse aggregate morphology on the mechanical properties of stone matrix asphalt. Construction and Building Materials, 2017, 152, 48-56.	3.2	42
21	Diffuse Interface Model to Investigate the Asphalt Concrete Cracking Subjected to Shear Loading at Low Temperature. Journal of Cold Regions Engineering - ASCE, 2017, 31, .	0.5	24
22	Flow characteristics and dynamic responses of a rear circular cylinder behind the square cylinder with different side lengths. Journal of Vibroengineering, 2017, 19, 2956-2975.	0.5	7
23	Quasi-Brittle Fracture Modeling of Preflawed Bitumen Using a Diffuse Interface Model. Advances in Materials Science and Engineering, 2016, 2016, 1-7.	1.0	19
24	Coupled Navierâ€“Stokes Phase-Field Model to Evaluate the Microscopic Phase Separation in Asphalt Binder under Thermal Loading. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	41
25	Quantification of aggregate morphologic characteristics with the correlation to uncompacted void content of coarse aggregates in Virginia. Construction and Building Materials, 2016, 124, 645-655.	3.2	32
26	Quantification of Aggregate Morphologic Characteristics as Related to Mechanical Properties of Asphalt Concrete with Improved FTI System. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	25
27	Fracture failure in crack interaction of asphalt binder by using a phase field approach. Materials and Structures/Materiaux Et Constructions, 2015, 48, 2997-3008.	1.3	50
28	Evaluation of fracture in mortar subject to tension loading using phase field model and three point bending test. Materials and Design, 2015, 86, 121-128.	3.3	12
29	Environmental protection using dewatering technology in a deep confined aquifer beneath a shallow aquifer. Engineering Geology, 2015, 196, 59-70.	2.9	60
30	Investigation of the Asphalt Self-Healing Mechanism Using a Phase-Field Model. Journal of Materials in Civil Engineering, 2015, 27, .	1.3	68
31	Evaluation of the blocking effect of retaining walls on groundwater seepage in aquifers with different insertion depths. Engineering Geology, 2014, 183, 254-264.	2.9	118
32	Modeling Mode I Cracking Failure in Asphalt Binder by Using Nonconserved Phase-Field Model. Journal of Materials in Civil Engineering, 2014, 26, 684-691.	1.3	64
33	Evaluation of the hydraulic conductivity of aquifers with piles. Hydrogeology Journal, 2014, 22, 371-382.	0.9	70
34	Deformation behavior of high performance fiber reinforced cementitious composite prepared with asphalt emulsion. Journal of Central South University, 2014, 21, 811-816.	1.2	5
35	Leaking behavior of shield tunnels under the Huangpu River of Shanghai with induced hazards. Natural Hazards, 2014, 70, 1115-1132.	1.6	120
36	Fracture failure of asphalt binder in mixed mode (Modes I and II) by using phase-field model. Road Materials and Pavement Design, 2014, 15, 167-181.	2.0	13

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37	A field trial of horizontal jet grouting using the composite-pipe method in the soft deposits of Shanghai. Tunnelling and Underground Space Technology, 2013, 35, 142-151.	3.0	129
38	Review of Multiscale Characterization Techniques and Multiscale Modeling Methods for Cement Concrete: From Atomistic to Continuum. , 2013, , 325-341.		2
39	Evaluation of Aggregate Imaging Techniques for Quantification of Morphological Characteristics. Transportation Research Record, 2013, 2335, 39-49.	1.0	47
40	Experimental Evaluation of a Simple Contact Model Containing Two Elastic Particles Bonded by a Thin Layer of Viscoelastic Binder. Journal of Nanomechanics & Micromechanics, 2013, 3, 04013005.	1.4	1
41	Evaluation of image analysis methods used for quantification of particle angularity. Sedimentology, 2013, 60, 1100-1110.	1.6	46
42	Image Analysis Technique for Aggregate Morphology Analysis with Two-Dimensional Fourier Transform Method. Transportation Research Record, 2012, 2267, 3-13.	1.0	36
43	Evaluation of land subsidence by considering underground structures that penetrate the aquifers of Shanghai, China. Hydrogeology Journal, 2012, 20, 1623-1634.	0.9	107
44	Field performance of underground structures during shield tunnel construction. Tunnelling and Underground Space Technology, 2012, 28, 272-277.	3.0	32