Ali Behnood

List of Publications by Year
in descending order

68 papers	6,045 citations	76196 40 h-index	106150 65 g-index
71 all docs	71 docs citations	71 times ranked	3628 citing authors

#	Article	IF	Citations
1	Utilization of copper slag in cement and concrete. Resources, Conservation and Recycling, 2008, 52, 1115-1120.	5.3	394
2	Morphology, rheology, and physical properties of polymer-modified asphalt binders. European Polymer Journal, 2019, 112, 766-791.	2.6	360
3	Predicting the compressive strength of normal and High-Performance Concretes using ANN and ANFIS hybridized with Grey Wolf Optimizer. Construction and Building Materials, 2020, 232, 117266.	3.2	289
4	Effects of silica fume addition and water to cement ratio on the properties of high-strength concrete after exposure to high temperatures. Cement and Concrete Composites, 2008, 30, 106-112.	4.6	240
5	Predicting the compressive strength of silica fume concrete using hybrid artificial neural network with multi-objective grey wolves. Journal of Cleaner Production, 2018, 202, 54-64.	4.6	237
6	Determinants of bicyclist injury severities in bicycle-vehicle crashes: A random parameters approach with heterogeneity in means and variances. Analytic Methods in Accident Research, 2017, 16, 35-47.	4.7	225
7	Soil and clay stabilization with calcium- and non-calcium-based additives: A state-of-the-art review of challenges, approaches and techniques. Transportation Geotechnics, 2018, 17, 14-32.	2.0	219
8	Prediction of the compressive strength of normal and high-performance concretes using M5P model tree algorithm. Construction and Building Materials, 2017, 142, 199-207.	3.2	216
9	Application of rejuvenators to improve the rheological and mechanical properties of asphalt binders and mixtures: A review. Journal of Cleaner Production, 2019, 231, 171-182.	4.6	214
10	Rheological properties of asphalt binders modified with styrene-butadiene-styrene (SBS), ground tire rubber (GTR), or polyphosphoric acid (PPA). Construction and Building Materials, 2017, 151, 464-478.	3.2	187
11	The temporal stability of factors affecting driver-injury severities in single-vehicle crashes: Some empirical evidence. Analytic Methods in Accident Research, 2015, 8, 7-32.	4.7	174
12	An empirical assessment of the effects of economic recessions on pedestrian-injury crashes using mixed and latent-class models. Analytic Methods in Accident Research, 2016, 12, 1-17.	4.7	166
13	Predicting modulus elasticity of recycled aggregate concrete using M5′ model tree algorithm. Construction and Building Materials, 2015, 94, 137-147.	3.2	161
14	The effect of passengers on driver-injury severities in single-vehicle crashes: A random parameters heterogeneity-in-means approach. Analytic Methods in Accident Research, 2017, 14, 41-53.	4.7	155
15	Mechanical properties of high-strength concrete incorporating copper slag as coarse aggregate. Construction and Building Materials, 2009, 23, 2183-2188.	3.2	144
16	Application of soft computing methods for predicting the elastic modulus of recycled aggregate concrete. Journal of Cleaner Production, 2018, 176, 1163-1176.	4.6	135
17	Latent class analysis of the effects of age, gender, and alcohol consumption on driver-injury severities. Analytic Methods in Accident Research, 2014, 3-4, 56-91.	4.7	126
18	Evaluation of the splitting tensile strength in plain and steel fiber-reinforced concrete based on the compressive strength. Construction and Building Materials, 2015, 98, 519-529.	3.2	120

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19	Machine learning study of the mechanical properties of concretes containing waste foundry sand. Construction and Building Materials, 2020, 243, 118152.	3.2	120
20	Estimation of the compressive strength of concretes containing ground granulated blast furnace slag using hybridized multi-objective ANN and salp swarm algorithm. Construction and Building Materials, 2020, 248, 118676.	3.2	118
21	Time-of-day variations and temporal instability of factors affecting injury severities in large-truck crashes. Analytic Methods in Accident Research, 2019, 23, 100102.	4.7	114
22	Estimating the optimal mix design of silica fume concrete using biogeography-based programming. Cement and Concrete Composites, 2019, 96, 95-105.	4.6	108
23	Effects of copper slag and recycled concrete aggregate on the properties of CIR mixes with bitumen emulsion, rice husk ash, Portland cement and fly ash. Construction and Building Materials, 2015, 96, 172-180.	3.2	105
24	Performance evaluation of asphalt mixtures containing warm mix asphalt (WMA) additives and reclaimed asphalt pavement (RAP). Construction and Building Materials, 2021, 268, 121200.	3.2	101
25	Laboratory studies to investigate the properties of CIR mixes containing steel slag as a substitute for virgin aggregates. Construction and Building Materials, 2012, 26, 475-480.	3.2	98
26	A review of the warm mix asphalt (WMA) technologies: Effects on thermo-mechanical and rheological properties. Journal of Cleaner Production, 2020, 259, 120817.	4.6	95
27	Automatic regression methods for formulation of elastic modulus of recycled aggregate concrete. Applied Soft Computing Journal, 2018, 64, 377-400.	4.1	76
28	Experimental investigation of stone matrix asphalt mixtures containing steel slag. Scientia Iranica, 2012, 19, 1214-1219.	0.3	74
29	Determinant of injury severities in large truck crashes: A weekly instability analysis. Safety Science, 2020, 131, 104911.	2.6	69
30	Stress-dependent behavior and rutting resistance of modified asphalt binders: An MSCR approach. Construction and Building Materials, 2017, 157, 635-646.	3.2	68
31	Rheological properties of asphalt binders modified with recycled materials: A comparison with Styrene-Butadiene-Styrene (SBS). Construction and Building Materials, 2020, 230, 117047.	3.2	67
32	Temporal stability of driver injury severities in animal-vehicle collisions: A random parameters with heterogeneity in means (and variances) approach. Analytic Methods in Accident Research, 2020, 26, 100120.	4.7	65
33	High-Temperature Properties of Asphalt Binders: Comparison of Multiple Stress Creep Recovery and Performance Grading Systems. Transportation Research Record, 2016, 2574, 131-143.	1.0	57
34	The effects of drug and alcohol consumption on driver injury severities in single-vehicle crashes. Traffic Injury Prevention, 2017, 18, 456-462.	0.6	56
35	Determinants of the infection rate of the COVID-19 in the U.S. using ANFIS and virus optimization algorithm (VOA). Chaos, Solitons and Fractals, 2020, 139, 110051.	2.5	51
36	Mechanical properties of GGBFS-based geopolymer concrete incorporating natural zeolite and silica fume with an optimum design using response surface method. Journal of Building Engineering, 2021, 36, 102138.	1.6	50

#	Article	IF	Citations
37	A machine learning study of the dynamic modulus of asphalt concretes: An application of M5P model tree algorithm. Construction and Building Materials, 2020, 262, 120544.	3.2	49
38	Effects of deicers on the performance of concrete pavements containing air-cooled blast furnace slag and supplementary cementitious materials. Cement and Concrete Composites, 2018, 90, 27-41.	4.6	46
39	The effects of Gilsonite and Sasobit on the mechanical properties and durability of asphalt mixtures. Construction and Building Materials, 2020, 238, 117676.	3.2	45
40	Predicting the compressive strength of self‑compacting concrete containing Class F fly ash using metaheuristic radial basis function neural network. Structural Concrete, 2022, 23, 1191-1213.	1.5	44
41	Estimation of the dynamic modulus of asphalt concretes using random forests algorithm. International Journal of Pavement Engineering, 2022, 23, 250-260.	2.2	42
42	Predicting the dynamic modulus of asphalt mixture using machine learning techniques: An application of multi biogeography-based programming. Construction and Building Materials, 2021, 266, 120983.	3.2	40
43	A fracture-based approach to characterize long-term performance of asphalt mixes under moisture and freeze-thaw conditions. Engineering Fracture Mechanics, 2021, 241, 107418.	2.0	40
44	Road safety research in the context of low- and middle-income countries: Macro-scale literature analyses, trends, knowledge gaps and challenges. Safety Science, 2022, 146, 105513.	2.6	38
45	Temporal stability of pedestrian injury severity in pedestrian-vehicle crashes: New insights from random parameter logit model with heterogeneity in means and variances. Analytic Methods in Accident Research, 2021, 32, 100184.	4.7	34
46	Predicting the mechanical properties of sustainable concrete containing waste foundry sand using multi-objective ANN approach. Construction and Building Materials, 2021, 291, 123314.	3.2	33
47	Prediction of the shear modulus of municipal solid waste (MSW): An application of machine learning techniques. Journal of Cleaner Production, 2021, 303, 127053.	4.6	30
48	Moisture Susceptibility of Asphalt Mixtures: Thermodynamic Evaluation of the Effects of Antistripping Additives. Journal of Materials in Civil Engineering, 2021, 33, .	1.3	29
49	Comparison of contributing factors in hit-and-run crashes with distracted and non-distracted drivers. Transportation Research Part F: Traffic Psychology and Behaviour, 2016, 38, 22-28.	1.8	24
50	Estimation of the compressive strength of green concretes containing rice husk ash: a comparison of different machine learning approaches. European Journal of Environmental and Civil Engineering, 2023, 27, 961-983.	1.0	24
51	Structural anatomy and temporal trends of road accident research: Full-scope analyses of the field. Journal of Safety Research, 2021, 79, 173-198.	1.7	23
52	Prediction of the resilient modulus of non-cohesive subgrade soils and unbound subbase materials using a hybrid support vector machine method and colliding bodies optimization algorithm. Construction and Building Materials, 2021, 275, 122140.	3.2	22
53	Novel metaheuristic-based type-2 fuzzy inference system for predicting the compressive strength of recycled aggregate concrete. Journal of Cleaner Production, 2021, 320, 128771.	4.6	21
54	Rheological, physicochemical, and microstructural properties of asphalt binder modified by fumed silica nanoparticles. Scientific Reports, 2021, 11, 11455.	1.6	20

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55	Predicting the compressive strength of green concretes using Harris hawks optimization-based data-driven methods. Construction and Building Materials, 2022, 318, 125944.	3.2	20
56	Post-fire behavior evaluation of concrete mixtures containing natural zeolite using a novel metaheuristic-based machine learning method. Archives of Civil and Mechanical Engineering, 2022, 22, 1.	1.9	19
57	Assessment of temporal stability in risk factors of crashes at horizontal curves on rural two-lane undivided highways. Journal of Safety Research, 2021, 76, 205-217.	1.7	16
58	Artificial Intelligence to Model the Performance of Concrete Mixtures and Elements: A Review. Archives of Computational Methods in Engineering, 2022, 29, 1941-1964.	6.0	16
59	Pavement Patching Practices. , 2014, , .		16
60	Coupled effects of warm mix asphalt (WMA) additives and rheological modifiers on the properties of asphalt binders. Cleaner Engineering and Technology, 2020, 1, 100028.	2.1	15
61	Engineered nanocomposites in asphalt binders. Nanotechnology Reviews, 2022, 11, 1047-1067.	2.6	15
62	Bicyclists injury severities: An empirical assessment of temporal stability. Accident Analysis and Prevention, 2022, 168, 106616.	3.0	12
63	The effects of drivers' behavior on driver-injury severities in Iran: An application of the mixed-logit model. Scientia Iranica, 2016, 23, 2429-2440.	0.3	11
64	Predicting the dynamic modulus of asphalt mixture using hybridized artificial neural network and grey wolf optimizer. International Journal of Pavement Engineering, 2023, 24, 1-11.	2.2	9
65	Determinants of purchase likelihood for partially and fully automated vehicles: Insights from mixed logit model with heterogeneity in means and variances. Transportation Research, Part A: Policy and Practice, 2022, 159, 119-139.	2.0	9
66	Determining the Moisture Content of Pre-Wetted Lightweight Aggregate: Assessing the Variability of the Paper Towel and Centrifuge Methods. , 2014, , .		8
67	Cracking features of asphalt mixtures under induced heating-healing. Construction and Building Materials, 2022, 324, 126625.	3.2	4
68	Full-Scale Laboratory Evaluation of the Effectiveness of Subgrade Soil Stabilization Practices for Portland Cement Concrete Pavements Patching Applications. Transportation Research Record, 2020, 2674, 465-474.	1.0	0