Pan Lu

List of Publications by Year
in descending order

56￼papers	867￼citations	567281￼15￼h-index	526287￼27￼g-index
56￼all docs	56￼docs citations	56￼times ranked	702￼citing authors

#	Article	IF	Citations
1	Accident Prediction Accuracy Assessment for Highway-Rail Grade Crossings Using Random Forest Algorithm Compared with Decision Tree. Reliability Engineering and System Safety, 2020, 200, 106931.	8.9	116
2	Commercial truck crash injury severity analysis using gradient boosting data mining model. Journal of Safety Research, 2018, 65, 115-124.	3.6	113
3	A Review of Car-Following Models and Modeling Tools for Human and Autonomous-Ready Driving Behaviors in Micro-Simulation. Smart Cities, 2021, 4, 314-335.	9.4	63
4	Accident prediction model for public highway-rail grade crossings. Accident Analysis and Prevention, 2016, 90, 73-81.	5.7	47
5	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
6	Pavement Treatment Short-Term Effectiveness in IRI Change Using Long-Term Pavement Program Data. Journal of Transportation Engineering, 2012, 138, 1297-1302.	0.9	38
7	Decision Tree Approach to Accident Prediction for Highway–Rail Grade Crossings: Empirical Analysis. Transportation Research Record, 2016, 2545, 115-122.	1.9	33
8	A deep learning approach for imbalanced crash data in predicting highway-rail grade crossings accidents. Reliability Engineering and System Safety, 2021, 216, 108019.	8.9	32
9	Technology Developments and Impacts of Connected and Autonomous Vehicles: An Overview. Smart Cities, 2022, 5, 382-404.	9.4	32
10	Vehicle Classification System Using In-Pavement Fiber Bragg Grating Sensors. IEEE Sensors Journal, 2018, 18, 2807-2815.	4.7	28
11	Railroad Track Condition Monitoring Using Inertial Sensors and Digital Signal Processing: A Review. IEEE Sensors Journal, 2019, 19, 25-33.	4.7	24
12	Geometric effect analysis of highway-rail grade crossing safety performance. Accident Analysis and Prevention, 2020, 138, 105470.	5.7	20
13	Multiobjective Pavement-Preservation Decision Making with Simulated Constraint Boundary Programming. Journal of Transportation Engineering, 2013, 139, 880-888.	0.9	18
14	Prediction of Bridge Component Ratings Using Ordinal Logistic Regression Model. Mathematical Problems in Engineering, 2019, 2019, 1-11.	1.1	18
15	Predicting Highway–Rail Grade Crossing Collision Risk by Neural Network Systems. Journal of Transportation Engineering Part A: Systems, 2019, 145, .	1.4	16
16	Electricity Load Forecasting Based on Adaptive Quantum-Behaved Particle Swarm Optimization and Support Vector Machines on Global Level. , 2008, , .		15
17	Comparing rail fuel efficiency with truck and waterway. Transportation Research, Part D: Transport and Environment, 2013, 24, 69-75.	6.8	15
18	A Gradient Boosting Crash Prediction Approach for Highway-Rail Grade Crossing Crash Analysis. Journal of Advanced Transportation, 2020, 2020, 1-10.	1.7	15

#	Article	IF	Citations
19	Weigh-In-Motion System in Flexible Pavements Using Fiber Bragg Grating Sensors Part A: Concept. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 5136-5147.	8.0	12
20	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
21	Impact of Forest Road Maintenance Policies on Log Transportation Cost, Routing, and Carbon-Emission Trade-Offs: Oregon Case Study. Journal of Transportation Engineering Part A: Systems, 2020, 146, .	1.4	11
22	Optimal System Design for Weigh-In-Motion Measurements Using In-Pavement Strain Sensors. IEEE Sensors Journal, 2017, 17, 7677-7684.	4.7	10
23	Signal Filter Cut-Off Frequency Determination to Enhance the Accuracy of Rail Track Irregularity Detection and Localization. IEEE Sensors Journal, 2020, 20, 1393-1399.	4.7	9
24	Enhancement of signals from connected vehicles to detect roadway and railway anomalies. Measurement Science and Technology, 2020, 31, 035105.	2.6	9
25	Internal crack detection in concrete pavement using discrete strain sensors. Journal of Civil Structural Health Monitoring, 2020, 10, 345-356.	3.9	9
26	Surface Modification of Carbon Nanotubes Using Carboxymethyl Cellulose for Enhanced Stress Sensing in Smart Cementitious Composites. IEEE Sensors Journal, 2021, , 1-1.	4.7	9
27	Detection of Pavement Maintenance Treatments using Deep-Learning Network. Transportation Research Record, 2021, 2675, 1434-1443.	1.9	9
28	Electricity Load Forecasting Using Rough Set Attribute Reduction Algorithm Based on Immune Genetic Algorithm and Support Vector Machines. , 2008, , .		8
29	A crash severity analysis at highway-rail grade crossings: The random survival forest method. Accident Analysis and Prevention, 2020, 144, 105683.	5.7	8
30	Railroad Energy Efficiency in the United States: Analytical and Statistical Analysis. Journal of Transportation Engineering, 2014, 140, 23-30.	0.9	7
31	A Simultaneous Safety Analysis of Crash Frequency and Severity for Highway-Rail Grade Crossings: The Competing Risks Method. Journal of Advanced Transportation, 2020, 2020, 1-13.	1.7	7
32	Mining Connected Vehicle Data for Beneficial Patterns in Dubai Taxi Operations. Journal of Advanced Transportation, 2018, 2018, 1-8.	1.7	6
33	Short-Term Electricity Load Forecasting Based on ICA and LSSVM. , 2009, , .		5
34	Measuring Passenger Car Equivalents (PCE) for Heavy Vehicle on Two Lane Highway Segments Operating Under Various Traffic Conditions. Journal of Advanced Transportation, 2020, 2020, 1-9.	1.7	5
35	Dynamic Properties of Sand-Sawdust Mixture for Modeling Deposit Soil. Applied Sciences (Switzerland), 2019, 9, 3863.	2.5	4
36	Surface Treatment of Carbon Nanotubes Using Modified Tapioca Starch for Improved Force Detection Consistency in Smart Cementitious Materials. Sensors, 2020, 20, 3985.	3.8	4

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37	Signal Feature Extraction and Combination to Enhance the Detection and Localization of Railroad Track Irregularities. IEEE Sensors Journal, 2021, 21, 6555-6563.	4.7	4
38	Investigating the effectiveness of safety countermeasures at highway-rail at-grade crossings using a competing risk model. Journal of Safety Research, 2021, 78, 251-261.	3.6	4
39	Review of Emerging Technologies and Issues in Rail and Track Inspection for Local Lines in the United States. Journal of Transportation Engineering Part A: Systems, 2021, 147, .	1.4	4
40	Bottom-up crack detection in concrete pavements using in-pavement strain sensors. , 2018, , .		4
41	Mechanistic–Empirical Analysis of Pavement Performance Considering Dynamic Axle Load Spectra Due to Longitudinal Unevenness. Applied Sciences (Switzerland), 2022, 12, 2600.	2.5	3
42	Statistical Safety Performance Models considering Pavement and Roadway Characteristics. Journal of Advanced Transportation, 2022, 2022, 1-12.	1.7	3
43	An Automated Rail Extraction Framework for Low-Density LiDAR Data Without Sensor Configuration Information. IEEE Sensors Journal, 2022, 22, 13234-13243.	4.7	3
44	Missing Pavement Performance Data Imputation Using Graph Neural Networks. Transportation Research Record, 2022, 2676, 409-419.	1.9	3
45	A Modal Perturbation Method for Eigenvalue Problem of Non-Proportionally Damped System. Applied Sciences (Switzerland), 2020, 10, 341.	2.5	2
46	Automatic Rail Track Surface Anomaly Detection with Smartphone Based Monitoring System. DEStech Transactions on Engineering and Technology Research, 2019, , .	0.0	2
47	Detecting sources of ride roughness by ensemble-connected vehicle signals. International Journal of Pavement Engineering, 2023, 24, .	4.4	2
48	Distribution Centers Site Selection Based on KPCA-SVRM. , 2008, , .		1
49	Forecasting Class I Railroad Fuel Consumption by Train Type. Transportation Research Record, 2020, 2674, 284-290.	1.9	1
50	Road sensor network for smart city applications. , 2018, , .		1
51	Modeling Bridge Condition Levels in the United States. Journal of Civil Engineering and Architecture, 2012, 6, .	0.1	1
52	Experimental crack detection in concrete pavement using point strain sensors. , 2019, , .		1
53	Combining KPCA with Support Vector Regression Machine for Short-Term Electricity Load Forecasting. , 2008, , .		0
54	Variability of Track Investment with Traffic for Class I Railroads in the United States. Modern Economy, 2019, 10, 1198-1210.	0.5	0

#	ARTICLE	IF	CITATIONS
55	Train speed estimation using low-cost GPS receivers. , 2019, , .		0
56	Sensor system benefits and costs in positive train control. , 2019, , .		0