Yunlong Zhang

List of Publications by Year
in descending order

97 papers	3,330 citations	147726 31 h-index	161767 54 g-index
97 all docs	97 docs citations	97 times ranked	2544 citing authors

#	ARTICLE	IF	CITATIONS
1	Predicting motor vehicle crashes using Support Vector Machine models. Accident Analysis and Prevention, 2008, 40, 1611-1618.	3.0	245
2	Short-Term Traffic Volume Forecasting Using Kalman Filter with Discrete Wavelet Decomposition. Computer-Aided Civil and Infrastructure Engineering, 2007, 22, 326-334.	6.3	233
3	A hybrid short-term traffic flow forecasting method based on spectral analysis and statistical volatility model. Transportation Research Part C: Emerging Technologies, 2014, 43, 65-78.	3.9	201
4	Predicting motor vehicle collisions using Bayesian neural network models: An empirical analysis. Accident Analysis and Prevention, 2007, 39, 922-933.	3.0	191
5	Forecasting of Short-Term Freeway Volume with v-Support Vector Machines. Transportation Research Record, 2007, 2024, 92-99.	1.0	133
6	Short-Term Traffic Flow Forecasting Using Fuzzy Logic System Methods. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2008, 12, 102-112.	2.6	111
7	Queue Length Estimation Using Connected Vehicle Technology for Adaptive Signal Control. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 2129-2140.	4.7	109
8	Travel Mode Choice Modeling with Support Vector Machines. Transportation Research Record, 2008, 2076, 141-150.	1.0	83
9	Development of Recurrent Neural Network Considering Temporal–Spatial Input Dynamics for Freeway Travel Time Modeling. Computer-Aided Civil and Infrastructure Engineering, 2013, 28, 359-371.	6.3	80
10	A Wavelet Network Model for Short-Term Traffic Volume Forecasting. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2006, 10, 141-150.	2.6	76
11	Seasonal Autoregressive Integrated Moving Average and Support Vector Machine Models. Transportation Research Record, 2011, 2215, 85-92.	1.0	76
12	Vehicle Type–Specific Headway Analysis Using Freeway Traffic Data. Transportation Research Record, 2009, 2124, 222-230.	1.0	74
13	Bayesian mixture modeling approach to account for heterogeneity in speed data. Transportation Research Part B: Methodological, 2010, 44, 662-673.	2.8	74
14	A space–time diurnal method for short-term freeway travel time prediction. Transportation Research Part C: Emerging Technologies, 2014, 43, 33-49.	3.9	71
15	Application of finite mixture of negative binomial regression models with varying weight parameters for vehicle crash data analysis. Accident Analysis and Prevention, 2013, 50, 1042-1051.	3.0	69
16	Multiregime Approach for Microscopic Traffic Simulation. Transportation Research Record, 1998, 1644, 103-114.	1.0	58
17	Development of a driving simulator based eco-driving support system. Transportation Research Part C: Emerging Technologies, 2015, 58, 631-641.	3.9	58
18	A Real-Time Transit Signal Priority Control Model Considering Stochastic Bus Arrival Time. IEEE Transactions on Intelligent Transportation Systems, 2014, 15, 1657-1666.	4.7	55

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19	Crash Frequency Analysis with Generalized Additive Models. Transportation Research Record, 2008, 2061, 39-45.	1.0	51
20	Crash frequency analysis of different types of urban roadway segments using generalized additive model. Journal of Safety Research, 2012, 43, 107-114.	1.7	50
21	Freeway Travel Time Prediction Using Takagiâ€"Sugenoâ€"Kang Fuzzy Neural Network. Computer-Aided Civil and Infrastructure Engineering, 2013, 28, 594-603.	6.3	44
22	Crash Involvement and Risky Riding Behaviors among Delivery Riders in China: The Role of Working Conditions. Transportation Research Record, 2019, 2673, 1011-1022.	1.0	44
23	Vehicle Fuel Consumption Prediction Method Based on Driving Behavior Data Collected from Smartphones. Journal of Advanced Transportation, 2020, 2020, 1-11.	0.9	44
24	Modeling Left-Turn Blockage and Capacity at Signalized Intersection with Short Left-Turn Bay. Transportation Research Record, 2008, 2071, 71-76.	1.0	40
25	Assessing the Influence of Adverse Weather on Traffic Flow Characteristics Using a Driving Simulator and VISSIM. Sustainability, 2019, 11, 830.	1.6	39
26	Understanding speeding behavior from naturalistic driving data: Applying classification based association rule mining. Accident Analysis and Prevention, 2020, 144, 105620.	3.0	39
27	Analyzing different functional forms of the varying weight parameter for finite mixture of negative binomial regression models. Analytic Methods in Accident Research, 2014, 1, 39-52.	4.7	38
28	Clustering driver behavior using dynamic time warping and hidden Markov model. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2021, 25, 249-262.	2.6	37
29	Development of Accident Modification Factors for Rural Frontage Road Segments in Texas Using Generalized Additive Models. Journal of Transportation Engineering, 2011, 137, 74-83.	0.9	36
30	Comparison of Sichel and Negative Binomial Models in Estimating Empirical Bayes Estimates. Transportation Research Record, 2013, 2392, 11-21.	1.0	36
31	A Comparative Study of Three Multivariate Short-Term Freeway Traffic Flow Forecasting Methods With Missing Data. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2016, 20, 205-218.	2.6	34
32	Forecasting of Short-Term Metro Ridership with Support Vector Machine Online Model. Journal of Advanced Transportation, 2018, 2018, 1-13.	0.9	33
33	Investigating Emission Reduction Benefit From Intersection Signal Optimization. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2013, 17, 200-209.	2.6	31
34	Effects of on-Board Unit on Driving Behavior in Connected Vehicle Traffic Flow. Journal of Advanced Transportation, 2019, 2019, 1-12.	0.9	30
35	Use of Skew-Normal and Skew-t Distributions for Mixture Modeling of Freeway Speed Data. Transportation Research Record, 2011, 2260, 67-75.	1.0	29
36	A copula-based approach to accommodate the dependence among microscopic traffic variables. Transportation Research Part C: Emerging Technologies, 2016, 70, 53-68.	3.9	29

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37	Vehicle-to-vehicle connectivity on two parallel roadways with a general headway distribution. Transportation Research Part C: Emerging Technologies, 2013, 29, 84-96.	3.9	24
38	Person-Based Adaptive Priority Signal Control with Connected-Vehicle Information. Transportation Research Record, 2015, 2487, 78-87.	1.0	24
39	Modeling of individual vehicle safety and fuel consumption under comprehensive external conditions. Transportation Research, Part D: Transport and Environment, 2020, 79, 102224.	3.2	24
40	Route-Based Transit Signal Priority Using Connected Vehicle Technology to Promote Bus Schedule Adherence. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 1174-1184.	4.7	23
41	Estimating Dispersion Parameter of Negative Binomial Distribution for Analysis of Crash Data. Transportation Research Record, 2007, 2019, 15-21.	1.0	22
42	Modeling Delay during Heavy Traffic for Signalized Intersections with Short Left-Turn Bays. Transportation Research Record, 2011, 2257, 103-110.	1.0	21
43	Constructing a bivariate distribution for freeway speed and headway data. Transportmetrica A: Transport Science, 2014, 10, 255-272.	1.3	21
44	Model for Optimization of Ecodriving at Signalized Intersections. Transportation Research Record, 2014, 2427, 54-62.	1.0	20
45	Mixture modeling of freeway speed and headway data using multivariate skew-t distributions. Transportmetrica A: Transport Science, 2017, 13, 657-678.	1.3	20
46	An Exact Markov Process for Multihop Connectivity via Intervehicle Communication on Parallel Roads. IEEE Transactions on Wireless Communications, 2012, 11, 865-868.	6.1	19
47	Assessing environmental impacts of ad-hoc truck platooning on multilane freeways. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2021, 25, 281-292.	2.6	18
48	Unscented Kalman Filter Method for Speed Estimation Using Single Loop Detector Data. , 0, .		18
49	Effect of Bicycles on the Saturation Flow Rate of Turning Vehicles at Signalized Intersections. Journal of Transportation Engineering, 2012, 138, 21-30.	0.9	17
50	Simulating near-road reactive dispersion of gaseous air pollutants using a three-dimensional Eulerian model. Science of the Total Environment, 2013, 454-455, 348-357.	3.9	16
51	How eco-driving training course influences driver behavior and comprehensibility: a driving simulator study. Cognition, Technology and Work, 2017, 19, 731-742.	1.7	16
52	Characterizing phone usage while driving: Safety impact from road and operational perspectives using factor analysis. Accident Analysis and Prevention, 2021, 152, 106012.	3.0	16
53	Classification of Fatigued and Drunk Driving Based on Decision Tree Methods: A Simulator Study. International Journal of Environmental Research and Public Health, 2019, 16, 1935.	1.2	15
54	Mining patterns of near-crash events with and without secondary tasks. Accident Analysis and Prevention, 2021, 157, 106162.	3.0	15

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55	Research on drivers' hazard perception in plateau environment based on visual characteristics. Accident Analysis and Prevention, 2022, 166, 106540.	3.0	14
56	An Integrated Dilemma Zone Protection System Using Connected Vehicle Technology. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 1714-1723.	4.7	13
57	Classification of Distracted Driving Based on Visual Features and Behavior Data using a Random Forest Method. Transportation Research Record, 2018, 2672, 210-221.	1.0	13
58	Development of Urban Road Order Index Based on Driving Behavior and Speed Variation. Transportation Research Record, 2019, 2673, 466-478.	1.0	13
59	Pedestrian choices of vertical walking facilities inside urban rail transit stations. KSCE Journal of Civil Engineering, 2015, 19, 742-748.	0.9	12
60	Platoon recognition using connected vehicle technology. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2019, 23, 12-27.	2.6	12
61	Automated Accident Detection in Intersections via Digital Audio Signal Processing. Transportation Research Record, 2003, 1840, 186-192.	1.0	11
62	Systematic Validation of a Microscopic Traffic Simulation Program. Transportation Research Record, 2004, 1876, 112-120.	1.0	11
63	Analytical Models for Protected plus Permitted Left-Turn Capacity at Signalized Intersection with Heavy Traffic. Transportation Research Record, 2010, 2192, 177-184.	1.0	11
64	Bus Capacity Estimation using Stochastic Queuing Models for Isolated Bus Stops in China. Transportation Research Record, 2018, 2672, 108-120.	1.0	11
65	Applying an interpretable machine learning framework to the traffic safety order analysis of expressway exits based on aggregate driving behavior data. Physica A: Statistical Mechanics and Its Applications, 2022, 597, 127277.	1.2	11
66	Analysis of injury severity in rear-end crashes on an expressway involving different types of vehicles using random-parameters logit models with heterogeneity in means and variances. Transportation Letters, 2023, 15, 742-753.	1.8	11
67	Speed Estimation from Single Loop Data Using an Unscented Particle Filter. Computer-Aided Civil and Infrastructure Engineering, 2010, 25, 494-503.	6.3	10
68	Goodness-of-fit testing for accident models with low means. Accident Analysis and Prevention, 2013, 61, 78-86.	3.0	10
69	Development and Application of an Ecodriving Support Platform Based on Internet+: Case Study in Beijing Taxicabs. Transportation Research Record, 2017, 2645, 57-66.	1.0	10
70	Short-term forecasting of urban rail transit ridership based on ARIMA and wavelet decomposition. AIP Conference Proceedings, 2018, , .	0.3	10
71	A state dependent mandatory lane-changing model for urban arterials with hidden markov model method. International Journal of Transportation Science and Technology, 2019, 8, 219-230.	2.0	10
72	Patterns of near-crash events in a naturalistic driving dataset: Applying rules mining. Accident Analysis and Prevention, 2021, 161, 106346.	3.0	10

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73	Short Duration Crash Prediction for Rural Two-Lane Roadways: Applying Explainable Artificial Intelligence. Transportation Research Record, 2022, 2676, 535-549.	1.0	10
74	Bridge Deck Deterioration: Reasons and Patterns. Transportation Research Record, 2022, 2676, 570-584.	1.0	8
75	A multi-agent adaptive traffic signal control system using swarm intelligence and neuro-fuzzy reinforcement learning. , 2011, , .		7
76	Maturity in Automated Driving on Public Roads: A Review of the Six-Year Autonomous Vehicle Tester Program. Transportation Research Record, 2022, 2676, 352-362.	1.0	7
77	A multinomial logit model: Safety risk analysis of interchange area based on aggregate driving behavior data. Journal of Safety Research, 2022, 80, 27-38.	1.7	6
78	Throughput-Optimal Scheduling for Multi-Hop Networked Transportation Systems With Switch-Over Delay. , 2017, , .		5
79	Prediction of Chinese drivers' intentions to park illegally in emergency lanes: An application of the theory of planned behavior. Traffic Injury Prevention, 2018, 19, 629-636.	0.6	5
80	Inclusion of phone use while driving data in predicting distraction-affected crashes. Journal of Safety Research, 2021, 79, 321-328.	1.7	5
81	Efficient Missing Counts Imputation of a Bike-Sharing System by Generative Adversarial Network. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 13443-13451.	4.7	5
82	Development of an Automated Accident Detection System at Intersections. , 2004, , 153.		4
83	TAMNROM-3D. Transportation Research Record, 2010, 2158, 61-68.	1.0	4
84	Bit-Error Aware Lossless Compression of Waveform Data. IEEE Signal Processing Letters, 2010, 17, 547-550.	2.1	4
85	Evaluating the Impact of Real-Time Mobility and Travel Time Reliability Information on Truck Drivers' Routing Decisions. Transportation Research Record, 2018, 2672, 164-172.	1.0	4
86	Application of Genetic Neural Networks to Real-Time Intersection Accident Detection Using Acoustic Signals. , 0, .		4
87	Bid-Based Priority Signal Control in a Connected Environment: Concept. Transportation Research Record, 2019, 2673, 737-747.	1.0	3
88	Modeling Capacity of Through Movement at Signalized Intersection Affected by Short Left-Turn Bay under Different Signal Settings. Transportation Research Record, 2021, 2675, 1209-1223.	1.0	3
89	In-Depth Understanding of Near-Crash Events Through Pattern Recognition. Transportation Research Record, 2022, 2676, 775-785.	1.0	3
90	A derivative-free nonlinear algorithm for speed estimation using data from single loop detectors. , 2006, , .		2

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91	Left-Turn Spillback Probability Estimation in a Connected Vehicle Environment. Transportation Research Record, 2019, 2673, 753-761.	1.0	2
92	Hierarchical Longitudinal Control for Connected and Automated Vehicles in Mixed Traffic on a Signalized Arterial. Sustainability, 2021, 13, 8852.	1.6	2
93	Semi-Automatic Extraction of Geometric Elements of Curved Ramps from Google Earth Images. Sustainability, 2022, 14, 1001.	1.6	2
94	Application of Genetic Neural Networks to Real-Time Intersection Accident Detection Using Acoustic Signals. Transportation Research Record, 2006, 1968, 75-82.	1.0	1
95	Using an Interpretable Machine Learning Framework to Understand the Relationship of Mobility and Reliability Indices on Truck Driversâ€™ Route Choices. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 13419-13428.	4.7	1
96	Review of Transportation engineering basics by A. S. Narasimha Murthy and Henry R. Mohle. Journal of Transportation Engineering, 2002, 128, 479-479.	0.9	0
97	Response to â€œDiscussion Note on Paper â€˜A Wavelet Network Model for Short-Term Traffic Volume Forecastingâ€â€™. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2008, 12, 99-101.	2.6	0