Qing Cai

List of Publications by Year
in descending order

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50 papers	1,835 citations	257357 24 h-index	276775 41 g-index
50 all docs	50 docs citations	50 times ranked	1126 citing authors

#	Article	IF	Citations
1	A Deep Learning Approach to Detect Real-Time Vehicle Maneuvers Based on Smartphone Sensors. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 3148-3157.	4.7	14
2	Estimating cycle-level real-time traffic movements at signalized intersections. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2022, 26, 400-419.	2.6	8
3	Effect of Various Speed Management Strategies on Bicycle Crashes for Urban Roads in Central Florida. Transportation Research Record, 2022, 2676, 544-555.	1.0	5
4	Applying machine learning and google street view to explore effects of driversâ€™ visual environment on traffic safety. Transportation Research Part C: Emerging Technologies, 2022, 135, 103541.	3.9	20
5	Analyzing the Difference Between Operating Speed and Target Speed Using Mixed-Effect Ordered Logit Model. Transportation Research Record, 2022, 2676, 596-607.	1.0	4
6	Estimating effectiveness of speed reduction measures for pedestrian crossing treatments using an empirically supported speed choice modeling framework. Transportation Research Part F: Traffic Psychology and Behaviour, 2022, 89, 276-288.	1.8	2
7	Modeling Real-Time Cycle-Level Crash Risk at Signalized Intersections Based on High-Resolution Event-Based Data. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 6700-6715.	4.7	20
8	Predicting cycle-level traffic movements at signalized intersections using machine learning models. Transportation Research Part C: Emerging Technologies, 2021, 124, 102930.	3.9	27
9	Crash data augmentation using variational autoencoder. Accident Analysis and Prevention, 2021, 151, 105950.	3.0	86
10	Crash analysis and development of safety performance functions for Florida roads in the framework of the context classification system. Journal of Safety Research, 2021, 79, 1-13.	1.7	6
11	Factors Contributing to Operating Speeds on Arterial Roads by Context Classifications. Journal of Transportation Engineering Part A: Systems, 2021, 147, .	0.8	4
12	Vulnerable road usersâ€™ crash hotspot identification on multi-lane arterial roads using estimated exposure and considering context classification. Accident Analysis and Prevention, 2021, 159, 106294.	3.0	15
13	Developing a grouped random parameter beta model to analyze driversâ€™ speeding behavior on urban and suburban arterials with probe speed data. Accident Analysis and Prevention, 2021, 161, 106386.	3.0	13
14	Explore effects of bicycle facilities and exposure on bicycle safety at intersections. International Journal of Sustainable Transportation, 2021, 15, 592-603.	2.1	16
15	Multi-Objective reinforcement learning approach for improving safety at intersections with adaptive traffic signal control. Accident Analysis and Prevention, 2020, 144, 105655.	3.0	32
16	Investigation of Safety-in-Numbers for Pedestrians and Bicyclists at a Macroscopic Level with Various Exposure Variables. Transportation Research Record, 2020, 2674, 568-580.	1.0	6
17	Prediction of pedestrian-vehicle conflicts at signalized intersections based on long short-term memory neural network. Accident Analysis and Prevention, 2020, 148, 105799.	3.0	30
18	How Does Heterogeneity Affect Freeway Safety? A Simulation-Based Exploration Considering Sustainable Intelligent Connected Vehicles. Sustainability, 2020, 12, 8941.	1.6	8

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19	Safety of micro-mobility: Analysis of E-Scooter crashes by mining news reports. Accident Analysis and Prevention, 2020, 143, 105608.	3.0	128
20	Real-time crash prediction on expressways using deep generative models. Transportation Research Part C: Emerging Technologies, 2020, 117, 102697.	3.9	92
21	Automated Safety Diagnosis Based on Unmanned Aerial Vehicle Video and Deep Learning Algorithm. Transportation Research Record, 2020, 2674, 350-359.	1.0	23
22	Proactive crash risk prediction modeling for merging assistance system at interchange merging areas. Traffic Injury Prevention, 2020, 21, 234-240.	0.6	10
23	â‹†This paper has been handled by associate editor Tony Sze.The application of novel connected vehicles emulated data on real-time crash potential prediction for arterials. Accident Analysis and Prevention, 2020, 144, 105658.	3.0	25
24	A Smart Path Recommendation Method for Metro Systems With Passenger Preferences. IEEE Access, 2020, 8, 20646-20657.	2.6	7
25	Method for Estimating Vehicle-to-Vehicle Travel Time Variability Models at the Link and Network Levels of Freeways/Expressways through Censoring Mechanism. Transportation Research Record, 2019, 2673, 548-563.	1.0	1
26	Decentralized network level adaptive signal control by multi-agent deep reinforcement learning. Transportation Research Interdisciplinary Perspectives, 2019, 1, 100020.	1.6	34
27	Applying a deep learning approach for transportation safety planning by using high-resolution transportation and land use data. Transportation Research, Part A: Policy and Practice, 2019, 127, 71-85.	2.0	30
28	Coordination of Last Train Transfers Using Potential Passenger Demand From Public Transport Modes. IEEE Access, 2019, 7, 126037-126050.	2.6	8
29	Developing a Crash Warning System for the Bike Lane Area at Intersections with Connected Vehicle Technology. Transportation Research Record, 2019, 2673, 47-58.	1.0	23
30	Applying machine learning approaches to analyze the vulnerable road-users' crashes at statewide traffic analysis zones. Journal of Safety Research, 2019, 70, 275-288.	1.7	35
31	Examining traffic conflicts of up stream toll plaza area using vehiclesâ€™ trajectory data. Accident Analysis and Prevention, 2019, 125, 174-187.	3.0	64
32	Transportation Safety Planning Approach for Pedestrians: An Integrated Framework of Modeling Walking Duration and Pedestrian Fatalities. Transportation Research Record, 2019, 2673, 898-906.	1.0	20
33	Real-Time Crash Risk Prediction using Long Short-Term Memory Recurrent Neural Network. Transportation Research Record, 2019, 2673, 314-326.	1.0	113
34	Bicycle Safety Analysis at Intersections from Crowdsourced Data. Transportation Research Record, 2019, 2673, 1-14.	1.0	25
35	Investigating drivers' mandatory lane change behavior on the weaving section of freeway with managed lanes: A driving simulator study. Transportation Research Part F: Traffic Psychology and Behaviour, 2019, 62, 11-32.	1.8	48
36	Utilizing UAV video data for in-depth analysis of driversâ€™ crash risk at interchange merging areas. Accident Analysis and Prevention, 2019, 123, 159-169.	3.0	123

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37	Integrating macro- and micro-level safety analyses: a Bayesian approach incorporating spatial interaction. Transportmetrica A: Transport Science, 2019, 15, 285-306.	1.3	29
38	Developing an algorithm to assess the rear-end collision risk under fog conditions using real-time data. Transportation Research Part C: Emerging Technologies, 2018, 87, 11-25.	3.9	87
39	Effects of emergency medical services times on traffic injury severity: A random effects ordered probit approach. Traffic Injury Prevention, 2018, 19, 577-581.	0.6	38
40	Analysis of crash proportion by vehicle type at traffic analysis zone level: A mixed fractional split multinomial logit modeling approach with spatial effects. Accident Analysis and Prevention, 2018, 111, 12-22.	3.0	66
41	Developing a grouped random parameters multivariate spatial model to explore zonal effects for segment and intersection crash modeling. Analytic Methods in Accident Research, 2018, 19, 1-15.	4.7	61
42	Safety Impact of Weaving Distance on Freeway Facilities with Managed Lanes using Both Microscopic Traffic and Driving Simulations. Transportation Research Record, 2018, 2672, 130-141.	1.0	24
43	Integrated Modeling Approach for Non-Motorized Mode Trips and Fatal Crashes in the Framework of Transportation Safety Planning. Transportation Research Record, 2018, 2672, 49-60.	1.0	17
44	Analysis of Fatal Traffic Crash-Reporting and Reporting-Arrival Time Intervals of Emergency Medical Services. Transportation Research Record, 2018, 2672, 61-71.	1.0	14
45	Comparative analysis of zonal systems for macro-level crash modeling. Journal of Safety Research, 2017, 61, 157-166.	1.7	68
46	Intersection crash prediction modeling with macro-level data from various geographic units. Accident Analysis and Prevention, 2017, 102, 213-226.	3.0	86
47	Macro-level vulnerable road users crash analysis: A Bayesian joint modeling approach of frequency and proportion. Accident Analysis and Prevention, 2017, 107, 11-19.	3.0	47
48	Shockwave-based queue estimation approach for undersaturated and oversaturated signalized intersections using multi-source detection data. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2017, 21, 167-178.	2.6	23
49	Macro-level pedestrian and bicycle crash analysis: Incorporating spatial spillover effects in dual state count models. Accident Analysis and Prevention, 2016, 93, 14-22.	3.0	149
50	Long-term safety evaluation of the primary seat-belt law. Journal of Transportation Safety and Security, 0, , 1-21.	1.1	1