

Hao Xu

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

2,030
citations

257101

24
h-index

253896

43
g-index

60
all docs

60
docs citations

60
times ranked

1377
citing authors

#	ARTICLE	IF	CITATIONS
1	High-speed, low-loss silicon Mach-Zehnder modulators with doping optimization. Optics Express, 2013, 21, 4116.	1.7	250
2	Detection and tracking of pedestrians and vehicles using roadside LiDAR sensors. Transportation Research Part C: Emerging Technologies, 2019, 100, 68-87.	3.9	220
3	25 Gbit/s silicon microring modulator based on misalignment-tolerant interleaved PN junctions. Optics Express, 2012, 20, 2507.	1.7	165
4	A novel method of vehicle-pedestrian near-crash identification with roadside LiDAR data. Accident Analysis and Prevention, 2018, 121, 238-249.	3.0	94
5	Highly Efficient Silicon Michelson Interferometer Modulators. IEEE Photonics Technology Letters, 2013, 25, 407-409.	1.3	75
6	Roadside Magnetic Sensor System for Vehicle Detection in Urban Environments. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 1365-1374.	4.7	75
7	Automatic Vehicle Tracking With Roadside LiDAR Data for the Connected-Vehicles System. IEEE Intelligent Systems, 2019, 34, 44-51.	4.0	68
8	Automatic Background Filtering Method for Roadside LiDAR Data. Transportation Research Record, 2018, 2672, 106-114.	1.0	58
9	Driver behavior analysis for right-turn drivers at signalized intersections using SHRP 2 naturalistic driving study data. Journal of Safety Research, 2017, 63, 177-185.	1.7	57
10	Automatic Vehicle Classification using Roadside LiDAR Data. Transportation Research Record, 2019, 2673, 153-164.	1.0	53
11	3-D Data Processing to Extract Vehicle Trajectories from Roadside LiDAR Data. Transportation Research Record, 2018, 2672, 14-22.	1.0	50
12	Automatic Lane Identification Using the Roadside LiDAR Sensors. IEEE Intelligent Transportation Systems Magazine, 2020, 12, 25-34.	2.6	50
13	The influence of road familiarity on distracted driving activities and driving operation using naturalistic driving study data. Transportation Research Part F: Traffic Psychology and Behaviour, 2018, 52, 75-85.	1.8	48
14	Automatic background filtering and lane identification with roadside LiDAR data. , 2017, , .		45
15	Vehicle Detection and Tracking in Complex Traffic Circumstances with Roadside LiDAR. Transportation Research Record, 2019, 2673, 62-71.	1.0	42
16	LiDAR-Enhanced Connected Infrastructures Sensing and Broadcasting High-Resolution Traffic Information Serving Smart Cities. IEEE Access, 2019, 7, 79895-79907.	2.6	40
17	Trajectory tracking and prediction of pedestrian's crossing intention using roadside LiDAR. IET Intelligent Transport Systems, 2019, 13, 789-795.	1.7	37
18	Automatic ground points filtering of roadside LiDAR data using a channel-based filtering algorithm. Optics and Laser Technology, 2019, 115, 374-383.	2.2	34

#	ARTICLE	IF	CITATIONS
19	Automatic Background Construction and Object Detection Based on Roadside LiDAR. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 4086-4097.	4.7	34
20	Deer Crossing Road Detection With Roadside LiDAR Sensor. IEEE Access, 2019, 7, 65944-65954.	2.6	32
21	Probabilistic Prediction of Pedestrian Crossing Intention Using Roadside LiDAR Data. IEEE Access, 2019, 7, 93781-93790.	2.6	30
22	Raster-Based Background Filtering for Roadside LiDAR Data. IEEE Access, 2019, 7, 76779-76788.	2.6	29
23	Vehicle Detection under Adverse Weather from Roadside LiDAR Data. Sensors, 2020, 20, 3433.	2.1	29
24	Automatic Vehicle Detection With Roadside LiDAR Data Under Rainy and Snowy Conditions. IEEE Intelligent Transportation Systems Magazine, 2021, 13, 197-209.	2.6	29
25	An improved vehicle-pedestrian near-crash identification method with a roadside LiDAR sensor. Journal of Safety Research, 2020, 73, 211-224.	1.7	26
26	Architecture of Vehicle Trajectories Extraction With Roadside LiDAR Serving Connected Vehicles. IEEE Access, 2019, 7, 100406-100415.	2.6	25
27	Revolution and rotation-based method for roadside LiDAR data integration. Optics and Laser Technology, 2019, 119, 105571.	2.2	23
28	An Automatic Background Filtering Method for Detection of Road Users in Heavy Traffics Using Roadside 3-D LiDAR Sensors With Noises. IEEE Sensors Journal, 2020, 20, 6596-6604.	2.4	22
29	Points Registration for Roadside LiDAR Sensors. Transportation Research Record, 2019, 2673, 627-639.	1.0	21
30	Lane change identification and prediction with roadside LiDAR data. Optics and Laser Technology, 2020, 123, 105934.	2.2	19
31	A portable roadside vehicle detection system based on multi-sensing fusion. International Journal of Sensor Networks, 2019, 29, 38.	0.2	18
32	Driver behavior analysis on rural 2-lane, 2-way highways using SHRP 2 NDS data. Traffic Injury Prevention, 2018, 19, 838-843.	0.6	17
33	Data Registration with Ground Points for Roadside LiDAR Sensors. Remote Sensing, 2019, 11, 1354.	1.8	17
34	Impacts of traffic flow arrival pattern on the necessary queue storage space at metered on-ramps. Transportmetrica A: Transport Science, 2018, 14, 543-561.	1.3	16
35	An automatic lane identification method for the roadside light detection and ranging sensor. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2020, 24, 467-479.	2.6	12
36	Optimization based method to develop representative driving cycle for real-world fuel consumption estimation. Energy, 2021, 235, 121434.	4.5	12

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37	A novel skateboarder-related near-crash identification method with roadside LiDAR data. Accident Analysis and Prevention, 2020, 137, 105438.	3.0	11
38	Feasibility of Using a Constant Acceleration Rate for Freeway Entrance Ramp Acceleration Lane Length Design. Journal of Transportation Engineering Part A: Systems, 2018, 144, .	0.8	10
39	Azimuth-Height Background Filtering Method for Roadside LiDAR Data. , 2019, , .		10
40	Real-Time Queue Length Detection with Roadside LiDAR Data. Sensors, 2020, 20, 2342.	2.1	10
41	Leveraging Deep Convolutional Neural Networks Pre-Trained on Autonomous Driving Data for Vehicle Detection From Roadside LiDAR Data. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 22367-22377.	4.7	10
42	Automatic Ground Points Identification Method for Roadside LiDAR Data. Transportation Research Record, 2019, 2673, 140-152.	1.0	9
43	Queue length estimation for a metered on-ramp using mesoscopic simulation. Transportation Letters, 2019, 11, 570-579.	1.8	8
44	Annual Average Daily Traffic Prediction Model for Minor Roads at Intersections. Journal of Transportation Engineering Part A: Systems, 2019, 145, 04019041.	0.8	8
45	Towards application of light detection and ranging sensor to traffic detection: an investigation of its built-in features and installation techniques. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, 2022, 26, 213-234.	2.6	8
46	Metro passenger's path choice model estimation with travel time correlations derived from smart card data. Transportation Planning and Technology, 2020, 43, 141-157.	0.9	8
47	Tracking Multi-Vehicles With Reference Points Switches at the Intersection Using a Roadside LiDAR Sensor. IEEE Access, 2019, 7, 174072-174082.	2.6	7
48	Microsimulation Analysis of Traffic Operations at Two Diamond Interchange Types. Journal of Advanced Transportation, 2019, 2019, 1-11.	0.9	7
49	An Unsupervised Clustering Method for Processing Roadside LiDAR Data With Improved Computational Efficiency. IEEE Sensors Journal, 2022, 22, 10684-10691.	2.4	7
50	Modeling the Impacts of Traffic Flow Arrival Profiles on Ramp Metering Queues. Transportation Research Record, 2018, 2672, 85-92.	1.0	6
51	Geometric design of metered on-ramps: state-of-the-practice and remaining challenges. Transportation Letters, 2020, 12, 649-658.	1.8	6
52	Driver Behavior Fault Analysis on Ramp-related Crashes/Near-Crashes Using SHRP 2 Naturalistic Driving Study Data. , 2018, , .		5
53	Automatic Identification of Vehicle Partial Occlusion in Data Collected by Roadside LiDAR Sensors. Transportation Research Record, 2022, 2676, 708-718.	1.0	5
54	Human-driver speed profile modeling for autonomous vehicle's velocity strategy on curvy paths. , 2016, , .		4

#	ARTICLE	IF	CITATIONS
55	Traffic Volume Detection Using Infrastructure-Based LiDAR under Different Levels of Service Conditions. <i>Journal of Transportation Engineering Part A: Systems</i> , 2021, 147, .	0.8	4
56	A novel optimization-based method to develop representative driving cycle in various driving conditions. <i>Energy</i> , 2022, 247, 123455.	4.5	4
57	A data mapping method for roadside LiDAR sensors. , 2019, , .		3
58	Road Boundary-Enhanced Automatic Background Filtering for Roadside Lidar Sensors. <i>IEEE Intelligent Transportation Systems Magazine</i> , 2022, 14, 60-72.	2.6	3
59	Fast-Spherical-Projection-Based Point Cloud Clustering Algorithm. <i>Transportation Research Record</i> , 2022, 2676, 315-329.	1.0	3
60	An automatic skateboarder detection method with roadside LiDAR data. <i>Journal of Transportation Safety and Security</i> , 2021, 13, 298-317.	1.1	2