

Shaobing Xu

List of Publications by Year in descending order

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Version: 2024-02-01

29
papers

1,039
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471371

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all docs

29
docs citations

29
times ranked

729
citing authors

#	ARTICLE	IF	CITATIONS
1	Design, Analysis, and Experiments of Preview Path Tracking Control for Autonomous Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 48-58.	4.7	188
2	Eco-Departure of Connected Vehicles With V2X Communication at Signalized Intersections. IEEE Transactions on Vehicular Technology, 2015, 64, 5439-5449.	3.9	107
3	Fuel-Optimal Cruising Strategy for Road Vehicles With Step-Gear Mechanical Transmission. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 3496-3507.	4.7	65
4	Performance Enhanced Predictive Control for Adaptive Cruise Control System Considering Road Elevation Information. IEEE Transactions on Intelligent Vehicles, 2017, 2, 150-160.	9.4	63
5	Fuel-Saving Cruising Strategies for Parallel HEVs. IEEE Transactions on Vehicular Technology, 2016, 65, 4676-4686.	3.9	55
6	Preview Path Tracking Control With Delay Compensation for Autonomous Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 2979-2989.	4.7	54
7	Instantaneous Feedback Control for a Fuel-Prioritized Vehicle Cruising System on Highways With a Varying Slope. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 1210-1220.	4.7	45
8	A Unified Pseudospectral Computational Framework for Optimal Control of Road Vehicles. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1499-1510.	3.7	42
9	Design and Comparison of Fuel-Saving Speed Planning Algorithms for Automated Vehicles. IEEE Access, 2018, 6, 9070-9080.	2.6	41
10	Safety assessment of highly automated driving systems in test tracks: A new framework. Accident Analysis and Prevention, 2020, 144, 105664.	3.0	37
11	Highway Exiting Planner for Automated Vehicles Using Reinforcement Learning. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 990-1000.	4.7	30
12	An Augmented Reality Environment for Connected and Automated Vehicle Testing and Evaluation. , 2018, , .		29
13	Accurate and Smooth Speed Control for an Autonomous Vehicle. , 2018, , .		28
14	SUPER: A Novel Lane Detection System. IEEE Transactions on Intelligent Vehicles, 2021, 6, 583-593.	9.4	27
15	Eco-Driving Operation of Connected Vehicle With V2I Communication Among Multiple Signalized Intersections. IEEE Intelligent Transportation Systems Magazine, 2021, 13, 107-119.	2.6	26
16	Confidence-Aware Reinforcement Learning for Self-Driving Cars. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 7419-7430.	4.7	26
17	Integrated energy-oriented cruising control of electric vehicle on highway with varying slopes considering battery aging. Science China Technological Sciences, 2020, 63, 155-165.	2.0	21
18	Design and Experiments of Safeguard Protected Preview Lane Keeping Control for Autonomous Vehicles. IEEE Access, 2020, 8, 29944-29953.	2.6	19

#	ARTICLE	IF	CITATIONS
19	Trustworthy safety improvement for autonomous driving using reinforcement learning. Transportation Research Part C: Emerging Technologies, 2022, 138, 103656.	3.9	18
20	A geometry-driven car-following distance estimation algorithm robust to road slopes. Transportation Research Part C: Emerging Technologies, 2019, 102, 274-288.	3.9	17
21	System and Experiments of Model-Driven Motion Planning and Control for Autonomous Vehicles. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 5975-5988.	5.9	16
22	Design and Test of Speed Tracking Control for the Self-Driving Lincoln MKZ Platform. IEEE Transactions on Intelligent Vehicles, 2020, 5, 324-334.	9.4	15
23	Graph-Embedded Lane Detection. IEEE Transactions on Image Processing, 2021, 30, 2977-2988.	6.0	15
24	Legendre pseudospectral computation of optimal speed profiles for vehicle eco-driving system. , 2014, , .		14
25	Efficient and accurate computation of model predictive control using pseudospectral discretization. Neurocomputing, 2016, 177, 363-372.	3.5	14
26	Periodicity based cruising control of passenger cars for optimized fuel consumption. , 2014, , .		13
27	Accurate Pseudospectral Optimization of Nonlinear Model Predictive Control for High-Performance Motion Planning. IEEE Transactions on Intelligent Vehicles, 2023, 8, 1034-1045.	9.4	10
28	Monocular Connected-Vehicle Position Estimation on Sloping and Uneven Roads. IEEE Intelligent Transportation Systems Magazine, 2022, 14, 228-241.	2.6	4
29	Fuel Economy Analysis of Periodic Cruise Control Strategies for Power-Split HEVs at Medium and Low Speed. , 0, , .		0