Weichao Zhuang

List of Publications by Year
in descending order

61 papers	1,202 citations	430754 18 h-index	414303 32 g-index
61 all docs	61 docs citations	61 times ranked	713 citing authors

#	Article	IF	Citations
1	Event-Driven Energy-Efficient Driving Control in Urban Traffic for Connected Electric Vehicles. IEEE Transactions on Transportation Electrification, 2023, 9, 99-113.	5.3	4
2	A Decentralized Cooperative Control Framework for Active Steering and Active Suspension: Multi-Agent Approach. IEEE Transactions on Transportation Electrification, 2022, 8, 1414-1429.	5.3	18
3	CT2â€MDS: Cooperative trustâ€aware tolerant misbehaviour detection system for connected and automated vehicles. IET Intelligent Transport Systems, 2022, 16, 218-231.	1.7	10
4	Ecological cruising control of connected electric vehicle: a deep reinforcement learning approach. Science China Technological Sciences, 2022, 65, 529-540.	2.0	5
5	A comparative study of energy-efficient driving strategy for connected internal combustion engine and electric vehicles at signalized intersections. Applied Energy, 2022, 310, 118524.	5.1	15
6	Stochastic Stable Control of Vehicular Platoon Time-Delay System Subject to Random Switching Topologies and Disturbances. IEEE Transactions on Vehicular Technology, 2022, 71, 5755-5769.	3.9	9
7	Predictive energy-efficient driving strategy design of connected electric vehicle among multiple signalized intersections. Transportation Research Part C: Emerging Technologies, 2022, 137, 103595.	3.9	23
8	Optimal sizing and learning-based energy management strategy of NCR/LTO hybrid battery system for electric taxis. Energy, 2022, 257, 124653.	4.5	7
9	Safe and optimal lane-change path planning for automated driving. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2021, 235, 1070-1083.	1.1	25
10	Self-learning control for coordinated collision avoidance of automated vehicles. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2021, 235, 1149-1163.	1.1	18
11	Geometry-Based Cooperative Localization for Connected Vehicle Subject to Temporary Loss of GNSS Signals. IEEE Sensors Journal, 2021, 21, 23527-23536.	2.4	9
12	Robust Inter-Vehicle Distance Measurement Using Cooperative Vehicle Localization. Sensors, 2021, 21, 2048.	2.1	10
13	Enhanced Eco-Approach Control of Connected Electric Vehicles at Signalized Intersection With Queue Discharge Prediction. IEEE Transactions on Vehicular Technology, 2021, 70, 5457-5469.	3.9	37
14	A Distributed Integrated Control Architecture of AFS and DYC Based on MAS for Distributed Drive Electric Vehicles. IEEE Transactions on Vehicular Technology, 2021, 70, 5565-5577.	3.9	39
15	Adaptive Multi-modal Fusion Instance Segmentation for CAEVs in Complex Conditions: Dataset, Framework and Verifications. Chinese Journal of Mechanical Engineering (English Edition), 2021, 34, .	1.9	1
16	Energy-Optimal Braking Control Using a Double-Layer Scheme for Trajectory Planning and Tracking of Connected Electric Vehicles. Chinese Journal of Mechanical Engineering (English Edition), 2021, 34, .	1.9	11
17	Decentralized On-Ramp Merging Control of Connected and Automated Vehicles in the Mixed Traffic Using Control Barrier Functions. , 2021, , .		6
18	Distance-Based Cooperative Localization of Connected Vehicles Via Convex Relaxation Under Extreme Environments. , 2021, , .		1

#	Article	IF	Citations
19	Cooperative Merging Trajectory Optimization of Connected and Automated Vehicles in the Mixed Traffic: a Receding Horizon Control Approach. , 2021, , .		0
20	Ecological Predictive Cruise Control of Connected Electric Vehicle with Predecessor Velocity Prediction and Road Grade Preview. , 2021, , .		0
21	Safety-critical Eco-driving Strategy for Electric Vehicle at Signalized Intersection Using Control Barrier Function. , 2021, , .		0
22	Mode Shift Schedule and Control Strategy Design of Multimode Hybrid Powertrain. IEEE Transactions on Control Systems Technology, 2020, 28, 804-815.	3.2	23
23	Compensating Delays and Noises in Motion Control of Autonomous Electric Vehicles by Using Deep Learning and Unscented Kalman Predictor. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 4326-4338.	5.9	30
24	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
25	Comparison of semi-active hybrid battery system configurations for electric taxis application. Applied Energy, 2020, 259, 114171.	5.1	15
26	Comparison of four-wheel-drive hybrid powertrain configurations. Energy, 2020, 209, 118286.	4.5	13
27	Energy-Optimal Velocity Planning for Connected Electric Vehicles at Signalized Intersection with Queue Prediction. , 2020, , .		6
28	Estimation of Vehicle State Using Robust Cubature Kalman Filter. , 2020, , .		9
29	Robust Cooperative Control of Multiple Autonomous Vehicles for Platoon Formation Considering Parameter Uncertainties. Automotive Innovation, 2020, 3, 88-100.	3.1	9
30	A survey of powertrain configuration studies on hybrid electric vehicles. Applied Energy, 2020, 262, 114553.	5.1	135
31	Investigation of the Performance and Potential of a Novel Trackless Train with Pneumatic Tires. Lecture Notes in Mechanical Engineering, 2020, , 531-536.	0.3	0
32	Learning-Based Vibration Control of Vehicle Active Suspension. , 2020, , .		6
33	Optimal sizing and adaptive energy management of a novel four-wheel-drive hybrid powertrain. Energy, 2019, 187, 116008.	4.5	19
34	Integrated energy-oriented lateral stability control of a four-wheel-independent-drive electric vehicle. Science China Technological Sciences, 2019, 62, 2170-2183.	2.0	15
35	Rule-filter-integrated Control of LFP/LTO Hybrid Energy Storage System for Vehicular Application. , 2019, , .		2
36	Distributed Formation Control of Homogeneous Vehicle Platoon Considering Vehicle Dynamics. International Journal of Automotive Technology, 2019, 20, 1103-1112.	0.7	13

#	Article	IF	Citations
37	Energy-oriented cruising strategy design of vehicle platoon considering communication delay and disturbance. Transportation Research Part C: Emerging Technologies, 2019, 107, 34-53.	3.9	48
38	Modeling and Online Parameter Identification of Lithium Battery Considering Hysteresis Characteristics. , 2019, , .		0
39	Robust overtaking control of autonomous electric vehicle with parameter uncertainties. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2019, 233, 3358-3376.	1.1	12
40	A thermal management method for lithium-ion battery based on fuzzy model predictive control. , 2019, , .		1
41	Predictive Ecological Control: Using Road Terrain and Traffic Signal Information for Improving Vehicle Energy Efficiency. , 2019, , .		1
42	Instantaneous Velocity Optimization Strategy of Electric Vehicle Considering Varying Road Slopes. , 2019, , .		1
43	Modeling and Robust Control of Heterogeneous Vehicle Platoons on Curved Roads Subject to Disturbances and Delays. IEEE Transactions on Vehicular Technology, 2019, 68, 11551-11564.	3.9	60
44	Energy-Efficient Feedback Control Strategy of Vehicle Platoon on Highway with Varying Slopes. , 2019, , .		0
45	Cooperative Merging for Multiple Connected and Automated Vehicles at Highway On-Ramps via Virtual Platoon Formation. , 2019, , .		9
46	Crashworthiness analysis of double-arrowed auxetic structure under axial impact loading. Materials and Design, 2019, 161, 22-34.	3.3	85
47	Simultaneous Longitudinal and Lateral Control of Vehicle Platoon Subject to Stochastic Communication Delays. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, .	0.9	16
48	In-plane crushing behaviors of piecewise linear graded honeycombs. Composite Structures, 2019, 207, 425-437.	3.1	34
49	Simultaneous optimization of topology, control and size for multi-mode hybrid tracked vehicles. Applied Energy, 2018, 212, 1627-1641.	5.1	47
50	A Novel Four-Wheel-Drive Hybrid Electric Sport Utility Vehicle with Double Planetary Gears. IFAC-PapersOnLine, 2018, 51, 81-86.	0.5	3
51	Stable Longitudinal Control of Heterogeneous Vehicular Platoon With Disturbances and Information Delays. IEEE Access, 2018, 6, 69794-69806.	2.6	33
52	Recognition Method for Multi-Class Motor Imagery EEG Based on Channel Frequency Selection. , 2018, , .		2
53	Strategy for heterogeneous vehicular platoons merging in automated highway system. , 2018, , .		12
54	Mode shift map design and integrated energy management control of a multi-mode hybrid electric vehicle. Applied Energy, 2017, 204, 476-488.	5.1	56

#	Article	IF	Citations
55	Simultaneous Optimization of Topology and Component Sizes for Double Planetary Gear Hybrid Powertrains. Energies, 2016, 9, 411.	1.6	38
56	Rapid Configuration Design of Multiple-Planetary-Gear Power-Split Hybrid Powertrain via Mode Combination. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2924-2934.	3.7	46
57	Comparison of multi-mode hybrid powertrains with multiple planetary gears. Applied Energy, 2016, 178, 624-632.	5.1	78
58	Optimal design of three-planetary-gear power-split hybrid powertrains. International Journal of Automotive Technology, 2016, 17, 299-309.	0.7	36
59	Rapid Optimization of Multiple-Planetary-Gear Power-Split Hybrid Powertrains. , 2015, , .		1
60	Optimal energy management strategy design for a diesel parallel hybrid electric vehicle. , 2014, , .		7
61	Optimal Engine Starts of an Input-Split Hybrid Electric Vehicle. SAE International Journal of Alternative Powertrains, 0, 4, 343-351.	0.8	12