

# Weichao Zhuang

## List of Publications by Year in descending order

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Version: 2024-02-01

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	A survey of powertrain configuration studies on hybrid electric vehicles. <i>Applied Energy</i> , 2020, 262, 114553.	5.1	135
2	Crashworthiness analysis of double-arrowed auxetic structure under axial impact loading. <i>Materials and Design</i> , 2019, 161, 22-34.	3.3	85
3	Comparison of multi-mode hybrid powertrains with multiple planetary gears. <i>Applied Energy</i> , 2016, 178, 624-632.	5.1	78
4	Modeling and Robust Control of Heterogeneous Vehicle Platoons on Curved Roads Subject to Disturbances and Delays. <i>IEEE Transactions on Vehicular Technology</i> , 2019, 68, 11551-11564.	3.9	60
5	Mode shift map design and integrated energy management control of a multi-mode hybrid electric vehicle. <i>Applied Energy</i> , 2017, 204, 476-488.	5.1	56
6	Energy-oriented cruising strategy design of vehicle platoon considering communication delay and disturbance. <i>Transportation Research Part C: Emerging Technologies</i> , 2019, 107, 34-53.	3.9	48
7	Simultaneous optimization of topology, control and size for multi-mode hybrid tracked vehicles. <i>Applied Energy</i> , 2018, 212, 1627-1641.	5.1	47
8	Rapid Configuration Design of Multiple-Planetary-Gear Power-Split Hybrid Powertrain via Mode Combination. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016, 21, 2924-2934.	3.7	46
9	A Distributed Integrated Control Architecture of AFS and DYC Based on MAS for Distributed Drive Electric Vehicles. <i>IEEE Transactions on Vehicular Technology</i> , 2021, 70, 5565-5577.	3.9	39
10	Simultaneous Optimization of Topology and Component Sizes for Double Planetary Gear Hybrid Powertrains. <i>Energies</i> , 2016, 9, 411.	1.6	38
11	Enhanced Eco-Approach Control of Connected Electric Vehicles at Signalized Intersection With Queue Discharge Prediction. <i>IEEE Transactions on Vehicular Technology</i> , 2021, 70, 5457-5469.	3.9	37
12	Optimal design of three-planetary-gear power-split hybrid powertrains. <i>International Journal of Automotive Technology</i> , 2016, 17, 299-309.	0.7	36
13	In-plane crushing behaviors of piecewise linear graded honeycombs. <i>Composite Structures</i> , 2019, 207, 425-437.	3.1	34
14	Stable Longitudinal Control of Heterogeneous Vehicular Platoon With Disturbances and Information Delays. <i>IEEE Access</i> , 2018, 6, 69794-69806.	2.6	33
15	Compensating Delays and Noises in Motion Control of Autonomous Electric Vehicles by Using Deep Learning and Unscented Kalman Predictor. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2020, 50, 4326-4338.	5.9	30
16	Safe and optimal lane-change path planning for automated driving. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2021, 235, 1070-1083.	1.1	25
17	Mode Shift Schedule and Control Strategy Design of Multimode Hybrid Powertrain. <i>IEEE Transactions on Control Systems Technology</i> , 2020, 28, 804-815.	3.2	23
18	Predictive energy-efficient driving strategy design of connected electric vehicle among multiple signalized intersections. <i>Transportation Research Part C: Emerging Technologies</i> , 2022, 137, 103595.	3.9	23

#	ARTICLE	IF	CITATIONS
19	Integrated energy-oriented cruising control of electric vehicle on highway with varying slopes considering battery aging. <i>Science China Technological Sciences</i> , 2020, 63, 155-165.	2.0	21
20	Optimal sizing and adaptive energy management of a novel four-wheel-drive hybrid powertrain. <i>Energy</i> , 2019, 187, 116008.	4.5	19
21	Self-learning control for coordinated collision avoidance of automated vehicles. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2021, 235, 1149-1163.	1.1	18
22	A Decentralized Cooperative Control Framework for Active Steering and Active Suspension: Multi-Agent Approach. <i>IEEE Transactions on Transportation Electrification</i> , 2022, 8, 1414-1429.	5.3	18
23	Simultaneous Longitudinal and Lateral Control of Vehicle Platoon Subject to Stochastic Communication Delays. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2019, 141, .	0.9	16
24	Integrated energy-oriented lateral stability control of a four-wheel-independent-drive electric vehicle. <i>Science China Technological Sciences</i> , 2019, 62, 2170-2183.	2.0	15
25	Comparison of semi-active hybrid battery system configurations for electric taxis application. <i>Applied Energy</i> , 2020, 259, 114171.	5.1	15
26	A comparative study of energy-efficient driving strategy for connected internal combustion engine and electric vehicles at signalized intersections. <i>Applied Energy</i> , 2022, 310, 118524.	5.1	15
27	Distributed Formation Control of Homogeneous Vehicle Platoon Considering Vehicle Dynamics. <i>International Journal of Automotive Technology</i> , 2019, 20, 1103-1112.	0.7	13
28	Comparison of four-wheel-drive hybrid powertrain configurations. <i>Energy</i> , 2020, 209, 118286.	4.5	13
29	Optimal Engine Starts of an Input-Split Hybrid Electric Vehicle. <i>SAE International Journal of Alternative Powertrains</i> , 0, 4, 343-351.	0.8	12
30	Strategy for heterogeneous vehicular platoons merging in automated highway system. , 2018, , .		12
31	Robust overtaking control of autonomous electric vehicle with parameter uncertainties. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2019, 233, 3358-3376.	1.1	12
32	Energy-Optimal Braking Control Using a Double-Layer Scheme for Trajectory Planning and Tracking of Connected Electric Vehicles. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2021, 34, .	1.9	11
33	Robust Inter-Vehicle Distance Measurement Using Cooperative Vehicle Localization. <i>Sensors</i> , 2021, 21, 2048.	2.1	10
34	CT2â€MDS: Cooperative trustâ€aware tolerant misbehaviour detection system for connected and automated vehicles. <i>IET Intelligent Transport Systems</i> , 2022, 16, 218-231.	1.7	10
35	Cooperative Merging for Multiple Connected and Automated Vehicles at Highway On-Ramps via Virtual Platoon Formation. , 2019, , .		9
36	Estimation of Vehicle State Using Robust Cubature Kalman Filter. , 2020, , .		9

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37	Robust Cooperative Control of Multiple Autonomous Vehicles for Platoon Formation Considering Parameter Uncertainties. <i>Automotive Innovation</i> , 2020, 3, 88-100.	3.1	9
38	Geometry-Based Cooperative Localization for Connected Vehicle Subject to Temporary Loss of GNSS Signals. <i>IEEE Sensors Journal</i> , 2021, 21, 23527-23536.	2.4	9
39	Stochastic Stable Control of Vehicular Platoon Time-Delay System Subject to Random Switching Topologies and Disturbances. <i>IEEE Transactions on Vehicular Technology</i> , 2022, 71, 5755-5769.	3.9	9
40	Optimal energy management strategy design for a diesel parallel hybrid electric vehicle. , 2014, , .		7
41	Optimal sizing and learning-based energy management strategy of NCR/LTO hybrid battery system for electric taxis. <i>Energy</i> , 2022, 257, 124653.	4.5	7
42	Energy-Optimal Velocity Planning for Connected Electric Vehicles at Signalized Intersection with Queue Prediction. , 2020, , .		6
43	Decentralized On-Ramp Merging Control of Connected and Automated Vehicles in the Mixed Traffic Using Control Barrier Functions. , 2021, , .		6
44	Learning-Based Vibration Control of Vehicle Active Suspension. , 2020, , .		6
45	Ecological cruising control of connected electric vehicle: a deep reinforcement learning approach. <i>Science China Technological Sciences</i> , 2022, 65, 529-540.	2.0	5
46	Event-Driven Energy-Efficient Driving Control in Urban Traffic for Connected Electric Vehicles. <i>IEEE Transactions on Transportation Electrification</i> , 2023, 9, 99-113.	5.3	4
47	A Novel Four-Wheel-Drive Hybrid Electric Sport Utility Vehicle with Double Planetary Gears. <i>IFAC-PapersOnLine</i> , 2018, 51, 81-86.	0.5	3
48	Recognition Method for Multi-Class Motor Imagery EEG Based on Channel Frequency Selection. , 2018, , .		2
49	Rule-filter-integrated Control of LFP/LTO Hybrid Energy Storage System for Vehicular Application. , 2019, , .		2
50	Rapid Optimization of Multiple-Planetary-Gear Power-Split Hybrid Powertrains. , 2015, , .		1
51	A thermal management method for lithium-ion battery based on fuzzy model predictive control. , 2019, , .		1
52	Predictive Ecological Control: Using Road Terrain and Traffic Signal Information for Improving Vehicle Energy Efficiency. , 2019, , .		1
53	Instantaneous Velocity Optimization Strategy of Electric Vehicle Considering Varying Road Slopes. , 2019, , .		1
54	Adaptive Multi-modal Fusion Instance Segmentation for CAEVs in Complex Conditions: Dataset, Framework and Verifications. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2021, 34, .	1.9	1

#	ARTICLE	IF	CITATIONS
55	Distance-Based Cooperative Localization of Connected Vehicles Via Convex Relaxation Under Extreme Environments. , 2021, , .		1
56	Modeling and Online Parameter Identification of Lithium Battery Considering Hysteresis Characteristics. , 2019, , .		0
57	Energy-Efficient Feedback Control Strategy of Vehicle Platoon on Highway with Varying Slopes. , 2019, , .		0
58	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
59	Cooperative Merging Trajectory Optimization of Connected and Automated Vehicles in the Mixed Traffic: a Receding Horizon Control Approach. , 2021, , .		0
60	Ecological Predictive Cruise Control of Connected Electric Vehicle with Predecessor Velocity Prediction and Road Grade Preview. , 2021, , .		0
61	Safety-critical Eco-driving Strategy for Electric Vehicle at Signalized Intersection Using Control Barrier Function. , 2021, , .		0