Yingfeng Cai

List of Publications by Year in Descending Order

121 papers	1,516 citations	21 h-index	32 g-index
135 ext. papers	2,181 ext. citations	3.8 avg, IF	5.57 L-index

#	Paper	IF	Citations
121	Compensated Deadbeat Predictive Current Control Considering Disturbance and VSI Nonlinearity for In-Wheel PMSMs. *IEEE/ASME Transactions on Mechatronics*, **2022**, 1-12	5.5	8
120	Lithium-ion battery capacity estimation based on battery surface temperature change under constant-current charge scenario. *Energy*, **2022**, 241, 122879	7.9	0
119	Piecewise affine modeling and hybrid optimal control of intelligent vehicle longitudinal dynamics for velocity regulation. *Mechanical Systems and Signal Processing*, **2022**, 162, 108089	7.8	1
118	A Novel Energy Management Strategy for Plug-in Hybrid Electric Buses Based on Model Predictive Control and Estimation of Distribution Algorithm. *IEEE/ASME Transactions on Mechatronics*, **2022**, 1-12	5.5	5
117	Voxel-RCNN-Complex: An Effective 3D Point Cloud Object Detector for Complex Traffic Conditions. *IEEE Transactions on Instrumentation and Measurement*, **2022**, 1-1	5.2	6
116	Personalized motion planning and tracking control for autonomous vehicles obstacle avoidance. *IEEE Transactions on Vehicular Technology*, **2022**, 1-1	6.8	0
115	V2I-CARLA: A Novel Dataset and a Method for Vehicle Reidentification-Based V2I Environment. *IEEE Transactions on Instrumentation and Measurement*, **2022**, 71, 1-9	5.2	0
114	Energy Saving Performance of Agricultural Tractor Equipped with Mechanic-Electronic-Hydraulic Powertrain System. *Agriculture (Switzerland)*, **2022**, 12, 436	3	2
113	Integrated-Hybrid Framework for Connected and Autonomous Vehicles Microscopic Traffic Flow Modelling. *Journal of Advanced Transportation*, **2022**, 2022, 1-16	1.9	0
112	Map-Based Localization for Intelligent Vehicles from Bi-Sensor Data Fusion. *Expert Systems With Applications*, **2022**, 117586	7.8	0
111	SFNet-N: An Improved SFNet Algorithm for Semantic Segmentation of Low-Light Autonomous Driving Road Scenes. *IEEE Transactions on Intelligent Transportation Systems*, **2022**, 1-13	6.1	10
110	Multi-Target Pan-Class Intrinsic Relevance Driven Model for Improving Semantic Segmentation in Autonomous Driving. *IEEE Transactions on Image Processing*, **2021**, 30, 9069-9084	8.7	2
109	. *IEEE Access*, **2021**, 9, 153811-153823	3.5	2
108	A Decision Control Method for Autonomous Driving Based on Multi-Task Reinforcement Learning. *IEEE Access*, **2021**, 9, 154553-154562	3.5	
107	State-of-health Estimation for Lithium-ion Batteries Based on Decoupled Dynamic Characteristic of Constant-voltage Charging Current. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	1
106	Pontryagin's minimum principle based fuzzy adaptive energy management for hybrid electric vehicle using real-time traffic information. *Applied Energy*, **2021**, 286, 116467	10.7	7
105	Trajectory prediction of cyclist based on dynamic Bayesian network and long short-term memory model at unsignalized intersections. *Science China Information Sciences*, **2021**, 64, 1	3.4	16

104	Data-Based Identification of the Tire Cornering Properties Via Piecewise Affine Approximation. *International Journal of Automotive Technology*, **2021**, 22, 631-641	1.6	0
103	Research on Intelligent Vehicle Path Tracking with Subsystems Based on Multimodel Intelligent Hierarchical Control Theory. *Mathematical Problems in Engineering*, **2021**, 2021, 1-15	1.1	0
102	Torque Modeling of a Segmented-Rotor SRM Using Maximum-Correntropy-Criterion-Based LSSVR for Torque Calculation of EVs. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 2674-2684	5.6	19
101	Visual Map-Based Localization for Intelligent Vehicles From Multi-View Site Matching. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 22, 1068-1079	6.1	5
100	Comprehensive Sensitivity and Cross-Factor Variance Analysis-Based Multi-Objective Design Optimization of a 3-DOF Hybrid Magnetic Bearing. *IEEE Transactions on Magnetics*, **2021**, 57, 1-4	2	17
99	Soft-Weighted-Average Ensemble Vehicle Detection Method Based on Single-Stage and Two-Stage Deep Learning Models. *IEEE Transactions on Intelligent Vehicles*, **2021**, 6, 100-109	5	13
98	Trajectory tracking control of steer-by-wire autonomous ground vehicle considering the complete failure of vehicle steering motor. *Simulation Modelling Practice and Theory*, **2021**, 109, 102235	3.9	7
97	. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-16	6.1	21
96	Crossing or Not? Context-Based Recognition of Pedestrian Crossing Intention in the Urban Environment. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-12	6.1	4
95	Robust Target Recognition and Tracking of Self-Driving Cars With Radar and Camera Information Fusion Under Severe Weather Conditions. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-14	6.1	30
94	Environment-Attention Network for Vehicle Trajectory Prediction. *IEEE Transactions on Vehicular Technology*, **2021**, 1-1	6.8	5
93	DLnet With Training Task Conversion Stream for Precise Semantic Segmentation in Actual Traffic Scene. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, PP,	10.3	13
92	Torsional oscillation-considered mode transition coordinated control for a power-split PHEV based on action dependent heuristic dynamic programming. *ISA Transactions*, **2021**,	5.5	1
91	Three-Vector-Based Model Predictive Torque Control for a Permanent Magnet Synchronous Motor of EVs. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 1454-1465	7.6	19
90	Creating navigation map in semi-open scenarios for intelligent vehicle localization using multi-sensor fusion. *Expert Systems With Applications*, **2021**, 184, 115543	7.8	4
89	YOLOv4-5D: An Effective and Efficient Object Detector for Autonomous Driving. *IEEE Transactions on Instrumentation and Measurement*, **2021**, 70, 1-13	5.2	45
88	An Automatic Vehicle Avoidance Control Model for Dangerous Lane-Changing Behavior. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-11	6.1	1
87	Displacement sensorless control for bearingless induction motor drives based on the MRAS method. *International Journal of Applied Electromagnetics and Mechanics*, **2020**, 62, 787-805	0.4	5

86	Grey Wolf Optimization Algorithm Based State Feedback Control for a Bearingless Permanent Magnet Synchronous Machine. *IEEE Transactions on Power Electronics*, **2020**, 35, 13631-13640	7.2	64
85	Design optimization and analysis of a segmented-rotor switched reluctance machine for BSG application in HEVs. *International Journal of Applied Electromagnetics and Mechanics*, **2020**, 63, 529-550	0.4	2
84	Review on multi-power sources dynamic coordinated control of hybrid electric vehicle during driving mode transition process. *International Journal of Energy Research*, **2020**, 44, 6128-6148	4.5	7
83	Robust Design Optimization of a Five-Phase PM Hub Motor for Fault-Tolerant Operation Based on Taguchi Method. *IEEE Transactions on Energy Conversion*, **2020**, 35, 2036-2044	5.4	56
82	Expected yaw rate-based trajectory tracking control with vision delay for intelligent vehicle. *Science Progress*, **2020**, 103, 36850420934274	1.1	
81	A Shift Vector Guided Multiobjective Evolutionary Algorithm Based on Decomposition for Dynamic Optimization. *IEEE Access*, **2020**, 8, 38391-38403	3.5	2
80	A Novel Saliency Detection Algorithm Based On Adversarial Learning Model. *IEEE Transactions on Image Processing*, **2020**,	8.7	10
79	Combining sustainable stochastic resonance with high-energy orbit oscillation to broaden rotational bandwidth of energy harvesting from tire. *AIP Advances*, **2020**, 10, 015011	1.5	2
78	Research on Compound Coordinated Control for a Power-Split Hybrid Electric Vehicle Based on Compensation of Non-Ideal Communication Network. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 14818-14833	6.8	3
77	Design optimisation of an outer-rotor permanent magnet synchronous hub motor for a low-speed campus patrol EV. *IET Electric Power Applications*, **2020**, 14, 2111-2118	1.8	8
76	A single-shot pose estimation approach for a 2D laser rangefinder. *Measurement Science and Technology*, **2020**, 31, 025105	2	3
75	An ANFIS-Based ECMS for Energy Optimization of Parallel Hybrid Electric Bus. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 1473-1483	6.8	37
74	Robust crowd counting based on refined density map. *Multimedia Tools and Applications*, **2020**, 79, 28337-28353	2.5	2
73	Torque distribution method based on vibration instability of PS-HEV transmission system. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2020**, 234, 3491-3503	1.4	5
72	Driving-Cycle-Oriented Design Optimization of a Permanent Magnet Hub Motor Drive System for a Four-Wheel-Drive Electric Vehicle. *IEEE Transactions on Transportation Electrification*, **2020**, 6, 1115-1125	7.6	38
71	Identification of a piecewise affine model for the tire cornering characteristics based on experimental data. *Nonlinear Dynamics*, **2020**, 101, 857-874	5	2
70	Development of a digital control system for a belt-driven starter generator segmented switched reluctance motor for hybrid electric vehicles. *Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering*, **2020**, 234, 975-984	1	3
69	Mode Transition Control of a Power-Split Hybrid Electric Vehicle Based on Improved Extended State Observer. *IEEE Access*, **2020**, 8, 207260-207274	3.5	

68	Stability Research of Distributed Drive Electric Vehicle by Adaptive Direct Yaw Moment Control. *IEEE Access*, **2019**, 7, 106225-106237	3.5	16
67	Vehicle license plate recognition method based on deep convolution network in complex road scene. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2019**, 233, 2284-2292	1.4	0
66	Passive fault-tolerant path following control of autonomous distributed drive electric vehicle considering steering system fault. *Mechanical Systems and Signal Processing*, **2019**, 123, 298-315	7.8	32
65	A forward collision avoidance algorithm based on driver braking behavior. *Accident Analysis and Prevention*, **2019**, 129, 30-43	6.1	26
64	Hybrid modeling and predictive control of intelligent vehicle longitudinal velocity considering nonlinear tire dynamics. *Nonlinear Dynamics*, **2019**, 97, 1051-1066	5	13
63	Sideslip Angle Fusion Estimation Method of an Autonomous Electric Vehicle Based on Robust Cubature Kalman Filter with Redundant Measurement Information. *World Electric Vehicle Journal*, **2019**, 10, 34	2.5	1
62	Lyophobic slippery surfaces on smooth/hierarchical structured substrates and investigations of their dynamic liquid repellency. *Physical Chemistry Chemical Physics*, **2019**, 21, 15705-15711	3.6	9
61	Passive actuator-fault-tolerant path following control of autonomous ground electric vehicle with in-wheel motors. *Advances in Engineering Software*, **2019**, 134, 22-30	3.6	19
60	Real-Time Vehicle Detection Algorithm Based on Vision and Lidar Point Cloud Fusion. *Journal of Sensors*, **2019**, 2019, 1-9	2	21
59	A path and velocity planning method for lane changing collision avoidance of intelligent vehicle based on cubic 3-D Bezier curve. *Advances in Engineering Software*, **2019**, 132, 65-73	3.6	31
58	. *IEEE Intelligent Transportation Systems Magazine*, **2019**, 11, 82-95	2.6	52
57	A study of the novel vision guided IV trajectory tracking control system based on expected yaw velocity. *Advances in Engineering Software*, **2019**, 131, 196-204	3.6	3
56	Implementation and Development of a Trajectory Tracking Control System for Intelligent Vehicle. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2019**, 94, 251-264	2.9	24
55	Running States Estimation of Autonomous Four-Wheel Independent Drive Electric Vehicle by Virtual Longitudinal Force Sensors. *Mathematical Problems in Engineering*, **2019**, 2019, 1-17	1.1	1
54	A novel resistor-inductor network-based equivalent circuit model of lithium-ion batteries under constant-voltage charging condition. *Applied Energy*, **2019**, 254, 113726	10.7	15
53	An adaptive ECMS with driving style recognition for energy optimization of parallel hybrid electric buses. *Energy*, **2019**, 189, 116151	7.9	43
52	Design of Vehicle Running States-Fused Estimation Strategy Using Kalman Filters and Tire Force Compensation Method. *IEEE Access*, **2019**, 7, 87273-87287	3.5	9
51	3D Vehicle Detection Based on LiDAR and Camera Fusion. *Automotive Innovation*, **2019**, 2, 276-283	1.7	1

50	. *IEEE Transactions on Applied Superconductivity*, **2019**, 29, 1-5	1.8	60
49	Simultaneous path following and lateral stability control of 4WD-4WS autonomous electric vehicles with actuator saturation. *Advances in Engineering Software*, **2019**, 128, 46-54	3.6	30
48	Optimal control of intelligent vehicle longitudinal dynamics via hybrid model predictive control. *Robotics and Autonomous Systems*, **2019**, 112, 190-200	3.5	24
47	Traffic State Spatial-Temporal Characteristic Analysis and Short-Term Forecasting Based on Manifold Similarity. *IEEE Access*, **2018**, 6, 9690-9702	3.5	13
46	Salient object detection based on multi-scale contrast. *Neural Networks*, **2018**, 101, 47-56	9.1	48
45	Traffic state prediction using ISOMAP manifold learning. *Physica A: Statistical Mechanics and Its Applications*, **2018**, 506, 532-541	3.3	14
44	Estimation of longitudinal force, lateral vehicle speed and yaw rate for four-wheel independent driven electric vehicles. *Mechanical Systems and Signal Processing*, **2018**, 101, 377-388	7.8	59
43	. *IEEE Access*, **2018**, 6, 24279-24290	3.5	5
42	Estimation of Longitudinal Force and Sideslip Angle for Intelligent Four-Wheel Independent Drive Electric Vehicles by Observer Iteration and Information Fusion. *Sensors*, **2018**, 18,	3.8	13
41	Analyzing the influence of automatic steering system on the trajectory tracking accuracy of intelligent vehicle. *Advances in Engineering Software*, **2018**, 121, 188-196	3.6	14
40	A 64-Line Lidar-Based Road Obstacle Sensing Algorithm for Intelligent Vehicles. *Scientific Programming*, **2018**, 2018, 1-7	1.4	3
39	Field-Oriented Control of Energy-Regenerative Electromagnetic Slip Coupling. *IEEE Access*, **2018**, 6, 52169-52178	3.5	8
38	Short-Time Traffic State Forecasting Using Adaptive Neighborhood Selection Based on Expansion Strategy. *IEEE Access*, **2018**, 6, 48210-48223	3.5	7
37	Robust sideslip angle observer with regional stability constraint for an uncertain singular intelligent vehicle system. *IET Control Theory and Applications*, **2018**, 12, 1802-1811	2.5	12
36	Piecewise Affine Identification of Tire Longitudinal Properties for Autonomous Driving Control Based on Data-Driven. *IEEE Access*, **2018**, 6, 47424-47432	3.5	7
35	Stochastic Predictive Energy Management of Power Split Hybrid Electric Bus for Real-World Driving Cycles. *IEEE Access*, **2018**, 6, 61700-61713	3.5	15
34	Multi-Objective Coordination Control Strategy of Distributed Drive Electric Vehicle by Orientated Tire Force Distribution Method. *IEEE Access*, **2018**, 6, 69559-69574	3.5	19
33	A Vehicle Recognition Algorithm Based on Deep Transfer Learning with a Multiple Feature Subspace Distribution. *Sensors*, **2018**, 18,	3.8	11

32	Vehicle Detection by Fusing Part Model Learning and Semantic Scene Information for Complex Urban Surveillance. *Sensors*, **2018**, 18,	3.8	5
31	Analysis and optimization of energy efficiency for an electric vehicle with four independent drive in-wheel motors. *Advances in Mechanical Engineering*, **2018**, 10, 168781401855	1.2	5
30	Saliency Detection by Multilevel Deep Pyramid Model. *Journal of Sensors*, **2018**, 2018, 1-11	2	3
29	Kernel Sparse Representation with Hybrid Regularization for On-Road Traffic Sensor Data Imputation. *Sensors*, **2018**, 18,	3.8	3
28	Graph regularized local self-representation for missing value imputation with applications to on-road traffic sensor data. *Neurocomputing*, **2018**, 303, 47-59	5.4	7
27	Saliency-Based Pedestrian Detection in Far Infrared Images. *IEEE Access*, **2017**, 1-1	3.5	27
26	Spatiotemporal variable and parameter selection using sparse hybrid genetic algorithm for traffic flow forecasting. *International Journal of Distributed Sensor Networks*, **2017**, 13, 155014771771337	1.7	14
25	Visual Vehicle Tracking Based on Deep Representation and Semisupervised Learning. *Journal of Sensors*, **2017**, 2017, 1-6	2	1
24	Vehicle Detection Based on Deep Dual-Vehicle Deformable Part Models. *Journal of Sensors*, **2017**, 2017, 1-10	2	9
23	Ensemble correlation-based low-rank matrix completion with applications to traffic data imputation. *Knowledge-Based Systems*, **2017**, 132, 249-262	7.3	36
22	Scene-Adaptive Vehicle Detection Algorithm Based on a Composite Deep Structure. *IEEE Access*, **2017**, 5, 22804-22811	3.5	13
21	Pedestrian detection algorithm in traffic scene based on weakly supervised hierarchical deep model. *International Journal of Advanced Robotic Systems*, **2017**, 14, 172988141769231	1.4	4
20	Path Tracking Control of Automatic Parking Cloud Model considering the Influence of Time Delay. *Mathematical Problems in Engineering*, **2017**, 2017, 1-14	1.1	10
19	Multilevel framework to handle object occlusions for real-time tracking. *IET Image Processing*, **2016**, 10, 885-892	1.7	11
18	Vehicle height and leveling control of electronically controlled air suspension using mixed logical dynamical approach. *Science China Technological Sciences*, **2016**, 59, 1814-1824	3.5	13
17	Discriminative sparsity preserving graph embedding **2016**,		5
16	Occluded vehicle detection with local connected deep model. *Multimedia Tools and Applications*, **2016**, 75, 9277-9293	2.5	11
15	Vehicle height and posture control of the electronic air suspension system using the hybrid system approach. *Vehicle System Dynamics*, **2016**, 54, 328-352	2.8	30

No.	Title	IF	Citations
14	Design of a hybrid model predictive controller for the vehicle height adjustment system of an electronic air suspension. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2016**, 230, 1504-1520	1.4	8
13	Night-Time Vehicle Detection Algorithm Based on Visual Saliency and Deep Learning. *Journal of Sensors*, **2016**, 2016, 1-7	2	16
12	Night-Time Vehicle Sensing in Far Infrared Image with Deep Learning. *Journal of Sensors*, **2016**, 2016, 1-8	2	13
11	Discriminant feature extraction for image recognition using complete robust maximum margin criterion. *Machine Vision and Applications*, **2015**, 26, 857-870	2.8	2
10	Trajectory-based anomalous behaviour detection for intelligent traffic surveillance. *IET Intelligent Transport Systems*, **2015**, 9, 810-816	2.4	49
9	A novel method for camera external parameters online calibration using dotted road line. *Advanced Robotics*, **2014**, 28, 1033-1042	1.7	5
8	A vehicle detection algorithm based on deep belief network. *Scientific World Journal, The*, **2014**, 2014, 647380	2.2	14
7	A Multistep Framework for Vision Based Vehicle Detection. *Journal of Applied Mathematics*, **2014**, 2014, 1-9	1.1	3
6	A review of the development trend of adaptive cruise control for ecological driving. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*,095440702110490	1.4	1
5	Event-triggered nonlinear model predictive control for trajectory tracking of unmanned vehicles. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*,095440702199216	1.4	1
4	Design and analysis of robust state constraint control for direct yaw moment control system. *International Journal of Modelling and Simulation*,1-10	1.5	0
3	Coordination control method of autonomous ground electric vehicle for simultaneous trajectory tracking and yaw stability control. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*,095440702210874	1.4	0
2	A high-performance neural network vehicle dynamics model for trajectory tracking control. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*,095440702210956	1.4	0
1	Deep multi-layer perceptron-based evolutionary algorithm for dynamic multiobjective optimization. *Complex & Intelligent Systems*,1	7.1	