Yingfeng Cai

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	YOLOv4-5D: An Effective and Efficient Object Detector for Autonomous Driving. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	2.4	142
2	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.	5.3	116
3	A Comparative Study of State-of-the-Art Deep Learning Algorithms for Vehicle Detection. IEEE Intelligent Transportation Systems Magazine, 2019, 11, 82-95.	2.6	110
4	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.	3.7	107
5	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, 2022, 23, 6640-6653.	4.7	98
6	Grey Wolf Optimization Algorithm Based State Feedback Control for a Bearingless Permanent Magnet Synchronous Machine. IEEE Transactions on Power Electronics, 2020, 35, 13631-13640.	5.4	96
7	An adaptive ECMS with driving style recognition for energy optimization of parallel hybrid electric buses. Energy, 2019, 189, 116151.	4.5	93
8	Torque Analysis and Dynamic Performance Improvement of a PMSM for EVs by Skew Angle Optimization. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.1	87
9	SFNet-N: An Improved SFNet Algorithm for Semantic Segmentation of Low-Light Autonomous Driving Road Scenes. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 21405-21417.	4.7	81
10	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.	4.4	79
11	Trajectoryâ€based anomalous behaviour detection for intelligent traffic surveillance. IET Intelligent Transport Systems, 2015, 9, 810-816.	1.7	69
12	An ANFIS-Based ECMS for Energy Optimization of Parallel Hybrid Electric Bus. IEEE Transactions on Vehicular Technology, 2020, 69, 1473-1483.	3.9	69
13	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.	1.8	66
14	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.	4.4	63
15	Salient object detection based on multi-scale contrast. Neural Networks, 2018, 101, 47-56.	3.3	56
16	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.	2.7	56
17	Ensemble correlation-based low-rank matrix completion with applications to traffic data imputation. Knowledge-Based Systems, 2017, 132, 249-262.	4.0	55
18	Pedestrian Motion Trajectory Prediction in Intelligent Driving from Far Shot First-Person Perspective Video. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 5298-5313.	4.7	53

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19	A forward collision avoidance algorithm based on driver braking behavior. Accident Analysis and Prevention, 2019, 129, 30-43.	3.0	52
20	Simultaneous path following and lateral stability control of 4WD-4WS autonomous electric vehicles with actuator saturation. Advances in Engineering Software, 2019, 128, 46-54.	1.8	52
21	Vehicle height and posture control of the electronic air suspension system using the hybrid system approach. Vehicle System Dynamics, 2016, 54, 328-352.	2.2	46
22	Optimal control of intelligent vehicle longitudinal dynamics via hybrid model predictive control. Robotics and Autonomous Systems, 2019, 112, 190-200.	3.0	41
23	Stability Research of Distributed Drive Electric Vehicle by Adaptive Direct Yaw Moment Control. IEEE Access, 2019, 7, 106225-106237.	2.6	40
24	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.	9.4	39
25	Saliency-based Pedestrian Detection in Far Infrared Images. IEEE Access, 2017, , 1-1.	2.6	38
26	Pontryagin's minimum principle based fuzzy adaptive energy management for hybrid electric vehicle using real-time traffic information. Applied Energy, 2021, 286, 116467.	5.1	37
27	Three-Vector-Based Model Predictive Torque Control for a Permanent Magnet Synchronous Motor of EVs. IEEE Transactions on Transportation Electrification, 2021, 7, 1454-1465.	5.3	37
28	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.	3.7	34
29	Compensated Deadbeat Predictive Current Control Considering Disturbance and VSI Nonlinearity for In-Wheel PMSMs. IEEE/ASME Transactions on Mechatronics, 2022, 27, 3536-3547.	3.7	34
30	Environment-Attention Network for Vehicle Trajectory Prediction. IEEE Transactions on Vehicular Technology, 2021, 70, 11216-11227.	3.9	33
31	A novel resistor-inductor network-based equivalent circuit model of lithium-ion batteries under constant-voltage charging condition. Applied Energy, 2019, 254, 113726.	5.1	32
32	Real-Time Vehicle Detection Algorithm Based on Vision and Lidar Point Cloud Fusion. Journal of Sensors, 2019, 2019, 1-9.	0.6	32
33	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.	2.0	30
34	Passive actuator-fault-tolerant path following control of autonomous ground electric vehicle with in-wheel motors. Advances in Engineering Software, 2019, 134, 22-30.	1.8	30
35	Multi-Objective Coordination Control Strategy of Distributed Drive Electric Vehicle by Orientated Tire Force Distribution Method. IEEE Access, 2018, 6, 69559-69574.	2.6	29
36	Hybrid modeling and predictive control of intelligent vehicle longitudinal velocity considering nonlinear tire dynamics. Nonlinear Dynamics, 2019, 97, 1051-1066.	2.7	27

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37	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.	1.2	26
38	Crossing or Not? Context-Based Recognition of Pedestrian Crossing Intention in the Urban Environment. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 5338-5349.	4.7	26
39	Night-Time Vehicle Detection Algorithm Based on Visual Saliency and Deep Learning. Journal of Sensors, 2016, 2016, 1-7.	0.6	25
40	Traffic state prediction using ISOMAP manifold learning. Physica A: Statistical Mechanics and Its Applications, 2018, 506, 532-541.	1.2	24
41	Vehicle Trajectory Prediction Based on Intention-Aware Non-Autoregressive Transformer With Multi-Attention Learning for Internet of Vehicles. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-12.	2.4	24
42	DLnet With Training Task Conversion Stream for Precise Semantic Segmentation in Actual Traffic Scene. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 6443-6457.	7.2	23
43	Design optimisation of an outerâ€rotor permanent magnet synchronous hub motor for a lowâ€speed campus patrol EV. IET Electric Power Applications, 2020, 14, 2111-2118.	1.1	23
44	Analyzing the influence of automatic steering system on the trajectory tracking accuracy of intelligent vehicle. Advances in Engineering Software, 2018, 121, 188-196.	1.8	22
45	A Vehicle Detection Algorithm Based on Deep Belief Network. Scientific World Journal, The, 2014, 2014, 1-7.	0.8	21
46	Night-Time Vehicle Sensing in Far Infrared Image with Deep Learning. Journal of Sensors, 2016, 2016, 1-8.	0.6	21
47	Stochastic Predictive Energy Management of Power Split Hybrid Electric Bus for Real-World Driving Cycles. IEEE Access, 2018, 6, 61700-61713.	2.6	21
48	Traffic State Spatial-Temporal Characteristic Analysis and Short-Term Forecasting Based on Manifold Similarity. IEEE Access, 2018, 6, 9690-9702.	2.6	20
49	Lithium-ion battery capacity estimation based on battery surface temperature change under constant-current charge scenario. Energy, 2022, 241, 122879.	4.5	20
50	Vehicle height and leveling control of electronically controlled air suspension using mixed logical dynamical approach. Science China Technological Sciences, 2016, 59, 1814-1824.	2.0	19
51	A Vehicle Recognition Algorithm Based on Deep Transfer Learning with a Multiple Feature Subspace Distribution. Sensors, 2018, 18, 4109.	2.1	19
52	Review on multiâ€power sources dynamic coordinated control of hybrid electric vehicle during driving mode transition process. International Journal of Energy Research, 2020, 44, 6128-6148.	2.2	19
53	A Novel Saliency Detection Algorithm Based on Adversarial Learning Model. IEEE Transactions on Image Processing, 2020, 29, 4489-4504.	6.0	19
54	State-of-Health Estimation for Lithium-Ion Batteries Based on Decoupled Dynamic Characteristic of Constant-Voltage Charging Current. IEEE Transactions on Transportation Electrification, 2022, 8, 2070-2079.	5.3	19

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55	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.	2.2	18
56	Spatiotemporal variable and parameter selection using sparse hybrid genetic algorithm for traffic flow forecasting. International Journal of Distributed Sensor Networks, 2017, 13, 155014771771337.	1.3	17
57	Scene-Adaptive Vehicle Detection Algorithm Based on a Composite Deep Structure. IEEE Access, 2017, 5, 22804-22811.	2.6	17
58	Robust sideslip angle observer with regional stability constraint for an uncertain singular intelligent vehicle system. IET Control Theory and Applications, 2018, 12, 1802-1811.	1.2	17
59	Analysis and optimization of energy efficiency for an electric vehicle with four independent drive in-wheel motors. Advances in Mechanical Engineering, 2018, 10, 168781401876554.	0.8	17
60	Estimation of Longitudinal Force and Sideslip Angle for Intelligent Four-Wheel Independent Drive Electric Vehicles by Observer Iteration and Information Fusion. Sensors, 2018, 18, 1268.	2.1	17
61	Design of Vehicle Running States-Fused Estimation Strategy Using Kalman Filters and Tire Force Compensation Method. IEEE Access, 2019, 7, 87273-87287.	2.6	17
62	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, 27, 4350-4361.	3.7	17
63	Multilevel framework to handle object occlusions for realâ€ŧime tracking. IET Image Processing, 2016, 10, 885-892.	1.4	16
64	Graph regularized local self-representation for missing value imputation with applications to on-road traffic sensor data. Neurocomputing, 2018, 303, 47-59.	3.5	15
65	Incorporating Driving Style Recognition Into MPC for Energy Management of Plug-In Hybrid Electric Buses. IEEE Transactions on Transportation Electrification, 2023, 9, 169-181.	5.3	14
66	Path Tracking Control of Automatic Parking Cloud Model considering the Influence of Time Delay. Mathematical Problems in Engineering, 2017, 2017, 1-14.	0.6	13
67	Vehicle Detection Based on Deep Dual-Vehicle Deformable Part Models. Journal of Sensors, 2017, 2017, 1-10.	0.6	13
68	Voxel-RCNN-Complex: An Effective 3-D Point Cloud Object Detector for Complex Traffic Conditions. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-12.	2.4	13
69	Energy Saving Performance of Agricultural Tractor Equipped with Mechanic-Electronic-Hydraulic Powertrain System. Agriculture (Switzerland), 2022, 12, 436.	1.4	13
70	Occluded vehicle detection with local connected deep model. Multimedia Tools and Applications, 2016, 75, 9277-9293.	2.6	12
71	Piecewise Affine Identification of Tire Longitudinal Properties for Autonomous Driving Control Based on Data-Driven. IEEE Access, 2018, 6, 47424-47432.	2.6	12
72	Creating navigation map in semi-open scenarios for intelligent vehicle localization using multi-sensor fusion. Expert Systems With Applications, 2021, 184, 115543.	4.4	12

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73	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.	3.9	11
74	Multi-Target Pan-Class Intrinsic Relevance Driven Model for Improving Semantic Segmentation in Autonomous Driving. IEEE Transactions on Image Processing, 2021, 30, 9069-9084.	6.0	11
75	Short-Time Traffic State Forecasting Using Adaptive Neighborhood Selection Based on Expansion Strategy. IEEE Access, 2018, 6, 48210-48223.	2.6	10
76	Lyophobic slippery surfaces on smooth/hierarchical structured substrates and investigations of their dynamic liquid repellency. Physical Chemistry Chemical Physics, 2019, 21, 15705-15711.	1.3	10
77	Visual Map-Based Localization for Intelligent Vehicles From Multi-View Site Matching. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 1068-1079.	4.7	10
78	A novel method for camera external parameters online calibration using dotted road line. Advanced Robotics, 2014, 28, 1033-1042.	1.1	9
79	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.	1.1	9
80	Identification of a piecewise affine model for the tire cornering characteristics based on experimental data. Nonlinear Dynamics, 2020, 101, 857-874.	2.7	9
81	Displacement sensorless control for bearingless induction motor drives based on the MRAS method. International Journal of Applied Electromagnetics and Mechanics, 2020, 62, 787-805.	0.3	9
82	A sharing deep reinforcement learning method for efficient vehicle platooning control. IET Intelligent Transport Systems, 2022, 16, 1697-1709.	1.7	9
83	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, 2022, 236, 1931-1948.	1.1	9
84	Personalized Motion Planning and Tracking Control for Autonomous Vehicles Obstacle Avoidance. IEEE Transactions on Vehicular Technology, 2022, 71, 4733-4747.	3.9	9
85	Pedestrian detection algorithm in traffic scene based on weakly supervised hierarchical deep model. International Journal of Advanced Robotic Systems, 2017, 14, 172988141769231.	1.3	8
86	Nonconvex <inline-formula> <tex-math notation="LaTeX">\$l_p\$ </tex-math> </inline-formula> -Norm Regularized Sparse Self-Representation for Traffic Sensor Data Recovery. IEEE Access, 2018, 6, 24279-24290.	2.6	8
87	Surrounding Objects Detection and Tracking for Autonomous Driving Using LiDAR and Radar Fusion. Chinese Journal of Mechanical Engineering (English Edition), 2021, 34, .	1.9	8
88	DSC-based RBF neural network control for nonlinear time-delay systems with time-varying full state constraints. ISA Transactions, 2022, 129, 79-90.	3.1	8
89	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.	1.1	7
90	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, 2023, 237, 2474-2483.	1.1	7

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91	Design and Analysis of a Novel Mechanic- Electronic-Hydraulic Powertrain System for Agriculture Tractors. IEEE Access, 2021, 9, 153811-153823.	2.6	7
92	Vehicle Detection by Fusing Part Model Learning and Semantic Scene Information for Complex Urban Surveillance. Sensors, 2018, 18, 3505.	2.1	6
93	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.	1.8	6
94	Torsional oscillation-considered mode transition coordinated control for a power-split PHEV based on action dependent heuristic dynamic programming. ISA Transactions, 2022, 126, 597-616.	3.1	6
95	Piecewise affine modeling and hybrid optimal control of intelligent vehicle longitudinal dynamics for velocity regulation. Mechanical Systems and Signal Processing, 2022, 162, 108089.	4.4	6
96	CAEâ€GAN: A hybrid model for vehicle trajectory prediction. IET Intelligent Transport Systems, 2022, 16, 1682-1696.	1.7	6
97	A Lightweight Feature Map Creation Method for Intelligent Vehicle Localization in Urban Road Environments. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-15.	2.4	6
98	Discriminative sparsity preserving graph embedding. , 2016, , .		5
99	Combining sustainable stochastic resonance with high-energy orbit oscillation to broaden rotational bandwidth of energy harvesting from tire. AIP Advances, 2020, 10, .	0.6	5
100	An Automatic Vehicle Avoidance Control Model for Dangerous Lane-Changing Behavior. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 8477-8487.	4.7	5
101	V2I-CARLA: A Novel Dataset and a Method for Vehicle Reidentification-Based V2I Environment. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	2.4	5
102	Integrated-Hybrid Framework for Connected and Autonomous Vehicles Microscopic Traffic Flow Modelling. Journal of Advanced Transportation, 2022, 2022, 1-16.	0.9	5
103	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, 2023, 237, 1695-1709.	1.1	5
104	Discriminant feature extraction for image recognition using complete robust maximum margin criterion. Machine Vision and Applications, 2015, 26, 857-870.	1.7	4
105	A 64-Line Lidar-Based Road Obstacle Sensing Algorithm for Intelligent Vehicles. Scientific Programming, 2018, 2018, 1-7.	0.5	4
106	Kernel Sparse Representation with Hybrid Regularization for On-Road Traffic Sensor Data Imputation. Sensors, 2018, 18, 2884.	2.1	4
107	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.	1.1	4
108	Direct Torque Control of A Segmented Switched Reluctance Motor for BSG in HEVs. , 2019, , .		4

108 Direct Torque Control of A Segmented Switched Reluctance Motor for BSG in HEVs. , 2019, , .

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109	A Shift Vector Guided Multiobjective Evolutionary Algorithm Based on Decomposition for Dynamic Optimization. IEEE Access, 2020, 8, 38391-38403.	2.6	4
110	Map-based localization for intelligent vehicles from bi-sensor data fusion. Expert Systems With Applications, 2022, 203, 117586.	4.4	4
111	NLS Based Hierarchical Anti-Disturbance Controller for Vehicle Platoons With Time-Varying Parameter Uncertainties. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 21062-21073.	4.7	4
112	A Multistep Framework for Vision Based Vehicle Detection. Journal of Applied Mathematics, 2014, 2014, 1-9.	0.4	3
113	Research on pedestrian detection technology based on improved DPM model. , 2017, , .		3
114	Field-Oriented Control of Energy-Regenerative Electromagnetic Slip Coupling. IEEE Access, 2018, 6, 52169-52178.	2.6	3
115	Saliency Detection by Multilevel Deep Pyramid Model. Journal of Sensors, 2018, 2018, 1-11.	0.6	3
116	Running States Estimation of Autonomous Four-Wheel Independent Drive Electric Vehicle by Virtual Longitudinal Force Sensors. Mathematical Problems in Engineering, 2019, 2019, 1-17.	0.6	3
117	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.	1.6	3
118	3D Vehicle Detection Based on LiDAR and Camera Fusion. Automotive Innovation, 2019, 2, 276-283.	3.1	3
119	A single-shot pose estimation approach for a 2D laser rangefinder. Measurement Science and Technology, 2020, 31, 025105.	1.4	3
120	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.	0.7	3
121	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.	0.3	3
122	Learning object recognition based on compressive sampling. , 2017, , .		2
123	Robust crowd counting based on refined density map. Multimedia Tools and Applications, 2020, 79, 2837-2853.	2.6	2
124	Mode Transition Control of a Power-Split Hybrid Electric Vehicle Based on Improved Extended State Observer. IEEE Access, 2020, 8, 207260-207274.	2.6	2
125	Expected yaw rate–based trajectory tracking control with vision delay for intelligent vehicle. Science Progress, 2020, 103, 36850420934274	1.0	2
126	Data-Based Identification of the Tire Cornering Properties Via Piecewise Affine Approximation. International Journal of Automotive Technology, 2021, 22, 631-641.	0.7	2

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127	A Decision Control Method for Autonomous Driving Based on Multi-Task Reinforcement Learning. IEEE Access, 2021, 9, 154553-154562.	2.6	2
128	A Battery Capacity Estimation Method Using Surface Temperature Change under Constant-current Charge Scenario. , 2021, , .		2
129	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, 0, , 095440702210874.	1.1	2
130	Deep learningâ€based hybrid model for the behaviour prediction of surrounding vehicles over longâ€ŧime periods. IET Intelligent Transport Systems, 2022, 16, 1404-1412.	1.7	2
131	Visual Vehicle Tracking Based on Deep Representation and Semisupervised Learning. Journal of Sensors, 2017, 2017, 1-6.	0.6	1
132	Self-Controlled In-Vehicle Traffic Light Based on The 4th Generation Mobile Communication. , 2021, , .		1
133	Research on Intelligent Vehicle Path Tracking with Subsystems Based on Multimodel Intelligent Hierarchical Control Theory. Mathematical Problems in Engineering, 2021, 2021, 1-15.	0.6	1
134	Design and analysis of robust state constraint control for direct yaw moment control system. International Journal of Modelling and Simulation, 0, , 1-10.	2.3	1
135	Deep multi-layer perceptron-based evolutionary algorithm for dynamic multiobjective optimization. Complex & Intelligent Systems, 0, , 1.	4.0	1