Junmin Wang

List of Publications by Year
in descending order

		31976	48315
250 papers	9,503 citations	53 h-index	88 g-index
251 all docs	251 docs citations	251 times ranked	4769 citing authors

#	Article	IF	Citations
1	Development and performance characterization of an electric ground vehicle with independently actuated in-wheel motors. Journal of Power Sources, 2011, 196, 3962-3971.	7.8	328
2	Vehicle Lateral Dynamics Control Through AFS/DYC and Robust Gain-Scheduling Approach. IEEE Transactions on Vehicular Technology, 2016, 65, 489-494.	6.3	289
3	Combined AFS and DYC Control of Four-Wheel-Independent-Drive Electric Vehicles over CAN Network with Time-Varying Delays. IEEE Transactions on Vehicular Technology, 2014, 63, 591-602.	6.3	288
4	Robust gain-scheduling energy-to-peak control of vehicle lateral dynamics stabilisation. Vehicle System Dynamics, 2014, 52, 309-340.	3.7	273
5	Coordinated and Reconfigurable Vehicle Dynamics Control. IEEE Transactions on Control Systems Technology, 2009, 17, 723-732.	5.2	231
6	On Energy-to-Peak Filtering for Nonuniformly Sampled Nonlinear Systems: A Markovian Jump System Approach. IEEE Transactions on Fuzzy Systems, 2014, 22, 212-222.	9.8	211
7	Adaptive Sliding-Mode Observer Design for a Selective Catalytic Reduction System of Ground-Vehicle Diesel Engines. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2027-2038.	5.8	201
8	Fault-Tolerant Control With Active Fault Diagnosis for Four-Wheel Independently Driven Electric Ground Vehicles. IEEE Transactions on Vehicular Technology, 2011, 60, 4276-4287.	6.3	200
9	A Parallel Hybrid Electric Vehicle Energy Management Strategy Using Stochastic Model Predictive Control With Road Grade Preview. IEEE Transactions on Control Systems Technology, 2015, 23, 2416-2423.	5.2	199
10	Observer Design for LPV Systems With Uncertain Measurements on Scheduling Variables: Application to an Electric Ground Vehicle. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1659-1670.	5.8	183
11	Hybrid Electric Vehicle Model Predictive Control Torque-Split Strategy Incorporating Engine Transient Characteristics. IEEE Transactions on Vehicular Technology, 2012, 61, 2458-2467.	6.3	175
12	Linear Parameter-Varying Controller Design for Four-Wheel Independently Actuated Electric Ground Vehicles With Active Steering Systems. IEEE Transactions on Control Systems Technology, 2014, 22, 1281-1296.	5.2	161
13	Lateral motion control for four-wheel-independent-drive electric vehicles using optimal torque allocation and dynamic message priority scheduling. Control Engineering Practice, 2014, 24, 55-66.	5.5	146
14	Adaptive Vehicle Speed Control With Input Injections for Longitudinal Motion Independent Road Frictional Condition Estimation. IEEE Transactions on Vehicular Technology, 2011, 60, 839-848.	6.3	140
15	Improving Vehicle Handling Stability Based on Combined AFS and DYC System via Robust Takagi-Sugeno Fuzzy Control. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 2696-2707.	8.0	127
16	Fast and Global Optimal Energy-Efficient Control Allocation With Applications to Over-Actuated Electric Ground Vehicles. IEEE Transactions on Control Systems Technology, 2012, 20, 1202-1211.	5.2	124
17	Design and Evaluation on Electric Differentials for Overactuated Electric Ground Vehicles With Four Independent In-Wheel Motors. IEEE Transactions on Vehicular Technology, 2012, 61, 1534-1542.	6.3	120
18	Hybrid Robust Air-Path Control for Diesel Engines Operating Conventional and Low Temperature Combustion Modes. IEEE Transactions on Control Systems Technology, 2008, 16, 1138-1151.	5.2	119

#	Article	IF	Citations
19	Design and Experimental Evaluations on Energy Efficient Control Allocation Methods for Overactuated Electric Vehicles: Longitudinal Motion Case. IEEE/ASME Transactions on Mechatronics, 2014, 19, 538-548.	5.8	115
20	State Estimation of Discrete-Time Takagiâ€"Sugeno Fuzzy Systems in a Network Environment. IEEE Transactions on Cybernetics, 2015, 45, 1525-1536.	9.5	115
21	A New Delay-Compensation Scheme for Networked Control Systems in Controller Area Networks. IEEE Transactions on Industrial Electronics, 2018, 65, 7239-7247.	7.9	113
22	Development and experimental studies of a control-oriented SCR model for a two-catalyst urea-SCR system. Control Engineering Practice, 2011, 19, 409-422.	5.5	112
23	Robust Weighted Gain-Scheduling H_{∞} Vehicle Lateral Motion Control With Considerations of Steering System Backlash-Type Hysteresis. IEEE Transactions on Control Systems Technology, 2014, 22, 1740-1753.	5.2	111
24	Robust energy-to-peak sideslip angle estimation with applications to ground vehicles. Mechatronics, 2015, 30, 338-347.	3.3	108
25	Passive Actuator Fault-Tolerant Control for a Class of Overactuated Nonlinear Systems and Applications to Electric Vehicles. IEEE Transactions on Vehicular Technology, 2013, 62, 972-985.	6.3	106
26	Adaptive Energy-Efficient Control Allocation for Planar Motion Control of Over-Actuated Electric Ground Vehicles. IEEE Transactions on Control Systems Technology, 2014, 22, 1362-1373.	5.2	101
27	Tireâ€"road friction coefficient and tire cornering stiffness estimation based on longitudinal tire force difference generation. Control Engineering Practice, 2013, 21, 65-75.	5.5	100
28	Observer-based tracking controller design for networked predictive control systems with uncertain Markov delays. International Journal of Control, 2013, 86, 1824-1836.	1.9	100
29	Air fraction estimation for multiple combustion mode diesel engines with dual-loop EGR systems. Control Engineering Practice, 2008, 16, 1479-1486.	5.5	99
30	Energy Management and Driving Strategy for In-Wheel Motor Electric Ground Vehicles With Terrain Profile Preview. IEEE Transactions on Industrial Informatics, 2014, 10, 1938-1947.	11.3	96
31	Active Fault-Tolerant Control for Electric Vehicles With Independently Driven Rear In-Wheel Motors Against Certain Actuator Faults. IEEE Transactions on Control Systems Technology, 2016, 24, 1557-1572.	5.2	95
32	A Gain-Scheduling Driver Assistance Trajectory-Following Algorithm Considering Different Driver Steering Characteristics. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 1097-1108.	8.0	95
33	Robust H âˆž sliding mode control with pole placement for a fluid power electrohydraulic actuator (EHA) system. International Journal of Advanced Manufacturing Technology, 2014, 73, 1095-1104.	3.0	93
34	Robust sliding-mode control for Markovian jump systems subject to intermittent observations and partially known transition probabilities. Systems and Control Letters, 2013, 62, 1114-1124.	2.3	91
35	Active Steering Actuator Fault Detection for An Automatically-steered Electric Ground Vehicle. IEEE Transactions on Vehicular Technology, 2016, , 1-1.	6.3	91
36	Predictive Energy Management Strategy for Fully Electric Vehicles Based on Preceding Vehicle Movement. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 3049-3060.	8.0	87

#	ARTICLE	IF	CITATIONS
37	A Driver Steering Model With Personalized Desired Path Generation. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 111-120.	9.3	86
38	A Two-Cell Backstepping-Based Control Strategy for Diesel Engine Selective Catalytic Reduction Systems. IEEE Transactions on Control Systems Technology, 2011, 19, 1504-1515.	5.2	85
39	A robust wheel slip ratio control design combining hydraulic and regenerative braking systems for in-wheel-motors-driven electric Vehicles. Journal of the Franklin Institute, 2015, 352, 577-602.	3.4	80
40	Robust Lateral Motion Control of Electric Ground Vehicles With Random Network-Induced Delays. IEEE Transactions on Vehicular Technology, 2015, 64, 4985-4995.	6.3	76
41	Fault-Tolerant Control for Electric Ground Vehicles With Independently-Actuated In-Wheel Motors. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2012, 134, .	1.6	75
42	Experimental investigation of diesel and biodiesel post injections during active diesel particulate filter regenerations. Fuel, 2014, 130, 286-295.	6.4	73
43	A Personalizable Driver Steering Model Capable of Predicting Driver Behaviors in Vehicle Collision Avoidance Maneuvers. IEEE Transactions on Human-Machine Systems, 2017, 47, 625-635.	3.5	71
44	Control-oriented model for integrated diesel engine and aftertreatment systems thermal management. Control Engineering Practice, 2014, 22, 81-93.	5.5	69
45	Robust finite frequency static-output-feedback control with application to vibration active control of structural systems. Mechatronics, 2014, 24, 354-366.	3.3	69
46	Design and experimental validation of an extended Kalman filter-based NOx concentration estimator in selective catalytic reduction system applications. Control Engineering Practice, 2011, 19, 346-353.	5.5	68
47	Robust lateral motion control of four-wheel independently actuated electric vehicles with tire force saturation consideration. Journal of the Franklin Institute, 2015, 352, 645-668.	3.4	65
48	Model predictive regenerative braking control for lightweight electric vehicles with in-wheel motors. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2012, 226, 1220-1232.	1.9	61
49	Dynamic Traffic Signal Timing Optimization Strategy Incorporating Various Vehicle Fuel Consumption Characteristics. IEEE Transactions on Vehicular Technology, 2016, 65, 3874-3887.	6.3	61
50	Adaptive and Efficient Ammonia Storage Distribution Control for a Two-Catalyst Selective Catalytic Reduction System. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2012, 134, .	1.6	60
51	Multiobjective Optimization of Lane-Changing Strategy for Intelligent Vehicles in Complex Driving Environments. IEEE Transactions on Vehicular Technology, 2020, 69, 1291-1308.	6.3	60
52	Ultra-local model predictive control: A model-free approach and its application on automated vehicle trajectory tracking. Control Engineering Practice, 2020, 101, 104482.	5.5	60
53	Fuzzy Observer-Based Transitional Path-Tracking Control for Autonomous Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 3078-3088.	8.0	60
54	Air-fraction modeling for simultaneous Diesel engine NOx and PM emissions control during active DPF regenerations. Applied Energy, 2014, 122, 310-320.	10.1	57

#	Article	IF	Citations
55	Human-Centered Trajectory Tracking Control for Autonomous Vehicles With Driver Cut-In Behavior Prediction. IEEE Transactions on Vehicular Technology, 2019, 68, 8461-8471.	6.3	57
56	Robust speed synchronization control for clutchless automated manual transmission systems in electric vehicles. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2015, 229, 424-436.	1.9	55
57	Real-Time Estimation of Center of Gravity Position for Lightweight Vehicles Using Combined AKFâ€"EKF Method. IEEE Transactions on Vehicular Technology, 2014, 63, 4221-4231.	6.3	54
58	NO and NO2 Concentration Modeling and Observer-Based Estimation Across a Diesel Engine Aftertreatment System. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2011, 133, .	1.6	53
59	A feedforward and feedback integrated lateral and longitudinal driver model for personalized advanced driver assistance systems. Mechatronics, 2018, 50, 177-188.	3.3	52
60	Sideslip Angle Estimation of an Electric Ground Vehicle via Finite-Frequency $\mathcal{H}_{\infty}$ Approach. IEEE Transactions on Transportation Electrification, 2016, 2, 200-209.	7.8	50
61	Robust Hâˆž dynamic output-feedback control for four-wheel independently actuated electric ground vehicles through integrated AFS/DYC. Journal of the Franklin Institute, 2018, 355, 9321-9350.	3.4	50
62	Autonomous ground vehicle control system for high-speed and safe operation. International Journal of Vehicle Autonomous Systems, 2009, 7, 18.	0.2	48
63	Motion Planning With Velocity Prediction and Composite Nonlinear Feedback Tracking Control for Lane-Change Strategy of Autonomous Vehicles. IEEE Transactions on Intelligent Vehicles, 2020, 5, 63-74.	12.7	46
64	Observer-Based Estimation of Air-Fractions for a Diesel Engine Coupled With Aftertreatment Systems. IEEE Transactions on Control Systems Technology, 2013, 21, 2239-2250.	5.2	45
65	A Stochastic Driver Pedal Behavior Model Incorporating Road Information. IEEE Transactions on Human-Machine Systems, 2017, 47, 614-624.	3.5	45
66	A Framework of Vehicle Trajectory Replanning in Lane Exchanging with Considerations of Driver Characteristics. IEEE Transactions on Vehicular Technology, 2016, , 1-1.	6.3	44
67	Control of diesel engine dual-loop EGR air-path systems by a singular perturbation method. Control Engineering Practice, 2013, 21, 981-988.	5.5	43
68	Output-feedback robust control for vehicle path tracking considering different human driversâ€™ characteristics. Mechatronics, 2018, 50, 402-412.	3.3	43
69	Nonlinear Observer Design of Diesel Engine Selective Catalytic Reduction Systems With <inline-formula> <tex-math>$\hbox{NO}_{x}$</tex-math></inline-formula> Sensor Measurements. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1585-1594.	5.8	42
70	Combined feedbackâ€"feedforward tracking control for networked control systems with probabilistic delays. Journal of the Franklin Institute, 2014, 351, 3477-3489.	3.4	41
71	Robust control for four wheel independently-actuated electric ground vehicles by external yaw-moment generation. International Journal of Automotive Technology, 2015, 16, 839-847.	1.4	40
72	Estimation and adaptive nonlinear model predictive control of selective catalytic reduction systems in automotive applications. Journal of Process Control, 2016, 40, 78-92.	3.3	40

#	Article	IF	Citations
73	Globally energy-optimal speed planning for road vehicles on a given route. Transportation Research Part C: Emerging Technologies, 2018, 93, 148-160.	7.6	40
74	Cycle-based optimal NOx emission control of selective catalytic reduction systems with dynamic programming algorithm. Fuel, 2015, 141, 200-206.	6.4	39
75	Motor/Generator Applications in Electrified Vehicle Chassisâ€"A Survey. IEEE Transactions on Transportation Electrification, 2019, 5, 584-601.	7.8	39
76	Robust Filtering for Ammonia Coverage Estimation in Diesel Engine Selective Catalytic Reduction Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2013, 135, .	1.6	37
77	A two-level stochastic approach to optimize the energy management strategy for fixed-route hybrid electric vehicles. Mechatronics, 2016, 38, 93-102.	3.3	37
78	Driver-Assistance Lateral Motion Control for In-Wheel-Motor-Driven Electric Ground Vehicles Subject to Small Torque Variation. IEEE Transactions on Vehicular Technology, 2018, 67, 6838-6850.	6.3	37
79	Center of gravity height real-time estimation for lightweight vehicles using tire instant effective radius. Control Engineering Practice, 2013, 21, 370-380.	5.5	36
80	Actuator-Redundancy-Based Fault Diagnosis for Four-Wheel Independently Actuated Electric Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2014, 15, 239-249.	8.0	36
81	Fault-Tolerant Control for Electric Vehicles With Independently Driven in-Wheel Motors Considering Individual Driver Steering Characteristics. IEEE Transactions on Vehicular Technology, 2019, 68, 4527-4536.	6.3	35
82	Lightweight Vehicle Control-Oriented Modeling and Payload Parameter Sensitivity Analysis. IEEE Transactions on Vehicular Technology, 2011, 60, 1999-2011.	6.3	34
83	Nonlinear Model Predictive Control of Integrated Diesel Engine and Selective Catalytic Reduction System for Simultaneous Fuel Economy Improvement and Emissions Reduction. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	1.6	32
84	Integrated Model Predictive Control of Hybrid Electric Vehicles Coupled With Aftertreatment Systems. IEEE Transactions on Vehicular Technology, 2016, 65, 1199-1211.	6.3	32
85	An Autonomous T-Intersection Driving Strategy Considering Oncoming Vehicles Based on Connected Vehicle Technology. IEEE/ASME Transactions on Mechatronics, 2019, 24, 2779-2790.	5.8	32
86	Rollover speed prediction on curves for heavy vehicles using mobile smartphone. Measurement: Journal of the International Measurement Confederation, 2018, 130, 404-411.	5.0	31
87	Development and experimental validation of a control-oriented Diesel engine model for fuel consumption and brake torque predictions. Mathematical and Computer Modelling of Dynamical Systems, 2011, 17, 261-277.	2.2	30
88	Robust Vehicle Driver Assistance Control for Handover Scenarios Considering Driving Performances. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4160-4170.	9.3	30
89	Robust Adaptive Path-Tracking Control of Autonomous Ground Vehicles With Considerations of Steering System Backlash. IEEE Transactions on Intelligent Vehicles, 2022, 7, 315-325.	12.7	30
90	Two-Level Nonlinear Model Predictive Control for Lean NOx Trap Regenerations. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2010, 132, .	1.6	29

#	Article	IF	Citations
91	Removal of NO_x sensor ammonia cross sensitivity from contaminated measurements in Diesel-engine selective catalytic reduction systems. Fuel, 2015, 150, 448-456.	6.4	29
92	Ammonia coverage ratio and input simultaneous estimation in ground vehicle selective catalytic reduction (SCR) systems. Journal of the Franklin Institute, 2015, 352, 708-723.	3.4	29
93	Optimal Dosing and Sizing Optimization for a Ground-Vehicle Diesel-Engine Two-Cell Selective Catalytic Reduction System. IEEE Transactions on Vehicular Technology, 2016, 65, 4740-4751.	6.3	29
94	On the Control Allocation for Coordinated Ground Vehicle Dynamics Control Systems. Proceedings of the American Control Conference, 2007, , .	0.0	27
95	Nonlinear and adaptive control of NO/NO2 ratio for improving selective catalytic reduction system performance. Journal of the Franklin Institute, 2013, 350, 1992-2012.	3.4	27
96	A Personalized Human-Like Lane-Changing Trajectory Planning Method for Automated Driving System. IEEE Transactions on Vehicular Technology, 2021, 70, 6399-6414.	6.3	27
97	Extremum-Seeking-Based Adaptive Model-Free Control and Its Application to Automated Vehicle Path Tracking. IEEE/ASME Transactions on Mechatronics, 2022, 27, 3874-3884.	5.8	27
98	Robust two-mode-dependent controller design for networked control systems with random delays modelled by Markov chains. International Journal of Control, 2015, 88, 2499-2509.	1.9	26
99	Vehicle Path-Tracking Linear-Time-Varying Model Predictive Control Controller Parameter Selection Considering Central Process Unit Computational Load. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, .	1.6	26
100	Energy-efficient control allocation with applications on planar motion control of electric ground vehicles. , 2011, , .		25
101	Velocity Optimization for Braking Energy Management of In-Wheel Motor Electric Vehicles. IEEE Access, 2019, 7, 66410-66422.	4.2	25
102	Trust-Based and Individualizable Adaptive Cruise Control Using Control Barrier Function Approach With Prescribed Performance. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 6974-6984.	8.0	24
103	Linear parameter-varying-based fault-tolerant controller design for a class of over-actuated non-linear systems with applications to electric vehicles. IET Control Theory and Applications, 2014, 8, 705-717.	2.1	23
104	Integrated Power Management and Aftertreatment System Control for Hybrid Electric Vehicles With Road Grade Preview. IEEE Transactions on Vehicular Technology, 2017, 66, 10935-10945.	6.3	23
105	A physics-based time-varying transport delay oxygen concentration model for dual-loop exhaust gas recirculation (EGR) engine air-paths. Applied Energy, 2014, 125, 300-307.	10.1	22
106	Autonomous Vehicle Trajectory Following: A Flatness Model Predictive Control Approach With Hardware-in-the-Loop Verification. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 5613-5623.	8.0	21
107	An extended Kalman filter for NO<inf>x</inf> sensor ammonia cross-sensitivity elimination in selective catalytic reduction applications. , 2010, , .		20
108	Sensor Reduction in Diesel Engine Two-Cell Selective Catalytic Reduction (SCR) Systems for Automotive Applications. IEEE/ASME Transactions on Mechatronics, 2015, 20, 2222-2233.	5.8	20

#	Article	IF	Citations
109	Self-Adaptive Equivalent Consumption Minimization Strategy for Hybrid Electric Vehicles. IEEE Transactions on Vehicular Technology, 2021, 70, 189-202.	6.3	20
110	Integrated Study of Inland-Vessel Diesel Engine Two-Cell SCR Systems With Dynamic References. IEEE/ASME Transactions on Mechatronics, 2017, 22, 1195-1206.	5.8	19
111	Popov-H_∞ Robust Path-Tracking Control of Autonomous Ground Vehicles with Consideration of Sector Bounded Kinematic Nonlinearity. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2021, , .	1.6	19
112	Pressure-based transient intake manifold temperature reconstruction in Diesel engines. Control Engineering Practice, 2012, 20, 531-538.	5.5	18
113	NOx Sensor Ammonia-Cross-Sensitivity Factor Estimation in Diesel Engine Selective Catalytic Reduction Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	1.6	18
114	Optimizing the Energy Management Strategy for Plug-In Hybrid Electric Vehicles With Multiple Frequent Routes. IEEE Transactions on Control Systems Technology, 2019, 27, 394-400.	5.2	18
115	Longitudinal Motion Based Lightweight Vehicle Payload Parameter Real-Time Estimations. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2013, 135, .	1.6	17
116	Introducing mass parameters to Pseudo–Rigid–Body models for precisely predicting dynamics of compliant mechanisms. Mechanism and Machine Theory, 2018, 126, 273-294.	4.5	17
117	Stable and Optimal Load Sharing of Multiple PMSGs in an Islanded DC Microgrid. IEEE Transactions on Energy Conversion, 2018, 33, 260-271.	5.2	17
118	Design and Modeling of a Compliant Link for Inherently Safe Corobots. Journal of Mechanisms and Robotics, 2018, 10, .	2.2	17
119	In-Wheel-Motor-Driven Electric Vehicles Motion Control Methods Considering Motor Thermal Protection. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, .	1.6	17
120	Impaired Driver Assistance Control With Gain-Scheduling Composite Nonlinear Feedback for Vehicle Trajectory Tracking. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2020, 142, .	1.6	17
121	Electric Vehicle Velocity and Energy Consumption Predictions Using Transformer and Markov-Chain Monte Carlo. IEEE Transactions on Transportation Electrification, 2022, 8, 3836-3847.	7.8	17
122	Oxygen Concentration Dynamic Model and Observer-Based Estimation Through a Diesel Engine Aftertreatment System. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2012, 134, .	1.6	16
123	Correction of contaminated yaw rate signal and estimation of sensor bias for an electric vehicle under normal driving conditions. Mechanical Systems and Signal Processing, 2017, 87, 64-80.	8.0	16
124	Analysis of Human Driver Behavior in Highway Cut-in Scenarios. , 0, , .		16
125	Energetic Impacts Evaluation of Eco-Driving on Mixed Traffic With Driver Behavioral Diversity. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 3406-3417.	8.0	16
126	Obstacle Detection for Autonomous Driving Vehicles With Multi-LiDAR Sensor Fusion. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2020, 142, .	1.6	15

#	Article	IF	Citations
127	Nonlinear observer designs for diesel engine selective catalytic reduction (SCR) ammonia coverage ratio estimation. , 2009, , .		14
128	An extended Kalman filter for ammonia coverage ratio and capacity estimations in the application of Diesel engine SCR control and onboard diagnosis. , 2010, , .		14
129	Control-Oriented Modeling and Observer-Based Estimation of Solid and Gas Temperatures for a Diesel Engine Aftertreatment System. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2012, 134, .	1.6	14
130	A novel cost-effective robust approach for selective catalytic reduction state estimations using dual nitrogen oxide sensors. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2015, 229, 83-96.	1.9	14
131	Coordinated Active Thermal Management and Selective Catalytic Reduction Control for Simultaneous Fuel Economy Improvement and Emissions Reduction During Low-Temperature Operations. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	1.6	14
132	Modeling and control of inherently safe robots with variable stiffness links. Robotics and Autonomous Systems, 2019, 120, 103247.	5.1	14
133	Incremental Model Predictive Control of Active Suspensions With Estimated Road Preview Information From a Lead Vehicle. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2020, 142, .	1.6	14
134	Control-oriented multi-phase combustion model for biodiesel fueled engines. Applied Energy, 2013, 108, 92-99.	10.1	13
135	Predictive energy management strategy for electric vehicles based on estimation of preceding vehicle future movements. , 2016, , .		13
136	Simultaneous Estimation of Vehicle's Center of Gravity and Inertial Parameters Based on Ackermann's Steering Geometry. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2017, 139, .	1.6	13
137	Automated Ground Vehicle Path-Following: A Robust Energy-to-Peak Control Approach. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 14294-14305.	8.0	13
138	Design and Robustness Analysis of Discrete Observers for Diesel Engine In-Cylinder Oxygen Mass Fraction Cycle-by-Cycle Estimation. IEEE Transactions on Control Systems Technology, 2011, , .	5.2	12
139	An adaptive energy-efficient control allocation on planar motion control of electric ground vehicles. , 2011, , .		12
140	Improved NO and NO2 Concentration Estimation for a Diesel-Engine-Aftertreatment System. IEEE/ASME Transactions on Mechatronics, 2018, 23, 190-199.	5.8	12
141	Predictive Control for NO_x Emission Reductions in Diesel Engine Vehicle Platoon Application. IEEE Transactions on Vehicular Technology, 2019, 68, 6429-6440.	6.3	12
142	Trajectory Tracking Control for Autonomous Vehicles in Different Cut-in Scenarios. , 2019, , .		12
143	Toward Tradeoff Between Impact Force Reduction and Maximum Safe Speed: Dynamic Parameter Optimization of Variable Stiffness Robots. Journal of Mechanisms and Robotics, 2020, 12, .	2.2	12
144	Fault-tolerant control with active fault diagnosis for four-wheel independently-driven electric ground vehicles. , 2011, , .		11

#	Article	IF	Citations
145	A robust wheel slip control design for in-wheel-motor-driven electric vehicles with hydraulic and regenerative braking systems. , 2014, , .		11
146	WiDrive: Adaptive WiFi-Based Recognition of Driver Activity for Real-Time and Safe Takeover. , 2019, , .		11
147	Automated Vehicle Path Following: A Non-Quadratic-Lyapunov-Function-Based Model Reference Adaptive Control Approach With $C^{\hat{}}$-Smooth Projection Modification. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 21653-21664.	8.0	11
148	Optimization of the ammonia coverage ratio references in diesel engine two-can selective catalytic reduction systems via nonlinear model predictive control. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2014, 228, 1452-1467.	1.9	10
149	Sliding-mode observers for urea selective catalytic reduction system state estimations based on nitrogen oxide sensor measurements. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2015, 229, 835-849.	1.9	10
150	NOx Sensor Reading Correction in Diesel Engine Selective Catalytic Reduction System Applications. IEEE/ASME Transactions on Mechatronics, 2015, , 1-1.	5.8	10
151	Adaptive Observer for Joint Estimation of Oxygen Fractions and Blend Level in Biodiesel Fueled Engines. IEEE Transactions on Control Systems Technology, 2015, 23, 80-90.	5.2	10
152	Observer-Based Estimation of Aging Condition for Selective Catalytic Reduction Systems in Vehicle Applications. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2017, 139, .	1.6	10
153	Staircase ammonia coverage ratio profile control for Diesel engine two-cell selective catalytic reduction systems. , 2010, , .		9
154	Cycle-based ammonia-coverage-ratio reference generator design for Diesel engine two-cell selective catalytic reduction systems via a fuzzy approach. Fuel, 2015, 159, 76-83.	6.4	9
155	Flatness-based Model Predictive Control for Autonomous Vehicle Trajectory Tracking. , 2019, , .		9
156	A Learning-Based Vehicle Trajectory-Tracking Approach for Autonomous Vehicles With LiDAR Failure Under Various Lighting Conditions. IEEE/ASME Transactions on Mechatronics, 2022, 27, 1011-1022.	5.8	9
157	In-cylinder oxygen mass fraction cycle-by-cycle estimation via a lyapunov-based observer design. , 2010, , .		8
158	Adaptive vehicle planar motion control with fast parameter estimation. , 2012, , .		8
159	Hand-wheel steering signal estimation and diagnosis approaches for ground vehicles. Control Engineering Practice, 2012, 20, 654-662.	5.5	8
160	Integrated diesel engine and selective catalytic reduction system active NO_x control for fuel economy improvement. , 2013, , .		8
161	A least-squares regression based method for vehicle yaw moment of inertia estimation. , 2015, , .		8
162	Comparative Study and Accommodation of Biodiesel in Diesel–Electric Hybrid Vehicles Coupled with Aftertreatment Systems. Asian Journal of Control, 2016, 18, 3-15.	3.0	8

#	Article	IF	Citations
163	Robust fuzzy control for vehicle lateral dynamic stability via Takagi-Sugeno fuzzy approach. , 2017, , .		8
164	Robust Gain-Scheduling Control of Vehicle Lateral Dynamics Through AFS/DYC. , 2018, , 339-368.		8
165	Nonlinear model predictive control of lean NO$_x$ trap regenerations. , 2009, , .		7
166	Nonlinear model predictive control for improving energy recovery for electric vehicles during regenerative braking. , 2011, , .		7
167	A robust ammonia coverage ratio control method for a two-cell selective catalytic reduction system in low temperature operations. , 2014, , .		7
168	Stochastic optimal control for hybrid electric vehicles running on fixed routes. , 2015, , .		7
169	Human-centered feed-forward control of a vehicle steering system based on a driver's steering model. , 2015, , .		7
170	Traffic signal timing optimization incorporating individual vehicle fuel consumption characteristics under connected vehicles environment. , 2016, , .		7
171	Control of aged automotive selective catalytic reduction systems for consistent performances. Journal of the Franklin Institute, 2017, 354, 8094-8116.	3.4	7
172	Robust vehicle longitudinal motion control subject to in-wheel-motor driving torque variations. , 2017, , .		7
173	Personalized Vehicle Path Following Based on Robust Gain-scheduling Control in Lane-changing and Left-turning Maneuvers. , 2018, , .		7
174	A Novel Vehicle Tracking Method for Cross-Area Sensor Fusion with Reinforcement Learning Based GMM. , 2020, , .		7
175	A Comparative Study on the Effect of Mechanical Compliance for a Safe Physical Human–Robot Interaction. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	2.9	7
176	MC-Safe. ACM Transactions on Cyber-Physical Systems, 2020, 4, 1-27.	2.5	7
177	Algebraic Driver Steering Model Parameter Identification. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2022, 144, .	1.6	7
178	Yaw-Rate-Tracking-Based Automated Vehicle Path Following: An MRAC Methodology With a Closed-Loop Reference Model. ASME Letters in Dynamic Systems and Control, 2022, 2, .	0.7	7
179	Stability control of electric vehicles with four independently actuated wheels. , 2011, , .		6
180	Application of NMPC on optimization of ammonia coverage ratio references in two-can diesel SCR systems. , 2014, , .		6

#	ARTICLE	IF	CITATIONS
181	Sliding-mode Control of Ammonia Coverage Ratio for Automotive Selective Catalytic Reduction Systems. , 2018, , .		6
182	Path-Tracking Considering Yaw Stability With Passivity-Based Control for Autonomous Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 8736-8746.	8.0	6
183	Vehicle-longitudinal-motion-independent real-time tire-road friction coefficient estimation. , 2010, , .		5
184	In-wheel motor electric ground vehicle energy management strategy for maximizing the travel distance. , 2012, , .		5
185	Sensitivity analysis of human driving characteristics on road and driving conditions for active vehicle control systems. , 2014, , .		5
186	Fault-type identification and fault estimation of the active steering system of an electric vehicle in normal driving conditions. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2017, 231, 1679-1692.	1.9	5
187	Predictive energy management strategy for fully electric vehicles based on hybrid model predictive control. , 2017, , .		5
188	Sliding-mode control of automotive selective catalytic reduction systems with state estimation. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2020, 234, 630-644.	1.9	5
189	Design, Modeling, and Manufacturing of a Variable Lateral Stiffness Arm Via Shape Morphing Mechanisms. Journal of Mechanisms and Robotics, 2021, 13, .	2.2	5
190	Vehicle yaw inertia and mass independent adaptive control for stability and trajectory tracking enhancements. , 2009, , .		4
191	Input constrained non-equilibrium transient trajectory shaping control for a class of nonlinear systems. , 2010, , .		4
192	Non-equilibrium transient trajectory shaping control via multiple Barrier Lyapunov Functions for a class of nonlinear systems. , 2010, , .		4
193	A global optimization algorithm for energy-efficient control allocation of over-actuated systems. , 2011, , .		4
194	Control-oriented modeling of thermal behaviors for a Diesel oxidation catalyst. , 2012, , .		4
195	Advanced Control and Optimization with Applications to Complex Automotive Systems. Mathematical Problems in Engineering, 2014, 2014, 1-3.	1.1	4
196	Unsprung Mass Effects on Electric Vehicle Dynamics based on Coordinated Control Scheme. , 2019, , .		4
197	Editorial: Connected and automated vehicles (CAV) based traffic-vehicle control. Transportation Research Part C: Emerging Technologies, 2020, 112, 116-119.	7.6	4
198	A Parametric Study of Compliant Link Design for Safe Physical Human–Robot Interaction. Robotica, 2021, 39, 1739-1759.	1.9	4

#	Article	IF	Citations
199	Implementation Resource Allocation for Collision-Avoidance Assistance Systems Considering Driver Capabilities. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 12822-12832.	8.0	4
200	Algebraic Car-Following Model Parameter Identification. IFAC-PapersOnLine, 2021, 54, 864-869.	0.9	4
201	Illumination-Resilient Lane Detection by Threshold Self-Adjustment Using Newton-Based Extremum Seeking. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 18643-18654.	8.0	4
202	A Mixed L_1/H_2 Robust Observer With An Application To Driver Steering Torque Estimation for Autopilot-Human Shared Steering. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2022, 144, .	1.6	4
203	Personalized Driving Behaviors and Fuel Economy Over Realistic Commute Traffic: Modeling, Correlation, and Prediction. IEEE Transactions on Vehicular Technology, 2022, 71, 7084-7094.	6.3	4
204	Control of dual loop EGR air-path systems for advanced combustion diesel engines by a singular perturbation methodology. , 2011, , .		3
205	Air- and fuel-path coordinated control for advanced combustion mode transitions in Diesel engines. , 2012, , .		3
206	Observer Based Oxygen Fraction Estimation for a Dual-Loop EGR Diesel Engine Fueled With Biodiesel Blends. , 2013, , .		3
207	State estimation for a four-wheel-independent-drive electric ground vehicle. , 2015, , .		3
208	Parameter Selection of an LTV-MPC Controller for Vehicle Path Tracking Considering CPU Computational Load. , 2018, , .		3
209	Dynamic Channel Selection for Real-Time Safety Message Communication in Vehicular Networks. , 2018, , .		3
210	A Predictive Control Method for Automotive Selective Catalytic Reduction Systems. , 2019, , .		3
211	An Algebraic Evaluation Framework for a Class of Car-Following Models. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 12366-12376.	8.0	3
212	Real-Time Adaptive Threshold Adjustment for Lane Detection Application under Different Lighting Conditions using Model-Free Control. IFAC-PapersOnLine, 2021, 54, 147-152.	0.9	3
213	Non-equilibrium transient trajectory shaping control via a three-stage switching method for a class of nonlinear systems. , 2010, , .		2
214	Oxygen Concentration Dynamic Model Through a Diesel Engine Aftertreatment System. , 2011, , .		2
215	A Stochastic Model Predictive Control Approach for Hybrid Electric Vehicle Energy Management With Road Grade Preview. , 2014, , .		2
216	Output transient trajectory shaping control for a class of nonlinear systems. International Journal of Robust and Nonlinear Control, 2014, 24, 3106-3123.	3.7	2

#	Article	IF	Citations
217	Control of dual-loop EGR engine air-path systems with adjustable intake manifold condition priorities. , 2014, , .		2
218	Load-dependent observer design for active suspension systems. International Journal of Vehicle Design, 2015, 68, 162.	0.3	2
219	Robust fault estimation for time-varying and high-order faults in vehicle electric steering systems. , 2015, , .		2
220	Tutorial of model-based powertrain and aftertreatment system control design and implementation. , 2015, , .		2
221	Linear parameter-varying observer design for vehicle yaw rate sensor bias estimation and signal reconstruction. , 2016, , .		2
222	A control method for consistent performance of automotive selective catalytic reduction systems under variant aging conditions. , 2016, , .		2
223	A novel diver pedal behavior model framework incorporating vehicle and road environment information. , 2016, , .		2
224	A Study on Economical Vehicle Platooning Strategy in Urban Driving Scenarios. , 2018, , .		2
225	Model-based Control of Automotive Selective Catalytic Reduction Systems with Road Grade Preview. , 2018, , .		2
226	Driversâ€™ Attentional Instability on a Winding Roadway. IEEE Transactions on Human-Machine Systems, 2019, 49, 498-507.	3.5	2
227	Personalized Ground Vehicle Collision Avoidance System: From a Computational Resource Re-allocation Perspective. , 2020, , .		2
228	Performance optimization of autonomous driving control under end-to-end deadlines. Real-Time Systems, 2022, 58, 509-547.	1.3	2
229	A Dual-Loop EGR Engine Air-Path Oxygen Concentration Model With Time-Varying Transport Delays. , 2013, , .		1
230	Robust mixed $\mathscr{H}_2/\mathscr{H}_\infty$ gain-scheduling observer design for removal of NO_x sensor ammonia cross sensitivity in selective catalytic reduction systems. , 2013, , .		1
231	Time-domain Smith predictor in discrete-time networked control systems. , 2014, , .		1
232	Model-based selective catalytic reduction systems aging estimation. , 2016, , .		1
233	Trajectory replanning in V2V lane exchanging with consideration of driver preferences. , 2016, , .		1
234	Automatic vehicle trajectory tracking control with self-calibration of nonlinear tire force function. , 2017, , .		1

#	Article	IF	Citations
235	Energy Consumption and Tailpipe Emission Reductions by Personalized Control of Connected Vehicles. Mechanical Engineering, 2017, 139, S5-S11.	0.1	1
236	Cascaded Velocity Estimation with Adaptive Complementary Filtering: Implementation on a FIAIWM EGV. , 2019, , .		1
237	Worst-case relative cost optimal control for dynamic systems with finite admissible disturbance sequence sets. International Journal of Control, 2019, , 1-8.	1.9	1
238	Parameterized Derivative-free Optimization Approach for Car-following Model Calibration. IFAC-PapersOnLine, 2021, 54, 876-881.	0.9	1
239	Real-Time Driver Model Parameter Identification: An Algebraic Approach. , 2020, , .		1
240	Comparison of Different Variable Combinations for Electric Vehicle Power Prediction Using Kernel Adaptive Filter. IFAC-PapersOnLine, 2021, 54, 858-863.	0.9	1
241	Fuel-assisted in-cylinder oxygen fraction transient trajectory shaping control for diesel engine combustion mode switching. , 2011, , .		0
242	A branch-and-bound algorithm for energy-efficient control allocation with applications to planar motion control of electric ground vehicles. , 2012, , .		0
243	Control-Oriented Modeling and Model-Based Estimation and Control for Diesel Engine Aftertreatment Systems. Mechanical Engineering, 2015, 137, S11-S14.	0.1	0
244	Directional Control Driver Model with Desired Path Generation. , 2015, , .		0
245	Adaptive control of two-cell selective catalytic reduction systems. , 2015, , .		0
246	Real-time-implementable relative cost min-max optimal control via a dynamic-programming-like method. , 2016, , .		0
247	Stable coordination of multiple PMSGs in an islanded DC microgrid: A distributed model predictive control approach. , 2017, , .		0
248	Fault-tolerant Control for Distributed-drive Electric Vehicles Considering Individual Driver Steering Characteristics. , 2018, , .		0
249	Special Issue on "Autonomous Mobile Systems" in Memory of Professor J. Karl Hedrick. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, .	1.6	0
250	Cooperative Adaptive Cruise Control Safety Enhancement via Dynamic Communication Channel Selection. , 2019, , .		0