Reza Langari

List of Publications by Year
in descending order

92 papers	2,056 citations	331670 21 h-index	289244 40 g-index
92 all docs	92 docs citations	92 times ranked	1836 citing authors

#	Article	IF	Citations
1	Energy management strategies of connected HEVs and PHEVs: Recent progress and outlook. Progress in Energy and Combustion Science, 2019, 73, 235-256.	31.2	298
2	Real-Time Energy Management Strategy Based on Velocity Forecasts Using V2V and V2I Communications. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 416-430.	8.0	199
3	A human-like game theory-based controller for automatic lane changing. Transportation Research Part C: Emerging Technologies, 2018, 88, 140-158.	7.6	193
4	Model-Based Multi-input, Multi-output Supervisory Semi-active Nonlinear Fuzzy Controller. Computer-Aided Civil and Infrastructure Engineering, 2010, 25, 387-393.	9.8	70
5	Subject-independent hand gesture recognition using normalization and machine learning algorithms. Journal of Computational Science, 2018, 27, 69-76.	2.9	67
6	Energy Management of Hybrid Electric Vehicle Using Vehicle Lateral Dynamic in Velocity Prediction. IEEE Transactions on Vehicular Technology, 2019, 68, 3279-3293.	6.3	65
7	A parameter-varying filtered PID strategy for air–fuel ratio control of spark ignition engines. Control Engineering Practice, 2012, 20, 805-815.	5.5	60
8	Fuzzy torque distribution control for a parallel hybrid vehicle. Expert Systems, 2002, 19, 4-10.	4.5	52
9	Adaptive energy management in automated hybrid electric vehicles with flexible torque request. Energy, 2021, 214, 118873.	8.8	48
10	Road excitation classification for semi-active suspension system with deep neural networks. Journal of Intelligent and Fuzzy Systems, 2017, 33, 1907-1918.	1.4	46
11	A Multi-Window Majority Voting Strategy to Improve Hand Gesture Recognition Accuracies Using Electromyography Signal. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 427-436.	4.9	43
12	Design and kinematic analysis of a novel upper limb exoskeleton for rehabilitation of stroke patients. , 2017, 2017, 759-764.		42
13	Stackelberg Game Based Model of Highway Driving. , 2012, , .		39
14	Consistency Improvement-Driven Decision-Making Methods with Probabilistic Multiplicative Preference Relations. Group Decision and Negotiation, 2020, 29, 371-397.	3.3	37
15	A Game Theoretic Model Predictive Controller With Aggressiveness Estimation for Mandatory Lane Change. IEEE Transactions on Intelligent Vehicles, 2020, 5, 75-89.	12.7	36
16	A Nonlinear Formulation of a Class of Fuzzy Linguistic Control Algorithms. , 1992, , .		35
17	Automated analysis of ECG waveforms with atypical QRS complex morphologies. Biomedical Signal Processing and Control, 2014, 10, 41-49.	5.7	34
18	Road profile classification for vehicle semi-active suspension system based on Adaptive Neuro-Fuzzy Inference System. , 2015, , .		33

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19	A Neuro-Fuzzy System for Tool Condition Monitoring in Metal Cutting. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2001, 123, 312-318.	2.2	32
20	Second-Order Sliding Mode Strategy for Airâ€"Fuel Ratio Control of Lean-Burn SI Engines. IEEE Transactions on Control Systems Technology, 2014, 22, 1374-1384.	5.2	30
21	A Stackelberg Game Theoretic Driver Model for Merging. , 2013, , .		29
22	Adaptive Hybrid Control of Vehicle Semiactive Suspension Based on Road Profile Estimation. Shock and Vibration, 2015, 2015, 1-13.	0.6	29
23	A Predictive Perception Model and Control Strategy for Collision-Free Autonomous Driving. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 4078-4091.	8.0	27
24	Driver-Behavior-Based Adaptive Steering Robust Nonlinear Control of Unmanned Driving Robotic Vehicle With Modeling Uncertainties and Disturbance Observer. IEEE Transactions on Vehicular Technology, 2019, 68, 8183-8190.	6.3	25
25	MIMO fuzzy identification of building-MR damper systems. Journal of Intelligent and Fuzzy Systems, 2011, 22, 185-205.	1.4	24
26	Road profile estimation for semi-active suspension using an adaptive Kalman filter and an adaptive super-twisting observer. , 2017, , .		22
27	Linear dynamic parameterâ€varying sliding manifold for airâ€"fuel ratio control in leanâ€burn engines. IET Control Theory and Applications, 2013, 7, 1319-1329.	2.1	21
28	Mode Shift Control for a Hybrid Heavy-Duty Vehicle with Power-Split Transmission. Energies, 2017, 10, 177.	3.1	21
29	Kinematic Design Optimization of an Eight Degree-of-Freedom Upper-Limb Exoskeleton. Robotica, 2019, 37, 2073-2086.	1.9	20
30	Modelling of petroleum multiphase flow in electrical submersible pumps with shallow artificial neural networks. Ships and Offshore Structures, 2020, 15, 174-183.	1.9	20
31	A Novel Decision-Making Model with Pythagorean Fuzzy Linguistic Information Measures and Its Application to a Sustainable Blockchain Product Assessment Problem. Sustainability, 2019, 11, 5630.	3.2	19
32	CLEVERarm: A Lightweight and Compact Exoskeleton for Upper-Limb Rehabilitation. IEEE Robotics and Automation Letters, 2022, 7, 1880-1887.	5.1	17
33	Weak Fault Feature Extraction of Rotating Machinery Based on Double-Window Spectrum Fusion Enhancement. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 1029-1040.	4.7	16
34	A dynamic feedback control strategy for control loops with time-varying delay. International Journal of Control, 2014, 87, 887-897.	1.9	14
35	Improved spindle detection through intuitive pre-processing of electroencephalogram. Journal of Neuroscience Methods, 2014, 233, 1-12.	2.5	14
36	A new modeling algorithm based on ANFIS and GMDH. Journal of Intelligent and Fuzzy Systems, 2015, 29, 1321-1329.	1.4	14

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37	Air–fuel ratio control of lean–burn SI engines using the LPV–based fuzzy technique. IET Control Theory and Applications, 2018, 12, 1414-1420.	2.1	14
38	Adaptive Analytic Hierarchy Process-Based Decision Making to Enhance Vehicle Autonomy. IEEE Transactions on Vehicular Technology, 2012, 61, 3321-3332.	6.3	13
39	Interval Type-2 Trapezoidal Fuzzy Decision- Making Method With Consistency-Improving Algorithm and DEA Model. IEEE Access, 2020, 8, 120456-120472.	4.2	13
40	Addressing Mandatory Lane Change Problem with Game Theoretic Model Predictive Control and Fuzzy Markov Chain. , 2018, , .		12
41	Single-valued neutrosophic entropy and similarity measures to solve supplier selection problems. Journal of Intelligent and Fuzzy Systems, 2018, 35, 6513-6523.	1.4	12
42	New Generation of Passenger Vehicles: FCV or HEV?. , 2006, , .		10
43	Receding Horizon Markov Game Autonomous Driving Strategy. , 2019, , .		10
44	Synthesis of Nonlinear Control Strategies via Fuzzy Logic. , 1993, , .		9
45	An adaptive equivalent consumption minimization strategy for parallel hybrid electric vehicle based on Fuzzy PI. , 2016, , .		9
46	Research and Bench Test of Nonlinear Model Predictive Control-Based Power Allocation Strategy for Hybrid Energy Storage System. IEEE Access, 2018, 6, 70770-70787.	4.2	9
47	Comparative Study of Equivalent Factor Adjustment Algorithm for Equivalent Consumption Minimization Strategy for HEVs. , 2018, , .		9
48	Towards real-time detection of myocardial infarction by digital analysis of electrocardiograms. , 2011, , .		8
49	Human arm motion planning against a joint constraint. , 2012, , .		7
50	Model reference adaptive control of a series–parallel hybrid electric vehicle during mode shift. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2017, 231, 541-553.	1.0	7
51	Local adjustment strategy-driven probabilistic linguistic group decision-making method and its application for fog-haze influence factors evaluation. Journal of Intelligent and Fuzzy Systems, 2021, 40, 4135-4154.	1.4	7
52	A Prediction Model Based on Artificial Neural Network for the Temperature Performance of a Hydrodynamic Retarder in Constant-Torque Braking Process. IEEE Access, 2021, 9, 24872-24883.	4.2	7
53	Seismic response control of a large civil structure equipped with magnetorheological dampers. , 2009, , .		6
54	Velocity Prediction Based on Vehicle Lateral Risk Assessment and Traffic Flow: A Brief Review and Application Examples. Energies, 2021, 14, 3431.	3.1	6

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55	Cascade Adaptive MPC with Type 2 Fuzzy System for Safety and Energy Management in Autonomous Vehicles: A Sustainable Approach for Future of Transportation. Sustainability, 2021, 13, 10113.	3.2	6
56	Incorporated vehicle lateral control strategy for stability and enhanced energy saving in distributed drive hybrid bus. Applied Soft Computing Journal, 2021, 111, 107617.	7.2	6
57	A variable forgetting factor RLS algorithm with application to fuzzy time-varying systems identification. International Journal of Systems Science, 1996, 27, 205-214.	5.5	5
58	Brain limbic system-based intelligent controller application to lane change manoeuvre. Vehicle System Dynamics, 2011, 49, 1873-1894.	3.7	5
59	Development of an autonomous vehicle highway merging strategy. International Journal of Vehicle Design, 2012, 60, 350.	0.3	5
60	An experimental study on redundancy resolution scheme of postural configuration in human arm reaching with an elbow joint kinematic constraint. , 2014, , .		5
61	Development of a predictive collision avoidance for subjective adjacent risk estimation. , 2015, , .		5
62	Power-Split Electromechanical Transmission Design and Validation with Three Planetary Gears for Heavy-Duty Vehicle. Iranian Journal of Science and Technology - Transactions of Mechanical Engineering, 2018, 42, 383-400.	1.3	5
63	Analytical Hierarchy Process and Brain Limbic System combined strategy for mobile robot navigation. , 2010, , .		4
64	Active Tuned Mass Damper. , 2015, , .		4
65	Sensor fault detection and isolation using phase space reconstruction. , 2015, , .		4
66	Real-time EMG-based Human Machine Interface using dynamic hand gestures. , 2017, , .		4
67	IDENTIFICATION OF TIME-VARYING FUZZY SYSTEMS. International Journal of General Systems, 1996, 25, 203-218.	2.5	3
68	A Genetic Algorithm and Fuzzy Approach (GAFA) for Constrained Nonlinear Optimization in Design. International Journal for Computational Methods in Engineering Science and Mechanics, 2006, 7, 173-189.	2.1	3
69	Model-based early gas kick and well loss detection. , 2016, , .		3
70	A Game Theoretic Four-Stage Model Predictive Controller for Highway Driving. , 2019, , .		3
71	Robust Estimation of Vehicle Motion States Utilizing an Extended Set-Membership Filter. Applied Sciences (Switzerland), 2020, 10, 1343.	2.5	3
72	Improved Motor Imagery Classification Using Regularized Common Spatial Pattern with Majority Voting Strategy. IFAC-PapersOnLine, 2021, 54, 226-231.	0.9	3

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73	Multiple sensor fault diagnosis for non-linear and dynamic system by evolving approach. , 2012, , .		2
74	Output Tracking in First-Order Time-Delay Systems: A Dynamic Control Approach. IFAC-PapersOnLine, 2015, 48, 269-274.	0.9	2
75	Autonomous vehicles. , 2017, , .		2
76	A computational approach for human-like motion generation in upper limb exoskeletons supporting scapulohumeral rhythms. , 2017, , .		2
77	Force Control of Dual-Manipulator Handling a Flexible Payload Based on Distributed Parameter Model. , 2018, , .		2
78	Improved Vehicle Lateral Dynamics with Takagi-Sugeno <tex>$\mathscr{H}_{\infty}$</tex> Fuzzy Control Strategy for Emergency Maneuvering. , 2018, , .		2
79	A Real-Time Fuzzy Learning Algorithm for Markov Chain and Its Application on Prediction of Vehicle Speed. , 2019, , .		2
80	Shared control between human driver and machine based on game theoretical model predictive control framework. , 2020, , .		2
81	A Novel Hybrid Approach for Risk Evaluation of Vehicle Failure Modes. Sensors, 2021, 21, 661.	3.8	2
82	Towards autonomous ergonomic upper-limb exoskeletons: A computational approach for planning a human-like path. Robotics and Autonomous Systems, 2021, 145, 103843.	5.1	2
83	A cascaded scheme for high-performance estimation of vehicle states. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2021, 235, 2101-2113.	1.9	1
84	GA Based Engineering Design Optimization Using Fuzzy Constraints and Fitness Functions. International Journal of Smart Engineering System Design, 2003, 5, 375-388.	0.2	0
85	Detection of cardiovascular abnormalities through 5-lead system algorithm. , 2016, , .		0
86	Model-based design and analysis of a subsea high integrity pressure protection system (HIPPS). , 2016, , .		0
87	Digital fuzzy sliding-mode control for a linear parameter-varying airâ€"fuel ratio system. Advances in Mechanical Engineering, 2019, 11, 168781401882210.	1.6	0
88	Vibration Control of Two-Link Rigid-Flexible Manipulator System with Input Saturation. , 2019, , .		0
89	Full- and Reduced-Order Fault Detection Filter Design With Application in Flow Transmission Lines. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, .	1.6	0
90	A novel risk evaluation for vehicle failure modes using a hybrid method under fuzzy environment. International Journal of Crashworthiness, 0, , 1-13.	1.9	0

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91	Numerical Finger Kinematic Models Derived From Virtual Grasping of Various Cylindrical Objects With the Family of Conic Sections. Journal of Mechanisms and Robotics, 2021, 13, .	2.2	0
92	Development of Machine-Learning Algorithms for Recognition of Subjects' Upper Limb Movement Intention Using Electroencephalogram Signals. , 2021, 2021, 190-193.		0