Ehsan Hashemi

List of Publications by Year
in descending order

39 papers	938 citations	361045 20 h-index	476904 29 g-index
39 all docs	39 docs citations	39 times ranked	639 citing authors

#	Article	IF	Citations
1	Autonomous Vehicle Kinematics and Dynamics Synthesis for Sideslip Angle Estimation Based on Consensus Kalman Filter. IEEE Transactions on Control Systems Technology, 2023, 31, 179-192.	3.2	116
2	Speed independent road classification strategy based on vehicle response: Theory and experimental validation. Mechanical Systems and Signal Processing, 2019, 117, 653-666.	4.4	72
3	Integrated model predictive control and velocity estimation of electric vehicles. Mechatronics, 2017, 46, 84-100.	2.0	59
4	Tire Condition Monitoring and Intelligent Tires Using Nanogenerators Based on Piezoelectric, Electromagnetic, and Triboelectric Effects. Advanced Materials Technologies, 2019, 4, 1800105.	3.0	57
5	Corner-based estimation of tire forces and vehicle velocities robust to road conditions. Control Engineering Practice, 2017, 61, 28-40.	3.2	56
6	Longitudinal vehicle state estimation using nonlinear and parameter-varying observers. Mechatronics, 2017, 43, 28-39.	2.0	37
7	A combined-slip predictive control of vehicle stability with experimental verification. Vehicle System Dynamics, 2018, 56, 319-340.	2.2	32
8	Reconfigurable Model Predictive Control for Articulated Vehicle Stability With Experimental Validation. IEEE Transactions on Transportation Electrification, 2020, 6, 308-317.	5.3	32
9	Cooperative Vehicle Speed Fault Diagnosis and Correction. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 783-789.	4.7	31
10	Vehicle Stability Control: Model Predictive Approach and Combined-Slip Effect. IEEE/ASME Transactions on Mechatronics, 2020, 25, 2789-2800.	3.7	31
11	Graph Theoretic Approach to the Robustness of k -Nearest Neighbor Vehicle Platoons. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 3218-3224.	4.7	30
12	Integrated Crash Avoidance and Mitigation Algorithm for Autonomous Vehicles. IEEE Transactions on Industrial Informatics, 2021, 17, 7246-7255.	7.2	30
13	A comprehensive study on the stability analysis of vehicle dynamics with pure/combined-slip tyre models. Vehicle System Dynamics, 2016, 54, 1736-1761.	2.2	28
14	Real-time estimation of the road bank and grade angles with unknown input observers. Vehicle System Dynamics, 2017, 55, 648-667.	2.2	28
15	Risk Assessment and Mitigation in Local Path Planning for Autonomous Vehicles With LSTM Based Predictive Model. IEEE Transactions on Automation Science and Engineering, 2022, 19, 2738-2749.	3.4	28
16	Fault Tolerant Consensus for Vehicle State Estimation: A Cyber-Physical Approach. IEEE Transactions on Industrial Informatics, 2019, 15, 5129-5138.	7.2	27
17	Estimation of longitudinal speed robust to road conditions for ground vehicles. Vehicle System Dynamics, 2016, 54, 1120-1146.	2.2	26
18	Model predictive control of vehicle roll-over with experimental verification. Control Engineering Practice, 2018, 77, 95-108.	3.2	24

#	Article	IF	Citations
19	Autonomous Vehicles Sideslip Angle Estimation: Single Antenna GNSS/IMU Fusion With Observability Analysis. IEEE Internet of Things Journal, 2021, 8, 14845-14859.	5.5	24
20	Model predictive-based tractor-trailer stabilisation using differential braking with experimental verification. Vehicle System Dynamics, 2021, 59, 1190-1213.	2.2	23
21	Opinion Dynamics-Based Vehicle Velocity Estimation and Diagnosis. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 2142-2148.	4.7	21
22	Slip-aware driver assistance path tracking and stability control. Control Engineering Practice, 2022, 118, 104958.	3.2	17
23	Networked Model for Cooperative Adaptive Cruise Control. IFAC-PapersOnLine, 2019, 52, 151-156.	0.5	16
24	Natural Walking With Musculoskeletal Models Using Deep Reinforcement Learning. IEEE Robotics and Automation Letters, 2021, 6, 4156-4162.	3.3	14
25	Distributed control under compromised measurements: Resilient estimation, attack detection, and vehicle platooning. Automatica, 2021, 134, 109953.	3.0	12
26	A Dynamical Game Approach for Integrated Stabilization and Path Tracking for Autonomous Vehicles. , 2020, , .		10
27	A Learning-Aided Generic Framework for Fault Detection and Recovery of Inertial Sensors in Automated Driving Systems. IEEE Systems Journal, 2021, 15, 3001-3011.	2.9	8
28	Resilient Corner-Based Vehicle Velocity Estimation. IEEE Transactions on Control Systems Technology, 2018, 26, 452-462.	3.2	7
29	Real-Time Road Bank Estimation With Disturbance Observers for Vehicle Control Systems. IEEE Transactions on Control Systems Technology, 2022, 30, 443-450.	3.2	7
30	Unsupervised fault detection and recovery for intelligent robotic rollators. Robotics and Autonomous Systems, 2021, 146, 103876.	3.0	7
31	Robust Estimation and Experimental Evaluation of Longitudinal Friction Forces in Ground Vehicles. , 2014, , .		6
32	Data-Driven Tire Capacity Estimation With Experimental Verification. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 21569-21581.	4.7	5
33	Distributed robust vehicle state estimation. , 2017, , .		4
34	Resilient Estimation and Control on k-Nearest Neighbor Platoons: A Network-Theoretic Approach. IFAC-PapersOnLine, 2018, 51, 22-27.	0.5	4
35	Adaptive Reference Inverse Optimal Control for Natural Walking With Musculoskeletal Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 1567-1575.	2.7	3
36	Estimation of Vehicle-Trailer Hitch-Forces and Lateral Tire Forces Independent of Trailer Type and Geometry. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2022, , .	0.9	2

#	Article	IF	Citations
37	Robust Slip-Aware Fusion for Mobile Robots State Estimation. IEEE Robotics and Automation Letters, 2022, 7, 7896-7903.	3.3	2
38	FINITE ELEMENT BASED ELASTO-PLASTIC ANALYSIS OF CLASSICAL AND FIRST ORDER BEAMS WITH ARMSTRONGâ€"FREDERICK KINEMATIC HARDENING MODEL. Transactions of the Canadian Society for Mechanical Engineering, 2014, 38, 1-14.	0.3	1
39	Optimal preview control of the Nao biped robot using a UKF-based state observer. , 2016, , .		1