Ardalan Vahidi

List of Publications by Year in Descending Order

56 papers	3,014 citations	22 h-index	54 g-index
65 ext. papers	3,706 ext. citations	3.9 avg, IF	5.98 L-index

#	Paper	IF	Citations
56	MPC-Based Connected Cruise Control with Multiple Human Predecessors **2021**,		3
55	Energy and flow effects of optimal automated driving in mixed traffic: Vehicle-in-the-loop experimental results. *Transportation Research Part C: Emerging Technologies*, **2021**, 130, 103168	8.4	3
54	Modeling the Recovery of WVIn the Moderate to Heavy Exercise Intensity Domain. *Medicine and Science in Sports and Exercise*, **2020**, 52, 2646-2654	1.2	5
53	Feedbackless Relaying for Enhancing Reliability of Connected Vehicles. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 4621-4634	6.8	3
52	Detailed Case Studies. *Lecture Notes in Intelligent Transportation and Infrastructure*, **2020**, 241-273	0.3	
51	Energy Saving Potentials of CAVs. *Lecture Notes in Intelligent Transportation and Infrastructure*, **2020**, 1-31	0.3	2
50	Information and Collaboration Levels in Vehicular Strings: A Comparative Study. *IFAC-PapersOnLine*, **2020**, 53, 13822-13829	0.7	3
49	Microsimulation of energy and flow effects from optimal automated driving in mixed traffic. *Transportation Research Part C: Emerging Technologies*, **2020**, 120, 102806	8.4	9
48	Receding Horizon Motion Planning for Automated Lane Change and Merge Using Monte Carlo Tree Search and Level-K Game Theory **2020**,		3
47	Multi-Agent Control of Lane-Switching Automated Vehicles for Energy Efficiency **2020**,		5
46	Energy-Efficient Driving of Road Vehicles. *Lecture Notes in Intelligent Transportation and Infrastructure*, **2020**,	0.3	15
45	Eco-Driving Practical Implementation. *Lecture Notes in Intelligent Transportation and Infrastructure*, **2020**, 215-239	0.3	
44	A Vehicle-in-the-Loop (VIL) verification of an all-autonomous intersection control scheme. *Transportation Research Part C: Emerging Technologies*, **2019**, 107, 193-210	8.4	9
43	Fundamentals of energy efficient driving for combustion engine and electric vehicles: An optimal control perspective. *Automatica*, **2019**, 103, 558-572	5.7	53
42	Automated Vehicles in Hazardous Merging Traffic: A Chance-Constrained Approach. *IFAC-PapersOnLine*, **2019**, 52, 218-223	0.7	5
41	Probabilistic Anticipation and Control in Autonomous Car Following. *IEEE Transactions on Control Systems Technology*, **2019**, 27, 30-38	4.8	22
40	Heuristic Versus Optimal Charging of Supercapacitors, Lithium-Ion, and Lead-Acid Batteries: An Efficiency Point of View. *IEEE Transactions on Control Systems Technology*, **2018**, 26, 167-180	4.8	35

39	Mixed-Integer Linear Programming for Optimal Scheduling of Autonomous Vehicle Intersection Crossing. *IEEE Transactions on Intelligent Vehicles*, **2018**, 3, 287-299	5	69
38	Modeling the Expenditure and Recovery of Anaerobic Work Capacity in Cycling. *Proceedings (mdpi)*, **2018**, 2, 219	0.3	3
37	To Merge Early or Late: Analysis of Traffic Flow and Energy Impact in a Reduced Lane Scenario **2018** ,		2
36	Predictively Coordinated Vehicle Acceleration and Lane Selection Using Mixed Integer Programming **2018**,		8
35	Impact of Model Simplification on Optimal Control of Combustion Engine and Electric Vehicles Considering Control Input Constraints **2018**,		2
34	Efficient and Collision-Free Anticipative Cruise Control in Randomly Mixed Strings. *IEEE Transactions on Intelligent Vehicles*, **2018**, 3, 439-452	5	27
33	Energy saving potentials of connected and automated vehicles. *Transportation Research Part C: Emerging Technologies*, **2018**, 95, 822-843	8.4	164
32	Multi-Intersection Traffic Management for Autonomous Vehicles via Distributed Mixed Integer Linear Programming **2018**,		11
31	Fast Model Predictive Control-Based Fuel Efficient Control Strategy for a Group of Connected Vehicles in Urban Road Conditions. *IEEE Transactions on Control Systems Technology*, **2017**, 25, 760-767	4.8	80
30	Optimal scheduling of autonomous vehicle arrivals at intelligent intersections via MILP **2017**,		41
29	Vehicle-in-the-loop (VIL) verification of a smart city intersection control scheme for autonomous vehicles **2017**,		19
28	Quantifying the impact of limited information and control robustness on connected automated platoons **2017**,		11
27	Ultracapacitor power assist with preview-based energy management for reducing fuel consumption of heavy vehicles. *International Journal of Powertrains*, **2016**, 5, 375	0.5	3
26	Reconstructing maximum likelihood trajectory of probe vehicles between sparse updates. *Transportation Research Part C: Emerging Technologies*, **2016**, 65, 16-30	8.4	21
25	Optimal speed advisory for connected vehicles in arterial roads and the impact on mixed traffic. *Transportation Research Part C: Emerging Technologies*, **2016**, 69, 548-563	8.4	129
24	. *IEEE Transactions on Intelligent Transportation Systems*, **2016**, 17, 870-881	6.1	19
23	Supercapacitor Electrical and Thermal Modeling, Identification, and Validation for a Wide Range of Temperature and Power Applications. *IEEE Transactions on Industrial Electronics*, **2016**, 63, 1574-1585	8.9	71
22	A fuel economic model predictive control strategy for a group of connected vehicles in urban roads **2015**,		32

21	. *IEEE Transactions on Intelligent Transportation Systems*, **2014**, 15, 2516-2523	6.1	77
20	Optimal pacing in a cycling time-trial considering cyclist\'s fatigue dynamics **2013**,		17
19	Route Preview in Energy Management of Plug-in Hybrid Vehicles. *IEEE Transactions on Control Systems Technology*, **2012**, 20, 546-553	4.8	142
18	Optimal charging of ultracapacitors during regenerative braking **2012**,		14
17	MPC-Based Energy Management of a Power-Split Hybrid Electric Vehicle. *IEEE Transactions on Control Systems Technology*, **2012**, 20, 593-603	4.8	423
16	Model predictive control of a hybrid electric powertrain with combined battery and ultracapacitor energy storage system. *International Journal of Powertrains*, **2012**, 1, 351	0.5	2
15	Ultracapacitor Assisted Powertrains: Modeling, Control, Sizing, and the Impact on Fuel Economy. *IEEE Transactions on Control Systems Technology*, **2011**, 19, 576-589	4.8	74
14	Predictive Cruise Control With Probabilistic Constraints for Eco Driving **2011**,		21
13	Predictive Cruise Control: Utilizing Upcoming Traffic Signal Information for Improving Fuel Economy and Reducing Trip Time. *IEEE Transactions on Control Systems Technology*, **2011**, 19, 707-714	4.8	380
12	Heavy vehicle fuel economy improvement using ultracapacitor power assist and preview-based MPC energy management **2011**,		7
11	Nonlinear Model Predictive Control for power-split Hybrid Electric Vehicles **2010**,		27
10	Predictive Control of Voltage and Current in a Fuel Cell□Ultracapacitor Hybrid. *IEEE Transactions on Industrial Electronics*, **2010**, 57, 1954-1963	8.9	75
9	Role of Terrain Preview in Energy Management of Hybrid Electric Vehicles. *IEEE Transactions on Vehicular Technology*, **2010**, 59, 1139-1147	6.8	127
8	A Two-Stage Lyapunov-Based Estimator for Estimation of Vehicle Mass and Road Grade. *IEEE Transactions on Vehicular Technology*, **2009**, 58, 3177-3185	6.8	61
7	Ultracapacitor assisted powertrains: Modeling, control, sizing, and the impact on fuel economy **2008**,		16
6	A review of the main parameters influencing long-term performance and durability of PEM fuel cells. *Journal of Power Sources*, **2008**, 180, 1-14	8.9	561
5	A Decentralized Model Predictive Control Approach to Power Management of a Fuel Cell-Ultracapacitor Hybrid. *Proceedings of the American Control Conference*, **2007**,	1.2	16
4	Constraint Handling in a Fuel Cell System: A Fast Reference Governor Approach. *IEEE Transactions on Control Systems Technology*, **2007**, 15, 86-98	4.8	56

3	Adaptive model predictive control for co-ordination of compression and friction brakes in heavy duty vehicles. *International Journal of Adaptive Control and Signal Processing*, **2006**, 20, 581-598	2.8	5
2	Predictive Time-Delay Control of Vehicle Suspensions. *JVC/Journal of Vibration and Control*, **2001**, 7, 1195-1211	2	14
1	Designing a General Neurocontroller for Water Towers. *Journal of Engineering Mechanics - ASCE*, **2000**, 126, 582-587	2.4	8