Antonio Sciarretta

List of Publications by Year
in descending order

80 papers	4,355 citations	430442 18 h-index	301761 39 g-index
82 all docs	82 docs citations	82 times ranked	2255 citing authors

#	Article	IF	Citations
1	Control of hybrid electric vehicles. IEEE Control Systems, 2007, 27, 60-70.	1.0	755
2	Optimal Control of Parallel Hybrid Electric Vehicles. IEEE Transactions on Control Systems Technology, 2004, 12, 352-363.	3.2	698
3	Optimal power management of an experimental fuel cell/supercapacitor-powered hybrid vehicle. Control Engineering Practice, 2005, 13, 41-53.	3.2	351
4	Energy saving potentials of connected and automated vehicles. Transportation Research Part C: Emerging Technologies, 2018, 95, 822-843.	3.9	332
5	Vehicle Propulsion Systems. , 2013, , .		298
6	Optimal Ecodriving Control: Energy-Efficient Driving of Road Vehicles as an Optimal Control Problem. IEEE Control Systems, 2015, 35, 71-90.	1.0	265
7	Optimal energy management for an electric vehicle in eco-driving applications. Control Engineering Practice, 2014, 29, 299-307.	3.2	183
8	Optimal energy management of hybrid electric vehicles including battery aging. , 2011, , .		120
9	A control benchmark on the energy management of a plug-in hybrid electric vehicle. Control Engineering Practice, 2014, 29, 287-298.	3.2	110
10	Safe- and Eco-Driving Control for Connected and Automated Electric Vehicles Using Analytical State-Constrained Optimal Solution. IEEE Transactions on Intelligent Vehicles, 2018, 3, 163-172.	9.4	101
11	Fundamentals of energy efficient driving for combustion engine and electric vehicles: An optimal control perspective. Automatica, 2019, 103, 558-572.	3.0	99
12	Explicit optimal control policy and its practical application for hybrid electric powertrains. Control Engineering Practice, 2010, 18, 1429-1439.	3.2	77
13	Supervisory control of hybrid powertrains: An experimental benchmark of offline optimization and online energy management. Control Engineering Practice, 2011, 19, 1253-1265.	3.2	68
14	Optimal drive of electric vehicles using an inversion-based trajectory generation approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14519-14526.	0.4	59
15	Optimal control for an organic rankine cycle on board a diesel-electric railcar. Journal of Process Control, 2015, 33, 1-13.	1.7	53
16	A Unified Approach for Electric Vehicles Range Maximization via Eco-Routing, Eco-Driving, and Energy Consumption Prediction. IEEE Transactions on Intelligent Vehicles, 2018, 3, 463-475.	9.4	50
17	Optimal control to minimize trip time and energy consumption in electric vehicles. , 2011, , .		42
18	On the integration of optimal energy management and thermal management of hybrid electric vehicles. , 2010, , .		37

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19	Energy-Efficient Driving of Road Vehicles. Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , .	0.3	36
20	Organic Rankine Cycle for Vehicles: Control Design and Experimental Results. IEEE Transactions on Control Systems Technology, 2017, 25, 952-965.	3.2	34
21	Improving the control performance of an Organic Rankine Cycle system for waste heat recovery from a heavy-duty diesel engine using a model-based approach. , 2013, , .		32
22	Regelung der Leistungsaufteilung von Parallelhybridfahrzeugen: Von der optimalen Steuerung zur Echtzeitanwendung (On the Power Split Control of Parallel Hybrid Vehicles: from Global) Tj ETQq0 0 0 rgBT /Overlook 10 Tf 50 1617 Td (	0.4	31
23	Online Implementation of an Optimal Supervisory Control for a Parallel Hybrid Powertrain. SAE International Journal of Engines, 2009, 2, 1630-1638.	0.4	31
24	Energy management strategy for Diesel hybrid electric vehicle. , 2011, , .		26
25	Towards model-based control of a steam Rankine process for engine waste heat recovery. , 2012, , .		23
26	Performance of current eco-routing methods. , 2016, , .		23
27	The Quasi-Propagatory Model: A New Approach for Describing Transient Phenomena in Engine Manifolds. , 2001, , .		22
28	Model-based adaptive observers for intake leakage detection in diesel engines. , 2009, , .		21
29	Control-Oriented Modeling and Fuel Optimal Control of a Series Hybrid Bus. , 2005, , .		20
30	Online Energy Management System (EMS) Including Engine and Catalyst Temperatures for a Parallel HEV. IFAC-PapersOnLine, 2017, 50, 8913-8920.	0.5	20
31	A model-based eco-routing strategy for electric vehicles in large urban networks. , 2016, , .		18
32	Automatic Generation of Online Optimal Energy Management Strategies for Hybrid Powertrain Simulation. , 0, , .		17
33	Design and Control Co-Optimization for Hybrid Powertrains: Development of Dedicated Optimal Energy Management Strategy. IFAC-PapersOnLine, 2016, 49, 277-284.	0.5	16
34	A real-time eco-driving strategy for automated electric vehicles. , 2017, , .		15
35	Real-Time Optimal Eco-Driving for Hybrid-Electric Vehicles. IFAC-PapersOnLine, 2019, 52, 562-567.	0.5	15
36	Model-Based Eco-Routing Strategy for Electric Vehicles in Large Urban Networks. SpringerBriefs in Applied Sciences and Technology, 2017, , 81-99.	0.2	14

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37	Optimal energy management compliant with online requirements for an electric vehicle in eco-driving applications. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 334-340.	0.4	13
38	A Constrained Eco-Routing Strategy for Hybrid Electric Vehicles Based on Semi-Analytical Energy Management. , 2018, , .		13
39	Fuel-Optimal Control of Rendezvous Maneuvers for Passenger Cars (Treibstoffoptimale AnnÃ¤herung) Tj ETQq1 1 0.784314 rgBT /Overl	0.4	12
40	Supervision and control prototyping for an engine exhaust gas heat recovery system based on a steam Rankine cycle. , 2012, , .		12
41	Control design for an automotive turbine Rankine Cycle system based on nonlinear state estimation. , 2014, , .		12
42	Bi-objective eco-routing in large urban road networks. , 2017, , .		12
43	A general constrained optimization framework for the eco-routing problem: Comparison and analysis of solution strategies for hybrid electric vehicles. Transportation Research Part C: Emerging Technologies, 2021, 123, 102935.	3.9	11
44	Analysis of the Potential Performance of a Combined Hybrid Vehicle with Optimal Supervisory Control. , 2006, , .		11
45	ECMS Controller Robustness in Flex-Fuel Hybrid Vehicles. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2014, 136, .	0.9	9
46	About prediction of vehicle energy consumption for eco-routing. , 2016, , .		9
47	Analysis of the potential performance of a combined hybrid vehicle with optimal supervisory control. , 2006, , .		8
48	Sizing and fuel consumption evaluation methodology for hybrid light duty vehicles. World Electric Vehicle Journal, 2010, 4, 249-258.	1.6	8
49	Optimal Energy Management of Automotive Battery Systems Including Thermal Dynamics and Aging. Lecture Notes in Control and Information Sciences, 2014, , 219-236.	0.6	8
50	State of charge management for plug in hybrid electric vehicles with uncertain distance to recharge. , 2013, , .		7
51	Thermal management optimization of a heat-pump-based HVAC system for cabin conditioning in electric vehicles. , 2018, , .		7
52	Robustness of ECMS-based Optimal Control in Parallel Hybrid Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 127-132.	0.4	6
53	Multi-Agent Control of Lane-Switching Automated Vehicles for Energy Efficiency. , 2020, , .		6
54	Cooperative Eco-Driving of Electric Vehicle Platoons for Energy Efficiency and String Stability. IFAC-PapersOnLine, 2021, 54, 133-139.	0.5	6

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55	Cooperative Levels in Eco-Driving of Electric Vehicle Platoons. , 2021, , .		6
56	Real-time eco-driving for connected electric vehicles. IFAC-PapersOnLine, 2021, 54, 126-131.	0.5	6
57	Control-Oriented Modeling of Power Split Devices in Combined Hybrid-Electric Vehicles. , 0, , .		5
58	State of Charge Management for Plug-In Hybrid Vehicles With Uncertain Trip Information. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	0.9	5
59	Handling State Constraints in Fast-computing Optimal Control for Hybrid Powertrains. IFAC-PapersOnLine, 2017, 50, 4781-4786.	0.5	5
60	Energy Saving Potentials of CAVs. Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , 1-31.	0.3	5
61	A Time- and Energy-Optimal Routing Strategy for Electric Vehicles with Charging Constraints. , 2020, , .		5
62	A Fully-Analytical Fuel Consumption Estimation for the Optimal Design of Light- and Heavy-Duty Series Hybrid Electric Powertrains. , 0, , .		4
63	A Local-Realistic Model of Quantum Mechanics Based on a Discrete Spacetime. Foundations of Physics, 2018, 48, 60-91.	0.6	4
64	Impact of Model Simplification on Optimal Control of Combustion Engine and Electric Vehicles Considering Control Input Constraints. , 2018, , .		4
65	Model-based Compensation of the Injector Dynamics for Multiple-Injection Combustion Patterns. , 0, , .		3
66	Modular Methodology to Optimize Innovative Drivetrains. , 0, , .		3
67	Information and Collaboration Levels in Vehicular Strings: A Comparative Study. IFAC-PapersOnLine, 2020, 53, 13822-13829.	0.5	3
68	Energy-Efficient Speed Profiles (Eco-Driving). Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , 131-178.	0.3	3
69	A lattice gas model with temperature and buoyancy effects to predict the concentration of pollutant gas released by power plants and traffic sources. Mathematical and Computer Modelling of Dynamical Systems, 2006, 12, 313-327.	1.4	2
70	A local-realistic quantum mechanical model of spin and spin entanglement. International Journal of Quantum Information, 0, , 2150006.	0.6	2
71	Connectivity and Automation as Enablers for Energy-Efficient Driving and Road Traffic Management. , 2021, , 1-40.		1
72	Energy-Efficient Route Navigation (Eco-Routing). Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , 111-129.	0.3	1

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73	Connectivity and Automation as Enablers for Energy-Efficient Driving and Road Traffic Management. , 2022, , 2337-2376.		1
74	Editorial: IFAC Workshop on Engine and Powertrain Control, Simulation and Modeling (ECOSM 2012). Control Engineering Practice, 2014, 29, 174-175.	3.2	0
75	GRAB-ECO for Minimal Fuel Consumption Estimation of Parallel Hybrid Electric Vehicles. Oil and Gas Science and Technology, 2017, 72, 39.	1.4	0
76	Fundamentals of Vehicle Modeling. Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , 33-62.	0.3	0
77	Eco-Driving Practical Implementation. Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , 215-239.	0.3	0
78	Presenting A Realistic, Stochastic, And Local Model Of Quantum Mechanics. , 2018, , .		0
79	Detailed Case Studies. Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , 241-273.	0.3	0
80	Route and Traffic Description. Lecture Notes in Intelligent Transportation and Infrastructure, 2020, , 83-110.	0.3	0