

Lino Guzzella

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6597586/publications.pdf>

Version: 2024-02-01

71
papers

3,976
citations

147726

31
h-index

155592

55
g-index

75
all docs

75
docs citations

75
times ranked

3067
citing authors

#	ARTICLE	IF	CITATIONS
1	A generic dynamic programming Matlab function. , 2009, , .		369
2	Introduction to Modeling and Control of Internal Combustion Engine Systems. , 2010, , .		352
3	Experiment-driven electrochemical modeling and systematic parameterization for a lithium-ion battery cell. Journal of Power Sources, 2010, 195, 5071-5080.	4.0	217
4	Battery State-of-Health Perceptive Energy Management for Hybrid Electric Vehicles. IEEE Transactions on Vehicular Technology, 2012, 61, 2893-2900.	3.9	209
5	Energy-Optimal Control of Plug-in Hybrid Electric Vehicles for Real-World Driving Cycles. IEEE Transactions on Vehicular Technology, 2011, 60, 2949-2962.	3.9	202
6	Convex Optimization for the Energy Management of Hybrid Electric Vehicles Considering Engine Start and Gearshift Costs. Energies, 2014, 7, 834-856.	1.6	154
7	Implementation of Dynamic Programming for n -Dimensional Optimal Control Problems With Final State Constraints. IEEE Transactions on Control Systems Technology, 2013, 21, 924-931.	3.2	145
8	Operational aspects of a large PEFC stack under practical conditions. Journal of Power Sources, 2004, 128, 208-217.	4.0	137
9	Predictive Reference Signal Generator for Hybrid Electric Vehicles. IEEE Transactions on Vehicular Technology, 2009, 58, 4730-4740.	3.9	137
10	EKF based self-adaptive thermal model for a passive house. Energy and Buildings, 2014, 68, 811-817.	3.1	137
11	Optimal design and operation of building services using mixed-integer linear programming techniques. Energy, 2013, 59, 365-376.	4.5	115
12	Model-based distinction and quantification of capacity loss and rate capability fade in Li-ion batteries. Journal of Power Sources, 2010, 195, 7634-7638.	4.0	113
13	Engine On/Off Control for the Energy Management of a Serial Hybrid Electric Bus via Convex Optimization. IEEE Transactions on Vehicular Technology, 2014, 63, 3549-3559.	3.9	109
14	Equivalent Consumption Minimization Strategy for the Control of Real Driving NOx Emissions of a Diesel Hybrid Electric Vehicle. Energies, 2014, 7, 3148-3178.	1.6	89
15	Explicit optimal control policy and its practical application for hybrid electric powertrains. Control Engineering Practice, 2010, 18, 1429-1439.	3.2	77
16	Topology Optimization for Hybrid Electric Vehicles With Automated Transmissions. IEEE Transactions on Vehicular Technology, 2012, 61, 2442-2451.	3.9	76
17	Is oxygen storage in three-way catalysts an equilibrium controlled process?. Applied Catalysis B: Environmental, 2009, 91, 30-38.	10.8	71
18	A fast and accurate physics-based model for the NOx emissions of Diesel engines. Applied Energy, 2013, 103, 221-233.	5.1	71

#	ARTICLE	IF	CITATIONS
19	Torque-Assist Hybrid Electric Powertrain Sizing: From Optimal Control Towards a Sizing Law. IEEE Transactions on Control Systems Technology, 2010, 18, 837-849.	3.2	70
20	Optimal sizing of a solar thermal building installation using particle swarm optimization. Energy, 2012, 41, 31-37.	4.5	69
21	Particle swarm optimisation for hybrid electric drive-train sizing. International Journal of Vehicle Design, 2012, 58, 181.	0.1	65
22	Combined Optimal Sizing and Control for a Hybrid Tracked Vehicle. Energies, 2012, 5, 4697-4710.	1.6	58
23	Adaptive internal model control with application to fueling control. Control Engineering Practice, 2010, 18, 873-881.	3.2	50
24	Gain-scheduled model-based feedback control of the air/fuel ratio in diesel engines. Control Engineering Practice, 2009, 17, 1417-1425.	3.2	46
25	Optimal energy management for a diesel hybrid electric vehicle considering transient PM and quasi-static NOx emissions. Control Engineering Practice, 2014, 29, 266-276.	3.2	46
26	Economic and environmental aspects of the component sizing for a stand-alone building energy system: A case study. Renewable Energy, 2013, 55, 438-447.	4.3	45
27	Feedback control of particulate matter and nitrogen oxide emissions in diesel engines. Control Engineering Practice, 2013, 21, 1809-1820.	3.2	44
28	Optimal control for Plug-in Hybrid Electric Vehicle applications. , 2010, , .		43
29	Iterative Tuning of Internal Model Controllers With Application to Air/Fuel Ratio Control. IEEE Transactions on Control Systems Technology, 2010, 18, 177-184.	3.2	42
30	Series Viscoelastic Actuators Can Match Human Force Perception. IEEE/ASME Transactions on Mechatronics, 2011, 16, 853-860.	3.7	41
31	Age-Specific Characteristics and Coupling of Cerebral Arterial Inflow and Cerebrospinal Fluid Dynamics. PLoS ONE, 2012, 7, e37502.	1.1	41
32	Optimisation-oriented modelling of the NOx emissions of a Diesel engine. Energy Conversion and Management, 2013, 75, 61-73.	4.4	36
33	Correlating Nitrogen Accumulation With Temporal Fuel Cell Performance. Journal of Fuel Cell Science and Technology, 2010, 7, .	0.8	35
34	A Transmission-Actuated Energy-Management Strategy. IEEE Transactions on Vehicular Technology, 2010, 59, 84-92.	3.9	34
35	Control-oriented modeling of a three-way catalytic converter with observation of the relative oxygen level profile. Journal of Process Control, 2012, 22, 984-994.	1.7	32
36	Control of ventricular unloading using an electrocardiogram-synchronized Thoratec paracorporeal ventricular assist device. Journal of Thoracic and Cardiovascular Surgery, 2013, 146, 710-717.	0.4	28

#	ARTICLE	IF	CITATIONS
37	Automobiles of the future and the role of automatic control in those systems. Annual Reviews in Control, 2009, 33, 1-10.	4.4	27
38	Model-Based Actuator Trajectories Optimization for a Diesel Engine Using a Direct Method. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	0.5	27
39	Surrogate modeling for the fast optimization of energy systems. Energy, 2013, 57, 653-662.	4.5	27
40	Optimal Control of Diesel Engines: Numerical Methods, Applications, and Experimental Validation. Mathematical Problems in Engineering, 2014, 2014, 1-21.	0.6	27
41	Hybrid-Electric Vehicle with Natural Gas-Diesel Engine. Energies, 2013, 6, 3571-3592.	1.6	20
42	An Equivalent Emission Minimization Strategy for Causal Optimal Control of Diesel Engines. Energies, 2014, 7, 1230-1250.	1.6	20
43	Optimal Power Control of Hybrid Fuel Cell Systems for an Accelerated System Warm-Up. IEEE Transactions on Control Systems Technology, 2007, 15, 290-305.	3.2	17
44	Engine Emission Modeling Using a Mixed Physics and Regression Approach. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	0.5	17
45	Implementation of comfort constraints in dynamic programming for hybrid vehicle energy management. International Journal of Vehicle Design, 2012, 58, 367.	0.1	16
46	Improved dynamic performance of turbocharged SI engine power trains using clutch actuation. Control Engineering Practice, 2006, 14, 363-373.	3.2	15
47	Control of diesel engines using NOx-emission feedback. International Journal of Engine Research, 2013, 14, 45-56.	1.4	15
48	Cascaded control of combustion and pollutant emissions in diesel engines. Control Engineering Practice, 2014, 29, 176-186.	3.2	14
49	Intake Manifold Boosting of Turbocharged Spark-Ignited Engines. Energies, 2013, 6, 1746-1763.	1.6	13
50	A cascaded control structure for air-path control of diesel engines. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2014, 228, 799-817.	1.1	13
51	Optimal control of a fuel-fired auxiliary heater for an improved passenger vehicle warm-up. Control Engineering Practice, 2009, 17, 664-675.	3.2	11
52	OPTIMAL IMPLEMENTATION OF LIGHTWEIGHTING AND POWERTRAIN EFFICIENCY TECHNOLOGY IN PASSENGERS' VEHICLES. Transport, 2012, 27, 237-249.	0.6	11
53	Dynamic Feedforward Control of a Diesel Engine Based on Optimal Transient Compensation Maps. Energies, 2014, 7, 5400-5424.	1.6	10
54	Recursive parameter estimation of exhaust gas oxygen sensors with input-dependent time delay and linear parameters. Control Engineering Practice, 2015, 41, 149-163.	3.2	10

#	ARTICLE	IF	CITATIONS
55	Dynamic programming for hybrid pneumatic vehicles. , 2009, , .		9
56	Craniospinal Pressureâ€™Volume Dynamics in Phantom Models. IEEE Transactions on Biomedical Engineering, 2012, 59, 3482-3490.	2.5	8
57	Individual Cylinder Airâ€™Fuel Ratio Control Using Fourier Analysis. IEEE Transactions on Control Systems Technology, 2011, 19, 1204-1213.	3.2	7
58	Using exhaust pressure pulsations to detect deteriorations of oxygen sensor dynamics. Sensors and Actuators B: Chemical, 2014, 191, 384-395.	4.0	7
59	Code-generator-based software package for defining and solving one-dimensional, dynamic, catalytic reactor models. Computers and Chemical Engineering, 2008, 32, 2445-2454.	2.0	5
60	Thermoacoustic Instability Suppression by Gain-Delay and \mathcal{H}_∞ Controllers Designed for Secondary Fuel Injection. IEEE Transactions on Control Systems Technology, 2009, 17, 1028-1042.	3.2	5
61	Optimized Control of a Pressure-Wave Supercharger: A Model-Based Feedforward Approach. IEEE Transactions on Control Systems Technology, 2007, 15, 457-464.	3.2	4
62	Efficient solution of the diesel-engine optimal control problem by time-domain decomposition. Control Engineering Practice, 2014, 30, 34-44.	3.2	3
63	A least squares estimation-based parameterisation method for a control-oriented model of selective catalytic reduction systems. International Journal of Powertrains, 2015, 4, 163.	0.1	3
64	Emission-controlled diesel engines. MTZ Worldwide, 2007, 68, 27-31.	0.1	2
65	Parameter Identification for a Low-Order Network Model of Combustion Instabilities. International Journal of Spray and Combustion Dynamics, 2009, 1, 113-142.	0.4	2
66	From static to dynamic optimisation of Diesel-engine control. , 2013, , .		2
67	Including Drag Phases in Numerical Optimal Control of Diesel Engines. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 489-494.	0.4	2
68	System Design and Analysis of a Directly Air-Assisted Turbocharged SI Engine with Camshaft Driven Valves. Energies, 2013, 6, 1843-1862.	1.6	1
69	Partitioned Quasi-Newton Approximation for Direct Collocation Methods and Its Application to the Fuel-Optimal Control of a Diesel Engine. Journal of Applied Mathematics, 2014, 2014, 1-6.	0.4	1
70	Optimale Approximation von Totzeitelementen im Zeitbereich. Automatisierungstechnik, 1994, 42, 516-516.	0.4	0
71	Control of the Pollutant Raw Emissions in Diesel Engines. MTZ Worldwide, 2014, 75, 56-62.	0.1	0