

# Lino Guzzella

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

70  
papers

3,110  
citations

30  
h-index

55  
g-index

75  
ext. papers

3,603  
ext. citations

4.5  
avg, IF

5.49  
L-index

| #  | Paper  | IF  | Citations |
|----|--|-----|-----------|
| 70 | Recursive parameter estimation of exhaust gas oxygen sensors with input-dependent time delay and linear parameters. <i>Control Engineering Practice</i> , <b>2015</b> , 41, 149-163                        | 3.9 | 8         |
| 69 | EKF based self-adaptive thermal model for a passive house. <i>Energy and Buildings</i> , <b>2014</b> , 68, 811-817   | 7   | 107       |
| 68 | Engine On/Off Control for the Energy Management of a Serial Hybrid Electric Bus via Convex Optimization. <i>IEEE Transactions on Vehicular Technology</i> , <b>2014</b> , 63, 3549-3559                    | 6.8 | 86        |
| 67 | Efficient solution of the diesel-engine optimal control problem by time-domain decomposition. <i>Control Engineering Practice</i> , <b>2014</b> , 30, 34-44  | 3.9 | 2         |
| 66 | Control of the Pollutant Raw Emissions in Diesel Engines. <i>MTZ Worldwide</i> , <b>2014</b> , 75, 56-62   | 0.3 |           |
| 65 | A cascaded control structure for air-path control of diesel engines. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , <b>2014</b> , 228, 799-817 | 1.4 | 10        |
| 64 | Using exhaust pressure pulsations to detect deteriorations of oxygen sensor dynamics. <i>Sensors and Actuators B: Chemical</i> , <b>2014</b> , 191, 384-395  | 8.5 | 6         |
| 63 | Optimal energy management for a diesel hybrid electric vehicle considering transient PM and quasi-static NOx emissions. <i>Control Engineering Practice</i> , <b>2014</b> , 29, 266-276                    | 3.9 | 40        |
| 62 | Equivalent Consumption Minimization Strategy for the Control of Real Driving NOx Emissions of a Diesel Hybrid Electric Vehicle. <i>Energies</i> , <b>2014</b> , 7, 3148-3178                               | 3.1 | 69        |
| 61 | Optimal Control of Diesel Engines: Numerical Methods, Applications, and Experimental Validation. <i>Mathematical Problems in Engineering</i> , <b>2014</b> , 2014, 1-21                                    | 1.1 | 23        |
| 60 | Partitioned Quasi-Newton Approximation for Direct Collocation Methods and Its Application to the Fuel-Optimal Control of a Diesel Engine. <i>Journal of Applied Mathematics</i> , <b>2014</b> , 2014, 1-6  | 1.1 | 1         |
| 59 | Dynamic Feedforward Control of a Diesel Engine Based on Optimal Transient Compensation Maps. <i>Energies</i> , <b>2014</b> , 7, 5400-5424  | 3.1 | 6         |
| 58 | An Equivalent Emission Minimization Strategy for Causal Optimal Control of Diesel Engines. <i>Energies</i> , <b>2014</b> , 7, 1230-1250  | 3.1 | 16        |
| 57 | Convex Optimization for the Energy Management of Hybrid Electric Vehicles Considering Engine Start and Gearshift Costs. <i>Energies</i> , <b>2014</b> , 7, 834-856   | 3.1 | 123       |
| 56 | Cascaded control of combustion and pollutant emissions in diesel engines. <i>Control Engineering Practice</i> , <b>2014</b> , 29, 176-186  | 3.9 | 14        |
| 55 | Model-linearization strategies for MPC of the air-path of a diesel engine <b>2014</b> , 627-632  |     |           |
| 54 | Implementation of Dynamic Programming for $n$ -Dimensional Optimal Control Problems With Final State Constraints. <i>IEEE Transactions on Control Systems Technology</i> , <b>2013</b> , 21, 924-931       | 4.8 | 99        |

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|----|---|------|----|
| 53 | Optimisation-oriented modelling of the NOx emissions of a Diesel engine. <i>Energy Conversion and Management</i> , <b>2013</b> , 75, 61-73  | 10.6 | 31 |
| 52 | Surrogate modeling for the fast optimization of energy systems. <i>Energy</i> , <b>2013</b> , 57, 653-662   | 7.9  | 22 |
| 51 | Optimal design and operation of building services using mixed-integer linear programming techniques. <i>Energy</i> , <b>2013</b> , 59, 365-376  | 7.9  | 97 |
| 50 | Feedback control of particulate matter and nitrogen oxide emissions in diesel engines. <i>Control Engineering Practice</i> , <b>2013</b> , 21, 1809-1820  | 3.9  | 42 |
| 49 | Control of ventricular unloading using an electrocardiogram-synchronized Thoratec paracorporeal ventricular assist device. <i>Journal of Thoracic and Cardiovascular Surgery</i> , <b>2013</b> , 146, 710-7 | 1.5  | 24 |
| 48 | Economic and environmental aspects of the component sizing for a stand-alone building energy system: A case study. <i>Renewable Energy</i> , <b>2013</b> , 55, 438-447                                      | 8.1  | 40 |
| 47 | A fast and accurate physics-based model for the NOx emissions of Diesel engines. <i>Applied Energy</i> , <b>2013</b> , 103, 221-233   | 10.7 | 63 |
| 46 | Control of diesel engines using NOx-emission feedback. <i>International Journal of Engine Research</i> , <b>2013</b> , 14, 45-56  | 2.7  | 13 |
| 45 | Intake Manifold Boosting of Turbocharged Spark-Ignited Engines. <i>Energies</i> , <b>2013</b> , 6, 1746-1763  | 3.1  | 8  |
| 44 | System Design and Analysis of a Directly Air-Assisted Turbocharged SI Engine with Camshaft Driven Valves. <i>Energies</i> , <b>2013</b> , 6, 1843-1862  | 3.1  |    |
| 43 | Hybrid-Electric Vehicle with Natural Gas-Diesel Engine. <i>Energies</i> , <b>2013</b> , 6, 3571-3592  | 3.1  | 18 |
| 42 | From static to dynamic optimisation of Diesel-engine control <b>2013</b> ,  |      | 1  |
| 41 | Including Drag Phases in Numerical Optimal Control of Diesel Engines. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2013</b> , 46, 489-494                        |      | 1  |
| 40 | Optimal sizing of a solar thermal building installation using particle swarm optimization. <i>Energy</i> , <b>2012</b> , 41, 31-37  | 7.9  | 59 |
| 39 | Topology Optimization for Hybrid Electric Vehicles With Automated Transmissions. <i>IEEE Transactions on Vehicular Technology</i> , <b>2012</b> , 61, 2442-2451   | 6.8  | 58 |
| 38 | Craniospinal pressure-volume dynamics in phantom models. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2012</b> , 59, 3482-90   | 5    | 6  |
| 37 | Control-oriented modeling of a three-way catalytic converter with observation of the relative oxygen level profile. <i>Journal of Process Control</i> , <b>2012</b> , 22, 984-994                           | 3.9  | 27 |
| 36 | Combined Optimal Sizing and Control for a Hybrid Tracked Vehicle. <i>Energies</i> , <b>2012</b> , 5, 4697-4710  | 3.1  | 44 |

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|----|--|-----|-----|
| 35 | Battery State-of-Health Perceptive Energy Management for Hybrid Electric Vehicles. <i>IEEE Transactions on Vehicular Technology</i> , <b>2012</b> , 61, 2893-2900              | 6.8 | 145 |
| 34 | Implementation of comfort constraints in dynamic programming for hybrid vehicle energy management. <i>International Journal of Vehicle Design</i> , <b>2012</b> , 58, 367      | 2.4 | 16  |
| 33 | OPTIMAL IMPLEMENTATION OF LIGHTWEIGHTING AND POWERTRAIN EFFICIENCY TECHNOLOGY IN PASSENGERVEHICLES. <i>Transport</i> , <b>2012</b> , 27, 237-249                               | 1.4 | 8   |
| 32 | Particle swarm optimisation for hybrid electric drive-train sizing. <i>International Journal of Vehicle Design</i> , <b>2012</b> , 58, 181                                     | 2.4 | 48  |
| 31 | Age-specific characteristics and coupling of cerebral arterial inflow and cerebrospinal fluid dynamics. <i>PLoS ONE</i> , <b>2012</b> , 7, e37502                              | 3.7 | 26  |
| 30 | Individual Cylinder Air/Fuel Ratio Control Using Fourier Analysis. <i>IEEE Transactions on Control Systems Technology</i> , <b>2011</b> , 19, 1204-1213                        | 4.8 | 5   |
| 29 | Energy-Optimal Control of Plug-in Hybrid Electric Vehicles for Real-World Driving Cycles. <i>IEEE Transactions on Vehicular Technology</i> , <b>2011</b> , 60, 2949-2962       | 6.8 | 172 |
| 28 | Series Viscoelastic Actuators Can Match Human Force Perception. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2011</b> , 16, 853-860                                      | 5.5 | 36  |
| 27 | Model-Based Actuator Trajectories Optimization for a Diesel Engine Using a Direct Method. <i>Journal of Engineering for Gas Turbines and Power</i> , <b>2011</b> , 133,        | 1.7 | 23  |
| 26 | Optimal control for Plug-in Hybrid Electric Vehicle applications <b>2010</b> ,   |     | 27  |
| 25 | Correlating Nitrogen Accumulation With Temporal Fuel Cell Performance. <i>Journal of Fuel Cell Science and Technology</i> , <b>2010</b> , 7,                                   |     | 29  |
| 24 | Engine Emission Modeling Using a Mixed Physics and Regression Approach. <i>Journal of Engineering for Gas Turbines and Power</i> , <b>2010</b> , 132,                          | 1.7 | 15  |
| 23 | Iterative Tuning of Internal Model Controllers With Application to Air/Fuel Ratio Control. <i>IEEE Transactions on Control Systems Technology</i> , <b>2010</b> , 18, 177-184  | 4.8 | 36  |
| 22 | Introduction to Modeling and Control of Internal Combustion Engine Systems <b>2010</b> ,   |     | 272 |
| 21 | Torque-Assist Hybrid Electric Powertrain Sizing: From Optimal Control Towards a Sizing Law. <i>IEEE Transactions on Control Systems Technology</i> , <b>2010</b> , 18, 837-849 | 4.8 | 57  |
| 20 | Experiment-driven electrochemical modeling and systematic parameterization for a lithium-ion battery cell. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 5071-5080      | 8.9 | 166 |
| 19 | A Transmission-Actuated Energy-Management Strategy. <i>IEEE Transactions on Vehicular Technology</i> , <b>2010</b> , 59, 84-92   | 6.8 | 29  |
| 18 | Model-based distinction and quantification of capacity loss and rate capability fade in Li-ion batteries. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 7634-7638       | 8.9 | 89  |

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|----|---|------|-----|
| 17 | Adaptive internal model control with application to fueling control. <i>Control Engineering Practice</i> , <b>2010</b> , 18, 873-881  | 3.9  | 43  |
| 16 | Explicit optimal control policy and its practical application for hybrid electric powertrains. <i>Control Engineering Practice</i> , <b>2010</b> , 18, 1429-1439  | 3.9  | 68  |
| 15 | Predictive Reference Signal Generator for Hybrid Electric Vehicles. <i>IEEE Transactions on Vehicular Technology</i> , <b>2009</b> , 58, 4730-4740  | 6.8  | 115 |
| 14 | Gain-scheduled model-based feedback control of the air/fuel ratio in diesel engines. <i>Control Engineering Practice</i> , <b>2009</b> , 17, 1417-1425  | 3.9  | 38  |
| 13 | Optimal control of a fuel-fired auxiliary heater for an improved passenger vehicle warm-up. <i>Control Engineering Practice</i> , <b>2009</b> , 17, 664-675   | 3.9  | 6   |
| 12 | Automobiles of the future and the role of automatic control in those systems. <i>Annual Reviews in Control</i> , <b>2009</b> , 33, 1-10   | 10.3 | 23  |
| 11 | Is oxygen storage in three-way catalysts an equilibrium controlled process?. <i>Applied Catalysis B: Environmental</i> , <b>2009</b> , 91, 30-38  | 21.8 | 59  |
| 10 | Dynamic programming for hybrid pneumatic vehicles <b>2009</b> ,   |      | 7   |
| 9  | A generic dynamic programming Matlab function <b>2009</b> ,   |      | 238 |
| 8  | Thermoacoustic Instability Suppression by Gain-Delay and $\mathcal{H}_{\infty}$ Controllers Designed for Secondary Fuel Injection. <i>IEEE Transactions on Control Systems Technology</i> , <b>2009</b> , 17, 1028-1042 | 4.8  | 3   |
| 7  | Parameter Identification for a Low-Order Network Model of Combustion Instabilities. <i>International Journal of Spray and Combustion Dynamics</i> , <b>2009</b> , 1, 113-142  | 1.3  | 1   |
| 6  | Code-generator-based software package for defining and solving one-dimensional, dynamic, catalytic reactor models. <i>Computers and Chemical Engineering</i> , <b>2008</b> , 32, 2445-2454                              | 4    | 3   |
| 5  | Optimized Control of a Pressure-Wave Supercharger: A Model-Based Feedforward Approach. <i>IEEE Transactions on Control Systems Technology</i> , <b>2007</b> , 15, 457-464   | 4.8  | 2   |
| 4  | Optimal Power Control of Hybrid Fuel Cell Systems for an Accelerated System Warm-Up. <i>IEEE Transactions on Control Systems Technology</i> , <b>2007</b> , 15, 290-305   | 4.8  | 13  |
| 3  | Emission-controlled diesel engines. <i>MTZ Worldwide</i> , <b>2007</b> , 68, 27-31  | 0.3  | 2   |
| 2  | Improved dynamic performance of turbocharged SI engine power trains using clutch actuation. <i>Control Engineering Practice</i> , <b>2006</b> , 14, 363-373   | 3.9  | 12  |
| 1  | Operational aspects of a large PEFC stack under practical conditions. <i>Journal of Power Sources</i> , <b>2004</b> , 128, 208-217  | 8.9  | 114 |