

Giovanni Lutzemberger

List of Publications by Year in descending order

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Version: 2024-02-01

87
papers

1,180
citations

471061

17
h-index

500791

28
g-index

87
all docs

87
docs citations

87
times ranked

968
citing authors

#	ARTICLE	IF	CITATIONS
1	State of charge estimation of high power lithium iron phosphate cells. Journal of Power Sources, 2014, 249, 92-102.	4.0	79
2	Design of a hydraulic servo-actuation fed by a regenerative braking system. Applied Energy, 2017, 187, 96-115.	5.1	70
3	State-Of-Charge Evaluation Of Supercapacitors. Journal of Energy Storage, 2017, 11, 211-218.	3.9	60
4	Evaluation of an electric turbo compound system for SI engines: A numerical approach. Applied Energy, 2016, 162, 527-540.	5.1	59
5	Development of a battery real-time state of health diagnosis based on fast impedance measurements. Journal of Energy Storage, 2021, 38, 102566.	3.9	58
6	Stationary and on-board storage systems to enhance energy and cost efficiency of tramways. Journal of Power Sources, 2014, 264, 128-139.	4.0	51
7	Energy storage systems to exploit regenerative braking in DC railway systems: Different approaches to improve efficiency of modern high-speed trains. Journal of Energy Storage, 2018, 16, 269-279.	3.9	48
8	Experimentally-Determined Models for High-Power Lithium Batteries. , 0, , .		37
9	Stochastic sizing of isolated rural mini-grids, including effects of fuel procurement and operational strategies. Electric Power Systems Research, 2018, 160, 419-428.	2.1	37
10	Economic multi-objective approach to design off-grid microgrids: A support for business decision making. Renewable Energy, 2020, 159, 693-704.	4.3	37
11	Aging evaluation of high power lithium cells subjected to micro-cycles. Journal of Energy Storage, 2016, 6, 116-124.	3.9	33
12	Design of a Wireless Charging System for Online Battery Spectroscopy. Energies, 2021, 14, 218.	1.6	33
13	Hybridization of rubber tired gantry (RTG) cranes. Journal of Energy Storage, 2017, 12, 186-195.	3.9	30
14	Modelling and simulation of electric urban transportation systems with energy storage. , 2016, , .		28
15	Systematic approach in the hybridization of a hydraulic skid loader. Automation in Construction, 2015, 58, 144-154.	4.8	25
16	Online Identification of Thevenin Equivalent Circuit Model Parameters and Estimation State of Charge of Lithium-Ion Batteries. , 2018, , .		22
17	The possible impact of weather uncertainty on the Dynamic Thermal Rating of transmission power lines: A Monte Carlo error-based approach. Electric Power Systems Research, 2019, 170, 338-347.	2.1	22
18	Control strategies and real time operation of storage systems integrated with MV photovoltaic plants. , 2015, , .		21

#	ARTICLE	IF	CITATIONS
19	Coupling economic multi-objective optimization and multiple design options: A business-oriented approach to size an off-grid hybrid microgrid. International Journal of Electrical Power and Energy Systems, 2021, 127, 106686.	3.3	21
20	High power Lithium Batteries usage in hybrid vehicles. , 2010, , .		19
21	Optimal sizing of residential battery systems with multi-year dynamics and a novel rainflow-based model of storage degradation: An extensive Italian case study. Electric Power Systems Research, 2022, 203, 107675.	2.1	19
22	Use of electrochemical storage in substations to enhance energy and cost efficiency of tramways. , 2013, , .		18
23	Multi-Objective Optimization of Off-Grid Hybrid Renewable Energy Systems in Buildings with Prior Design-Variable Screening. Energies, 2019, 12, 3026.	1.6	17
24	Comparison of SC and high-power batteries for use in hybrid vehicles. , 0, , .		16
25	Experiences in Modeling and simulation of hydrogen fuel-cell based propulsion systems. , 2009, , .		16
26	Systematic development of series-hybrid bus through modelling. , 2010, , .		16
27	Luenberger-based State-Of-Charge evaluation and experimental validation with lithium cells. Journal of Energy Storage, 2020, 30, 101534.	3.9	16
28	Optimised operation of storage systems integrated with MV photovoltaic plants, considering the impact on the battery lifetime. Journal of Energy Storage, 2017, 12, 178-185.	3.9	15
29	Experiences of realisation and test of a fuel-cell based vehicle. , 2010, , .		13
30	Regenerative braking in high speed railway applications: Analysis by different simulation tools. , 2016, , .		12
31	Electrical Storage for the Enhancement of Energy and Cost Efficiency of Urban Railroad Systems. , 0, , .		12
32	Modelling and Simulation of Tramway Transportation Systems. Journal of Advanced Transportation, 2019, 2019, 1-8.	0.9	11
33	A novel human-machine interface for working machines operation. , 2013, , .		10
34	Cost effective storage for energy saving in feeding systems of tramways. , 2014, , .		9
35	Cyber-Physical Modelling of Railroad Vehicle Systems using Modelica Simulation Language. , 0, , .		9
36	Electrical lithium battery performance model for second life applications. , 2020, , .		8

#	ARTICLE	IF	CITATIONS
37	Impedance spectroscopy characterization of lithium batteries with different ages in second life application. , 2020, , .		8
38	Realisation and test of a fuel-cell based vehicle. , 2012, , .		7
39	Numerical Evaluation of an Electric Turbo Compound for SI Engines. , 2014, , .		7
40	Cycle life evaluation of lithium cells subjected to micro-cycles. , 2015, , .		7
41	Hybridisation of railcars for usage in non-electrified lines. , 2017, , .		7
42	Optimal sizing of a mini-grid in developing countries, taking into account the operation of an electrochemical storage and a fuel tank. , 2017, , .		7
43	Model parameters evaluation for NMC cells. , 2019, , .		7
44	Hybridisation of forklift trucks. IET Electrical Systems in Transportation, 2020, 10, 116-123.	1.5	7
45	An Electro-Thermal Model for LFP Cells: Calibration Procedure and Validation. Energies, 2022, 15, 2653.	1.6	7
46	Impact of a large fleet of EVs on the efficiency and reliability of an electric power system. , 2014, , .		6
47	Optimal storage operation in EV charging stations delivering grid services. , 2016, , .		6
48	Modelling 2Ã—25 kVâ€“50 Hz traction systems for power frequency studies. , 2017, , .		6
49	Experimental Analysis of NMC Lithium Cells Aging for Second Life Applications. , 2018, , .		6
50	Experimental study of hydrogen releases in the passenger compartment of a Piaggio Porter. International Journal of Hydrogen Energy, 2012, 37, 17470-17477.	3.8	5
51	Performance evaluation of a medium size diesel vehicle equipped with different electricâ€“turbo compound layouts. IET Electrical Systems in Transportation, 2018, 8, 71-79.	1.5	5
52	State-of-charge estimation based on model-adaptive Kalman filters. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2021, 235, 1272-1286.	0.7	5
53	Design and Realization of an Inductive Power Transfer for Shuttles in Automated Warehouses. Energies, 2021, 14, 5660.	1.6	5
54	Development of a hybrid skid loader through modelling. , 2012, , .		4

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55	Hybrid energy systems in mobility applications. , 2016, , .		4
56	Heuristic approaches to size microgrids: a methodology to compile multiple design options. , 2020, , .		4
57	Parametric analysis of 2 Å– 25ÅkV railway electric supply. IET Electrical Systems in Transportation, 2020, 10, 44-51.	1.5	4
58	On the Investigation of Energy Efficient Torque Distribution Strategies through a Comprehensive Powertrain Model. Sustainability, 2021, 13, 4549.	1.6	4
59	Luenberger Observer for Lithium Battery State-of-Charge Estimation. Lecture Notes in Electrical Engineering, 2020, , 655-667.	0.3	4
60	Full electric and hybrid series vans: Cost, performance and efficiency evaluation for different powertrain layout. , 2017, , .		3
61	Auxiliary Power Units for pleasure boats. , 2017, , .		3
62	Modelling and design of improved powertrain solutions for electric and hybrid buses. IET Electrical Systems in Transportation, 2017, 7, 287-294.	1.5	3
63	Automated people mover: a comparison between conventional and permanent magnets MAGLEV systems. IET Electrical Systems in Transportation, 2017, 7, 295-302.	1.5	3
64	Use of Modelica language to simulate electrified railway lines and trains. Software - Practice and Experience, 2019, 49, 1114.	2.5	3
65	Numerical Analysis of Electrically Assisted Turbocharger Application on Hybrid Vehicle. , 0, , .		3
66	Dynamic optimisation of price arbitrage techniques. , 2016, , .		2
67	Optimal sizing of a hybrid mini-grid considering the fuel procurement and a rolling horizon system operation. , 2017, , .		2
68	New approaches to simulate AC electrified railway systems. , 2017, , .		2
69	Simulation and experimental validation of a hybrid forklift truck. , 2019, , .		2
70	Electro-mechanical modelling and simulation of railroad systems. , 2019, , .		2
71	Experimental Evaluation of Aging Indicators for Lithiumâ€“Ironâ€“Phosphate Cells. Energies, 2021, 14, 4813.	1.6	2
72	Model Parameter Evaluation for Nickel-Manganese-Cobalt Cells: An Examination and Verification of Various Approaches. IEEE Industry Applications Magazine, 2021, 27, 29-36.	0.3	2

#	ARTICLE	IF	CITATIONS
73	Energy optimization of hybrid vehicles: A general, suboptimal analysis. , 2015, , .		1
74	Electromechanical dynamics of overhead electric power line conductors analysed through the Modelica language models. , 2016, , .		1
75	The AMLEV technology applied to low speed urban transportation systems. , 2017, , .		1
76	Use of electrochemical storage to enhance energy and cost efficiency of a railway node. , 2018, , .		1
77	Optimal design of off-grid power systems operated by a rolling-horizon strategy: a method to reduce computational requirements. , 2019, , .		1
78	Experimental analysis of LFP lithium cells aging. , 2020, , .		1
79	Experimental Analysis of Ni-MH High Power Cells. , 2020, , .		1
80	Development of an Energy Management System for AC/DC hybrid networks: from abstract functional requirements to the flexible tool. , 2021, , .		1
81	Modelling urban EV charging stations with PV generation and energy storage. , 2021, , .		1
82	Integrated design of an hydraulic servo-system fed by vehicle regenerative braking. , 2016, , .		0
83	Optimal operation of storage systems integrated with MV photovoltaic plants, using Jmodelica. , 2017, , .		0
84	Optimisation of hybrid vehicles operation with ON/OFF strategy. , 2019, , .		0
85	Use of AMT Transformers and Distributed Storage Systems to Enhance Electrical Feeding Systems for Tramways. Energies, 2020, 13, 4725.	1.6	0
86	Electro-mechanical modelling and simulation of 2Å–25 kV railway systems. , 2020, , .		0
87	Heavy-duty hybrid transportation systems: Design, modeling, and energy management. , 2022, , 313-336.		0