Michela Robba

List of Publications by Year
in descending order

61 papers	2,440 citations	236925 25 h-index	223800 46 g-index
62 all docs	62 docs citations	62 times ranked	2693 citing authors

#	Article	IF	Citations
1	Methods and tools to evaluate the availability of renewable energy sources. Renewable and Sustainable Energy Reviews, 2011, 15, 1182-1200.	16.4	329
2	Optimizing forest biomass exploitation for energy supply at a regional level. Biomass and Bioenergy, 2004, 26, 15-25.	5.7	177
3	Planning woody biomass logistics for energy production: A strategic decision model. Biomass and Bioenergy, 2009, 33, 372-383.	5.7	154
4	Modeling and optimization of a hybrid system for the energy supply of a â€œGreenâ€•building. Energy Conversion and Management, 2012, 64, 351-363.	9.2	149
5	An environmentally sustainable decision model for urban solid waste management. Waste Management, 2004, 24, 277-295.	7.4	138
6	A dynamic optimization-based architecture for polygeneration microgrids with tri-generation, renewables, storage systems and electrical vehicles. Energy Conversion and Management, 2015, 96, 511-520.	9.2	114
7	A decision support system for planning biomass-based energy production. Energy, 2009, 34, 362-369.	8.8	111
8	A mathematical model for the optimal operation of the University of Genoa Smart Polygeneration Microgrid: Evaluation of technical, economic and environmental performance indicators. Energy, 2014, 64, 912-922.	8.8	92
9	Solid waste management in urban areas. Resources, Conservation and Recycling, 2003, 37, 301-328.	10.8	91
10	The University of Genoa smart polygeneration microgrid test-bed facility: The overall system, the technologies and the research challenges. Renewable and Sustainable Energy Reviews, 2013, 18, 442-459.	16.4	91
11	A Dynamic Decision Model for the Real-Time Control of Hybrid Renewable Energy Production Systems. IEEE Systems Journal, 2010, 4, 323-333.	4.6	80
12	Multi-objective optimization of solid waste flows: Environmentally sustainable strategies for municipalities. Waste Management, 2008, 28, 2202-2212.	7.4	77
13	A dynamic optimization model for solid waste recycling. Waste Management, 2013, 33, 287-296.	7.4	70
14	Thermal analysis and performance optimization of a solar water heater flat plate collector: Application to TÃ©touan (Morocco). Renewable and Sustainable Energy Reviews, 2011, 15, 630-638.	16.4	67
15	An optimization model for electrical vehicles scheduling in a smart grid. Sustainable Energy, Grids and Networks, 2018, 14, 62-70.	3.9	49
16	Energy planning of sustainable districts: Towards the exploitation of small size intermittent renewables in urban areas. Applied Energy, 2018, 228, 2288-2297.	10.1	49
17	An Energy Management Platform for the Optimal Control of Active and Reactive Powers in Sustainable Microgrids. IEEE Transactions on Industry Applications, 2019, 55, 7146-7156.	4.9	44
18	A decision support system for the optimal exploitation of wind energy on regional scale. Renewable Energy, 2012, 37, 299-309.	8.9	36

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19	A pilot facility for analysis and simulation of smart microgrids feeding smart buildings. Renewable and Sustainable Energy Reviews, 2016, 58, 1247-1255.	16.4	35
20	Optimal Planning of Sustainable Buildings: Integration of Life Cycle Assessment and Optimization in a Decision Support System (DSS). Energies, 2016, 9, 490.	3.1	34
21	A Multilevel Approach for the Optimal Control of Distributed Energy Resources and Storage. IEEE Transactions on Smart Grid, 2014, 5, 2155-2162.	9.0	33
22	Identification and optimal control of an electrical storage system for microgrids with renewables. Sustainable Energy, Grids and Networks, 2019, 17, 100183.	3.9	32
23	Optimal Charging and Routing of Electric Vehicles With Power Constraints and Time-of-Use Energy Prices. IEEE Transactions on Vehicular Technology, 2020, 69, 14436-14447.	6.3	32
24	Data-Driven Photovoltaic Power Production Nowcasting and Forecasting for Polygeneration Microgrids. IEEE Systems Journal, 2018, 12, 2842-2853.	4.6	27
25	A Bilevel Approach for the Stochastic Optimal Operation of Interconnected Microgrids. IEEE Transactions on Automation Science and Engineering, 2017, 14, 482-493.	5.2	26
26	Decision models for sustainable groundwater planning and control. Control Engineering Practice, 2007, 15, 1013-1029.	5.5	25
27	An optimization algorithm for the operation planning of the University of Genoa smart polygeneration microgrid. , 2013, , .		23
28	An architecture for the optimal control of tertiary and secondary levels in small-size islanded microgrids. International Journal of Electrical Power and Energy Systems, 2018, 103, 75-88.	5.5	23
29	Economic and environmental performances quantification of the university of Genoa Smart Polygeneration Microgrid. , 2012, , .		22
30	Planning and management of sustainable microgrids: The test-bed facilities at the University of Genoa. , 2013, , .		15
31	A system of systems model for the control of the university of Genoa Smart Polygeneration Microgrid. , 2012, , .		14
32	A Building Energy Management System Based on an Equivalent Electric Circuit Model. Energies, 2020, 13, 1689.	3.1	14
33	Optimal Planning of Charging Stations in Coupled Transportation and Power Networks Based on User Equilibrium Conditions. IEEE Transactions on Automation Science and Engineering, 2022, 19, 48-59.	5.2	13
34	Distributed control for polygeneration microgrids: A Dynamic Market Mechanism approach. Control Engineering Practice, 2022, 121, 105052.	5.5	13
35	An algorithm for the optimal collection of wet waste. Waste Management, 2016, 48, 56-63.	7.4	12
36	Optimal Control of Multiple Microgrids and Buildings by an Aggregator. Energies, 2020, 13, 1058.	3.1	12

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37	Towards the Integration of Sustainable Transportation and Smart Grids: A Review on Electric Vehiclesâ€™ Management. Energies, 2022, 15, 4020.	3.1	12
38	A distributed approach to the Optimal Power Flow problem for unbalanced and mesh networks. IFAC-PapersOnLine, 2020, 53, 13287-13292.	0.9	11
39	Optimal Planning of Door-to-Door Multiple Materials Separated Waste Collection. IEEE Transactions on Automation Science and Engineering, 2016, 13, 1448-1457.	5.2	10
40	A Dynamic Market Mechanism for Combined Heat and Power Microgrid Energy Management. IFAC-PapersOnLine, 2017, 50, 10033-10039.	0.9	10
41	A simple device for sampling pond sediment. Aquaculture, 2006, 258, 650-654.	3.5	9
42	A dynamic decision model for the optimal use of forest biomass for energy production. Energy Systems, 2016, 7, 615-635.	3.0	8
43	An Optimization Model for Polygeneration Microgrids with Renewables, Electrical and Thermal Storage: Application to the Savona Campus. , 2018, , .		8
44	An optimization model for the sizing of the biomass plantsâ€™ supply chain. IFAC-PapersOnLine, 2018, 51, 114-119.	0.9	7
45	A Model Predictive Control Strategy for Distribution Grids: Voltage and Frequency Regulation for Islanded Mode Operation. Energies, 2020, 13, 2637.	3.1	7
46	A Distributed-Optimization-Based Architecture for Management of Interconnected Energy Hubs. IEEE Transactions on Control of Network Systems, 2022, 9, 1704-1716.	3.7	6
47	Optimal planning of the energy production mix in smart districts including renewable and cogeneration power plants. , 2016, , .		5
48	Optimal control of coastal aquifer pumping towards the sustainability of water supply and salinity. Sustainability of Water Quality and Ecology, 2015, 6, 88-100.	2.0	4
49	A model predictive control approach for the optimization of polygeneration microgrids and demand response strategies. , 2016, , .		4
50	Discrete event optimization of a vehicle charging station with multiple sockets. Discrete Event Dynamic Systems: Theory and Applications, 2021, 31, 219-249.	1.5	4
51	Optimal Control of Hybrid Systems and Renewable Energies. Energies, 2022, 15, 78.	3.1	3
52	Optimal control of active power flows in Smart Microgrids. , 2014, , .		2
53	A multi-objective Energy Management System for microgrids: minimization of costs, exergy in input, and emissions. , 2021, , .		2
54	A Multilevel Approach for the Optimal Control of Energy Systems Distributed over the Territory. , 2013, , .		1

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55	A multi-objective optimization tool for the daily management of sustainable smart microgrids: Case Study: the savona campus SPM and SEB facilities. , 2016, , .		1
56	A bi-level approach for the optimal planning of charging stations and electric vehicles traffic assignment. , 2020, , .		1
57	Optimal coordination of buildings and microgrids by an aggregator: a bi-level approach. IFAC-PapersOnLine, 2020, 53, 16587-16592.	0.9	1
58	Guest Editorial Special Section on Advances in Automation and Optimization for Sustainable Transportation and Energy Systems. IEEE Transactions on Automation Science and Engineering, 2022, 19, 3-6.	5.2	1
59	A Dynamic Model for Electrical Vehicles Interacting with Microgrids and Renewables. , 2013, , .		0
60	Decentralized generation in urban districts: Optimal planning considering uncertainties. , 2017, , .		0
61	Optimal Control of Smart Distributed Power and Energy Systems. Energies, 2022, 15, 3.	3.1	0