

Pierluigi Mancarella

List of Publications by Year in descending order

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206
papers

12,337
citations

34076

52
h-index

27389

106
g-index

210
all docs

210
docs citations

210
times ranked

7224
citing authors

#	ARTICLE	IF	CITATIONS
1	Virtual Inertia Response and Frequency Control Ancillary Services From Hydrogen Electrolyzers. IEEE Transactions on Power Systems, 2023, 38, 2447-2459.	4.6	18
2	Co-Optimizing Substation Hardening and Transmission Expansion Against Earthquakes: A Decision-Dependent Probability Approach. IEEE Transactions on Power Systems, 2023, 38, 2058-2070.	4.6	4
3	Modelling and Characterisation of Flexibility From Distributed Energy Resources. IEEE Transactions on Power Systems, 2022, 37, 38-50.	4.6	44
4	Iterative LP-Based Methods for the Multiperiod Optimal Electricity and Gas Flow Problem. IEEE Transactions on Power Systems, 2022, 37, 153-166.	4.6	9
5	An Exact Sequential Linear Programming Algorithm for the Optimal Power Flow Problem. IEEE Transactions on Power Systems, 2022, 37, 666-679.	4.6	26
6	Frequency Response From Solar PV: A Dynamic Equivalence Closed-Loop System Identification Approach. IEEE Systems Journal, 2022, 16, 713-722.	2.9	10
7	Modelling of gas network transient flows with multiple hydrogen injections and gas composition tracking. International Journal of Hydrogen Energy, 2022, 47, 2220-2233.	3.8	22
8	Quantifying the Impacts of Modelling Assumptions on Accuracy and Computational Efficiency for Integrated Water-Energy System Simulations Under Uncertain Climate. IEEE Transactions on Sustainable Energy, 2022, 13, 1370-1382.	5.9	4
9	Coordinated operation of electricity and gas-hydrogen systems with transient gas flow and hydrogen concentration tracking. Electric Power Systems Research, 2022, 211, 108499.	2.1	7
10	Aggregated flexibility from multiple power-to-gas units in integrated electricity-gas-hydrogen distribution systems. Electric Power Systems Research, 2022, 212, 108409.	2.1	16
11	Assessment of the Capacity Credit of Renewables and Storage in Multi-Area Power Systems. IEEE Transactions on Power Systems, 2021, 36, 2334-2344.	4.6	14
12	The Fragile Grid: The Physics and Economics of Security Services in Low-Carbon Power Systems. IEEE Power and Energy Magazine, 2021, 19, 79-88.	1.6	16
13	Power system stability in the transition to a low carbon grid: A techno-economic perspective on challenges and opportunities. Wiley Interdisciplinary Reviews: Energy and Environment, 2021, 10, e399.	1.9	19
14	Modelling and deploying multi-energy flexibility: The energy lattice framework. Advances in Applied Energy, 2021, 2, 100030.	6.6	29
15	Multi-energy liquid air energy storage: A novel solution for flexible operation of districts with thermal networks. Energy Conversion and Management, 2021, 238, 114161.	4.4	16
16	Comparative Studies on Cost, Reliability and Resilience of Off-Grid Energy Systems. , 2021, , .		0
17	An efficient multi-energy vector power flow modeling and solution approach with unified loop-free formulation for heat and gas hydraulic equations. , 2021, , .		0
18	Introduction: the mathematics of energy systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20190425.	1.6	2

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19	Energy-based stochastic MPC for integrated electricity-hydrogen VPP in real-time markets. <i>Electric Power Systems Research</i> , 2021, 195, 106738.	2.1	11
20	Integrated Techno-Economic Assessment of Large-Scale Green Hydrogen Production. , 2021, , .		0
21	Fast Frequency Response Provision from Large-Scale Hydrogen Electrolyzers Considering Stack Voltage-Current Nonlinearity. , 2021, , .		3
22	Fast Frequency Response From Utility-Scale Hydrogen Electrolyzers. <i>IEEE Transactions on Sustainable Energy</i> , 2021, 12, 1707-1717.	5.9	51
23	Grid and Market Services From the Edge: Using Operating Envelopes to Unlock Network-Aware Bottom-Up Flexibility. <i>IEEE Power and Energy Magazine</i> , 2021, 19, 52-62.	1.6	36
24	Liquid air energy storage (LAES): A review on technology state-of-the-art, integration pathways and future perspectives. <i>Advances in Applied Energy</i> , 2021, 3, 100047.	6.6	101
25	From Security to Resilience: Technical and Regulatory Options to Manage Extreme Events in Low-Carbon Grids. <i>IEEE Power and Energy Magazine</i> , 2021, 19, 67-75.	1.6	10
26	Co-Optimizing Virtual Power Plant Services Under Uncertainty: A Robust Scheduling and Receding Horizon Dispatch Approach. <i>IEEE Transactions on Power Systems</i> , 2021, 36, 3960-3972.	4.6	52
27	Integrated electricity and gas system modelling with hydrogen injections and gas composition tracking. <i>Applied Energy</i> , 2021, 303, 117598.	5.1	33
28	Simultaneous Provision of Dynamic Active and Reactive Power Response From Utility-Scale Battery Energy Storage Systems in Weak Grids. <i>IEEE Transactions on Power Systems</i> , 2021, 36, 5548-5557.	4.6	19
29	Online Security Assessment of Low-Inertia Power Systems: A Real-Time Frequency Stability Tool for the Australian South-West Interconnected System. , 2021, , .		3
30	Network-Aware Distributed Electricity Markets: A Techno-Economic Comparative Study. , 2021, , .		0
31	Techno-Economic Analysis of On-grid Transition: A Case Study of Remote Villages in Sarawak. , 2021, , .		1
32	Assessing the Flexibility of Electricity-Gas-Hydrogen Distribution Systems with P2G Units. , 2021, , .		4
33	Frequency Stability Supports from Battery Storage with Virtual Synchronous Machine Control. , 2021, , .		0
34	Quantifying the System-Level Resilience of Thermal Power Generation to Extreme Temperatures and Water Scarcity. <i>IEEE Systems Journal</i> , 2020, 14, 749-759.	2.9	14
35	Identifying Optimal Portfolios of Resilient Network Investments Against Natural Hazards, With Applications to Earthquakes. <i>IEEE Transactions on Power Systems</i> , 2020, 35, 1411-1421.	4.6	54
36	Two-stage stochastic sizing and packetized energy scheduling of BEV charging stations with quality of service constraints. <i>Applied Energy</i> , 2020, 260, 114262.	5.1	26

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37	Integrated techno-economic modeling, flexibility analysis, and business case assessment of an urban virtual power plant with multi-market co-optimization. <i>Applied Energy</i> , 2020, 259, 114142.	5.1	79
38	Online Convex Optimization of Multi-Energy Building-to-Grid Ancillary Services. <i>IEEE Transactions on Control Systems Technology</i> , 2020, 28, 2416-2431.	3.2	12
39	Electricity system resilience in a world of increased climate change and cybersecurity risk. <i>Electricity Journal</i> , 2020, 33, 106833.	1.3	20
40	Incorporating new power system security paradigms into low-carbon electricity markets. <i>Electricity Journal</i> , 2020, 33, 106837.	1.3	9
41	Optimization of multi-energy virtual power plants for providing multiple market and local network services. <i>Electric Power Systems Research</i> , 2020, 189, 106775.	2.1	54
42	Contribution to System Frequency Stability and Resilience from PV Plants: A Closed-loop System Identification Approach. , 2020, , .		1
43	Separation event-constrained optimal power flow to enhance resilience in low-inertia power systems. <i>Electric Power Systems Research</i> , 2020, 189, 106678.	2.1	15
44	Flexibility Characterisation from Thermal Inertia of Buildings at City Level: A Bottom-up Approach. , 2020, , .		3
45	Flexibility From Distributed Multienergy Systems. <i>Proceedings of the IEEE</i> , 2020, 108, 1496-1517.	16.4	72
46	Spatial and sectoral benefit distribution in water-energy system design. <i>Applied Energy</i> , 2020, 269, 114794.	5.1	24
47	Integrated Electricity-Heat-Gas Systems: Techno-Economic Modeling, Optimization, and Application to Multienergy Districts. <i>Proceedings of the IEEE</i> , 2020, 108, 1392-1410.	16.4	59
48	From Reliability to Resilience: Planning the Grid Against the Extremes. <i>IEEE Power and Energy Magazine</i> , 2020, 18, 41-53.	1.6	52
49	Risk and Resilience Assessment With Component Criticality Ranking of Electric Power Systems Subject to Earthquakes. <i>IEEE Systems Journal</i> , 2020, 14, 2837-2848.	2.9	52
50	Integrated techno-economic assessment of Liquid Air Energy Storage (LAES) under off-design conditions: Links between provision of market services and thermodynamic performance. <i>Applied Energy</i> , 2020, 262, 114589.	5.1	36
51	Multi-mode operation of a Liquid Air Energy Storage (LAES) plant providing energy arbitrage and reserve services - Analysis of optimal scheduling and sizing through MILP modelling with integrated thermodynamic performance. <i>Energy</i> , 2020, 200, 117500.	4.5	26
52	Effect of inertia heterogeneity on frequency dynamics of low-inertia power systems. <i>IET Generation, Transmission and Distribution</i> , 2019, 13, 2951-2958.	1.4	33
53	Application of Utility-Connected Battery Energy Storage System for Integrated Dynamic Services. , 2019, , .		9
54	Demand Response from an Integrated Electricity-Hydrogen Virtual Power Plant. , 2019, , .		3

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55	On Feasibility and Flexibility Operating Regions of Virtual Power Plants and TSO/DSO Interfaces. , 2019, , .		41
56	A Modelling Framework for a Virtual Power Plant with Multiple Energy Vectors Providing Multiple Services. , 2019, , .		4
57	Flexibility in Sustainable Electricity Systems: Multivector and Multisector Nexus Perspectives. IEEE Electrification Magazine, 2019, 7, 12-21.	1.8	9
58	Frequency Response Capabilities of Utility-scale Battery Energy Storage Systems, with Application to the August 2018 Separation Event in Australia. , 2019, , .		9
59	Adequacy Assessment of Renewables-Dominated Power Systems with Large-Scale Energy Storage. , 2019, , .		1
60	Possible Negative Interactions between Fast Frequency Response from Utility-scale Battery Storage and Interconnector Protection Schemes. , 2019, , .		2
61	Capacity Credit Evaluation Framework of Wind, Solar and Pumped Hydro Storage Considering Generation Adequacy and Flexibility. , 2019, , .		1
62	Increased Frequency and Voltage Interactions Affecting Frequency and Transient Stability in Networks with Large Penetration of Renewable Generation. , 2019, , .		0
63	Frequency Stability Provision From Battery Energy Storage System Considering Cascading Failure s with Applications to Separation Events in Australia. , 2019, , .		10
64	Spatial Risk Analysis of Power Systems Resilience During Extreme Events. Risk Analysis, 2019, 39, 195-211.	1.5	45
65	Building-to-grid flexibility: Modelling and assessment metrics for residential demand response from heat pump aggregations. Applied Energy, 2019, 233-234, 709-723.	5.1	79
66	Data-Driven Dynamic Probabilistic Reserve Sizing Based on Dynamic Bayesian Belief Networks. IEEE Transactions on Power Systems, 2019, 34, 2281-2291.	4.6	28
67	Flexibility in Multi-Energy Communities With Electrical and Thermal Storage: A Stochastic, Robust Approach for Multi-Service Demand Response. IEEE Transactions on Smart Grid, 2019, 10, 503-513.	6.2	145
68	Integrated electricity-heat-gas modelling and assessment, with applications to the Great Britain system. Part I: High-resolution spatial and temporal heat demand modelling. Energy, 2019, 184, 180-190.	4.5	27
69	Integrated electricity-heat-gas modelling and assessment, with applications to the Great Britain system. Part II: Transmission network analysis and low carbon technology and resilience case studies. Energy, 2019, 184, 191-203.	4.5	52
70	A transactive energy modelling and assessment framework for demand response business cases in smart distributed multi-energy systems. Energy, 2019, 184, 165-179.	4.5	49
71	A Graph-Based Loss Allocation Framework for Transactive Energy Markets in Unbalanced Radial Distribution Networks. IEEE Transactions on Power Systems, 2019, 34, 4109-4118.	4.6	67
72	Energy Systems Integration in Smart Districts: Robust Optimisation of Multi-Energy Flows in Integrated Electricity, Heat and Gas Networks. IEEE Transactions on Smart Grid, 2019, 10, 1122-1131.	6.2	157

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73	How much electrical energy storage do we need? A synthesis for the U.S., Europe, and Germany. <i>Journal of Cleaner Production</i> , 2018, 181, 449-459.	4.6	130
74	A General Model for Thermal Energy Storage in Combined Heat and Power Dispatch Considering Heat Transfer Constraints. <i>IEEE Transactions on Sustainable Energy</i> , 2018, 9, 1518-1528.	5.9	55
75	A multi-disciplinary analysis of UK grid mix scenarios with large-scale PV deployment. <i>Energy Policy</i> , 2018, 114, 51-62.	4.2	21
76	Integrated Approach to Assess the Resilience of Future Electricity Infrastructure Networks to Climate Hazards. <i>IEEE Systems Journal</i> , 2018, 12, 3169-3180.	2.9	57
77	Techno-economic and business case assessment of multi-energy microgrids with co-optimization of energy, reserve and reliability services. <i>Applied Energy</i> , 2018, 210, 896-913.	5.1	68
78	Integrated Dispatch Model for Combined Heat and Power Plant With Phase-Change Thermal Energy Storage Considering Heat Transfer Process. <i>IEEE Transactions on Sustainable Energy</i> , 2018, 9, 1234-1243.	5.9	48
79	Systemic modelling and integrated assessment of asset management strategies and staff constraints on distribution network reliability. <i>Electric Power Systems Research</i> , 2018, 155, 164-171.	2.1	11
80	Specialized Heuristic Algorithms for AC Transmission Expansion Planning Problem. , 2018, , .		0
81	System Strength and Weak Grids: Fundamentals, Challenges, and Mitigation Strategies. , 2018, , .		28
82	The Influence of Location of Distributed Energy Storage Systems on Primary Frequency Response of Low Inertia Power Systems. , 2018, , .		5
83	System-level assessment of reliability and resilience provision from microgrids. <i>Applied Energy</i> , 2018, 230, 374-392.	5.1	47
84	Frequency Response Constrained Economic Dispatch with Consideration of Generation Contingency Size. , 2018, , .		4
85	Arbitrage opportunities for distributed multi-energy systems in providing power system ancillary services. <i>Energy</i> , 2018, 161, 381-395.	4.5	33
86	Smart distribution networks, demand side response, and community energy systems: Field trial experiences and smart grid modeling advances in the United Kingdom. , 2018, , 275-311.		1
87	Heat Electrification: The Latest Research in Europe. <i>IEEE Power and Energy Magazine</i> , 2018, 16, 69-78.	1.6	22
88	Modeling and Evaluating the Resilience of Critical Electrical Power Infrastructure to Extreme Weather Events. <i>IEEE Systems Journal</i> , 2017, 11, 1733-1742.	2.9	392
89	Active Distribution System Management: A Dual-Horizon Scheduling Framework for DSO/TSO Interface Under Uncertainty. <i>IEEE Transactions on Smart Grid</i> , 2017, 8, 2186-2197.	6.2	142
90	Energy Return on Energy Invested (ERoEI) for photovoltaic solar systems in regions of moderate insolation: A comprehensive response. <i>Energy Policy</i> , 2017, 102, 377-384.	4.2	59

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91	Review and classification of barriers and enablers of demand response in the smart grid. Renewable and Sustainable Energy Reviews, 2017, 72, 57-72.	8.2	211
92	Metrics and Quantification of Operational and Infrastructure Resilience in Power Systems. IEEE Transactions on Power Systems, 2017, 32, 4732-4742.	4.6	458
93	Unlocking Flexibility: Integrated Optimization and Control of Multienergy Systems. IEEE Power and Energy Magazine, 2017, 15, 43-52.	1.6	96
94	Power Systems Resilience Assessment: Hardening and Smart Operational Enhancement Strategies. Proceedings of the IEEE, 2017, 105, 1202-1213.	16.4	339
95	Ten questions concerning smart districts. Building and Environment, 2017, 118, 362-376.	3.0	43
96	Power System Resilience to Extreme Weather: Fragility Modeling, Probabilistic Impact Assessment, and Adaptation Measures. IEEE Transactions on Power Systems, 2017, 32, 3747-3757.	4.6	394
97	PV-battery community energy systems: Economic, energy independence and network deferral analysis. , 2017, , .		10
98	Energy management: flexibility, risk and optimization. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20170052.	1.6	3
99	Exploiting electric heat pump flexibility for renewable generation matching. , 2017, , .		4
100	System level assessment of PV and energy storage: Application to the Great Britain power system. , 2017, , .		2
101	Integrated electricity-heat-gas network modelling for the evaluation of system resilience to extreme weather. , 2017, , .		9
102	A sequential programming method for multi-energy districts optimal power flow. , 2017, , .		5
103	Risk of cable overheating and premature ageing due to load control measures. , 2017, , .		0
104	Power-to-hydrogen and hydrogen-to-X pathways: Opportunities for next generation energy systems. , 2017, , .		8
105	Planning low-carbon electricity systems under uncertainty considering operational flexibility and smart grid technologies. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160305.	1.6	35
106	Modelling and valuing multi-energy flexibility from community energy systems. , 2017, , .		4
107	Mapping the frequency response adequacy of the Australian national electricity market. , 2017, , .		3
108	Seismic resilience assessment and adaptation of the Northern Chilean power system. , 2017, , .		10

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109	The role of power-to-transport via hydrogen and natural gas vehicles in decarbonising the power and transportation sector. , 2017, , .		5
110	System-Level Operational and Adequacy Impact Assessment of Photovoltaic and Distributed Energy Storage, with Consideration of Inertial Constraints, Dynamic Reserve and Interconnection Flexibility. Energies, 2017, 10, 989.	1.6	14
111	Economic analysis of multi-service provision from PV and battery based community energy systems. , 2017, , .		6
112	Techno-economic assessment of community energy solutions to network capacity issues. , 2017, , .		2
113	Operational Optimization of Multigeneration Systems. , 2017, , 365-419.		0
114	Application of time-limited ratings to underground cables to enable life extension of network assets. , 2016, , .		3
115	Sharing energy resources in distribution networks: An initial investigation through OPF studies. , 2016, , .		2
116	Distribution network support from multi-energy demand side response in smart districts. , 2016, , .		1
117	Distribution network capacity support from flexible smart multi-energy districts. , 2016, , .		3
118	Towards sustainable urban energy systems: High resolution modelling of electricity and heat demand profiles. , 2016, , .		7
119	Framework for capacity credit assessment of electrical energy storage and demand response. IET Generation, Transmission and Distribution, 2016, 10, 2267-2276.	1.4	64
120	Techno-economic and business case assessment of low carbon technologies in distributed multi-energy systems. Applied Energy, 2016, 167, 158-172.	5.1	54
121	Multi-phase assessment and adaptation of power systems resilience to natural hazards. Electric Power Systems Research, 2016, 136, 352-361.	2.1	161
122	Assessing the benefits of coordinated operation of aggregated distributed Multi-energy Generation. , 2016, , .		10
123	Modelling and assessment of business cases for smart multi-energy districts. , 2016, , .		8
124	Integrated electricity and heat active network management. , 2016, , .		3
125	Assessment of the impact of heating on integrated gas and electrical network flexibility. , 2016, , .		2
126	Flexible investment under uncertainty in smart distribution networks with demand side response: Assessment framework and practical implementation. Energy Policy, 2016, 97, 439-449.	4.2	44

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127	Regulatory capital and social trade-offs in planning of smart distribution networks with application to demand response solutions. <i>Electric Power Systems Research</i> , 2016, 141, 63-72.	2.1	15
128	Exploring flexibility of aggregated residential electric heat pumps. , 2016, , .		4
129	Reliability and risk assessment of post-contingency demand response in smart distribution networks. <i>Sustainable Energy, Grids and Networks</i> , 2016, 7, 1-12.	2.3	53
130	Flexible Distributed Multienergy Generation System Expansion Planning Under Uncertainty. <i>IEEE Transactions on Smart Grid</i> , 2016, 7, 348-357.	6.2	128
131	Distributed Software Infrastructure for General Purpose Services in Smart Grid. <i>IEEE Transactions on Smart Grid</i> , 2016, 7, 1156-1163.	6.2	42
132	Unified Unit Commitment Formulation and Fast Multi-Service LP Model for Flexibility Evaluation in Sustainable Power Systems. <i>IEEE Transactions on Sustainable Energy</i> , 2016, 7, 658-671.	5.9	50
133	Integrated Electrical and Gas Network Flexibility Assessment in Low-Carbon Multi-Energy Systems. <i>IEEE Transactions on Sustainable Energy</i> , 2016, 7, 718-731.	5.9	233
134	Boosting the Power Grid Resilience to Extreme Weather Events Using Defensive Islanding. <i>IEEE Transactions on Smart Grid</i> , 2016, 7, 2913-2922.	6.2	276
135	Storing renewables in the gas network: modelling of power–gas seasonal storage flexibility in low–carbon power systems. <i>IET Generation, Transmission and Distribution</i> , 2016, 10, 566-575.	1.4	155
136	Modelling, assessment and Sankey diagrams of integrated electricity-heat-gas networks in multi-vector district energy systems. <i>Applied Energy</i> , 2016, 167, 336-352.	5.1	229
137	EHP in low voltage networks: Understanding the effects of heat emitters and room temperatures. , 2015, , .		2
138	Techno-economic assessment of demand response aggregation under different market price conditions. , 2015, , .		0
139	Demand Response Contracts as Real Options: A Probabilistic Evaluation Framework Under Short-Term and Long-Term Uncertainties. <i>IEEE Transactions on Smart Grid</i> , 2015, , 1-1.	6.2	26
140	Business cases for electric heat pumps under different day-ahead price scenarios. , 2015, , .		3
141	A tool for integrated analysis of multi-vector district energy networks. , 2015, , .		3
142	System level cost and environmental performance of integrated energy systems: An assessment of low-carbon scenarios for the UK. , 2015, , .		8
143	Stochastic control and real options valuation of thermal storage-enabled demand response from flexible district energy systems. <i>Applied Energy</i> , 2015, 137, 823-831.	5.1	62
144	Automated Demand Response From Home Energy Management System Under Dynamic Pricing and Power and Comfort Constraints. <i>IEEE Transactions on Smart Grid</i> , 2015, 6, 1874-1883.	6.2	344

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145	Optimization Under Uncertainty of Thermal Storage-Based Flexible Demand Response With Quantification of Residential Users'™ Discomfort. IEEE Transactions on Smart Grid, 2015, 6, 2333-2342.	6.2	165
146	Modelling and assessment of the contribution of demand response and electrical energy storage to adequacy of supply. Sustainable Energy, Grids and Networks, 2015, 3, 12-23.	2.3	85
147	Influence of extreme weather and climate change on the resilience of power systems: Impacts and possible mitigation strategies. Electric Power Systems Research, 2015, 127, 259-270.	2.1	499
148	The Grid: Stronger, Bigger, Smarter?: Presenting a Conceptual Framework of Power System Resilience. IEEE Power and Energy Magazine, 2015, 13, 58-66.	1.6	489
149	Electrical network capacity support from demand side response: Techno-economic assessment of potential business cases for small commercial and residential end-users. Energy Policy, 2015, 82, 222-232.	4.2	66
150	Assessment of the resilience of transmission networks to extreme wind events. , 2015, , .		25
151	Operational resilience assessment of power systems under extreme weather and loading conditions. , 2015, , .		19
152	Integrated Modeling and Assessment of the Operational Impact of Power-to-Gas (P2G) on Electrical and Gas Transmission Networks. IEEE Transactions on Sustainable Energy, 2015, 6, 1234-1244.	5.9	438
153	Microgrid Evolution Roadmap. , 2015, , .		98
154	High resolution modelling of multi-energy domestic demand profiles. Applied Energy, 2015, 137, 193-210.	5.1	97
155	Reliability evaluation of demand response to increase distribution network utilisation. , 2014, , .		16
156	Distribution network reinforcement planning considering demand response support. , 2014, , .		15
157	Generation adequacy in wind rich power systems: Comparison of analytical and simulation approaches. , 2014, , .		7
158	Integrated electrical and gas network modelling for assessment of different power-and-heat options. , 2014, , .		9
159	Techno-economic assessment of flexible combined heat and power plant with Carbon Capture and Storage. , 2014, , .		1
160	Modelling of household electro-thermal technologies for demand response applications. , 2014, , .		10
161	MES (multi-energy systems): An overview of concepts and evaluation models. Energy, 2014, 65, 1-17.	4.5	1,030
162	A short-term load forecasting model for demand response applications. , 2014, , .		30

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163	Strategic techno-economic assessment of heat network options for distributed energy systems in the UK. Energy, 2014, 75, 182-193.	4.5	19
164	Probabilistic modeling and assessment of the impact of electric heat pumps on low voltage distribution networks. Applied Energy, 2014, 127, 249-266.	5.1	77
165	Techno-economic and environmental modelling and optimization of flexible distributed multi-generation options. Energy, 2014, 71, 516-533.	4.5	118
166	Modelling and assessment of the techno-economic and environmental performance of flexible Multi-Generation systems. , 2014, , .		2
167	Decentralized Participation of Flexible Demand in Electricity Marketsâ€™Part II: Application With Electric Vehicles and Heat Pump Systems. IEEE Transactions on Power Systems, 2013, 28, 3667-3674.	4.6	133
168	Real-Time Demand Response From Energy Shifting in Distributed Multi-Generation. IEEE Transactions on Smart Grid, 2013, 4, 1928-1938.	6.2	151
169	A real options assessment of operational flexibility in district energy systems. , 2013, , .		7
170	Integrated energy and ancillary services provision in multi-energy systems. , 2013, , .		24
171	Participation of electric heat pump resources in electricity markets under uncertainty. , 2013, , .		4
172	Physical modeling of electro-thermal domestic heating systems with quantification of economic and environmental costs. , 2013, , .		13
173	Low-carbon LV networks: Challenges for planning and operation. , 2012, , .		15
174	Operational Optimization of Multigeneration Systems. , 2012, , 1-56.		4
175	Smart Multi-Energy Grids: Concepts, benefits and challenges. , 2012, , .		26
176	Learning from residential load data: Impacts on LV network planning and operation. , 2012, , .		12
177	Distributed multi-generation options to increase environmental efficiency in smart cities. , 2012, , .		17
178	Optimal Operational Strategies for CO2 Emission Reduction in Sustainable Energy Systems. Energy Systems, 2012, , 167-203.	0.5	0
179	Decentralized, agent-mediated participation of flexible thermal loads in electricity markets. , 2011, , .		9
180	Optimization of operating and investment costs of active management deployment in distribution networks. , 2011, , .		3

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181	Evaluation of the impact of electric heat pumps and distributed CHP on LV networks. , 2011, , .		26
182	Probabilistic Modeling and Simulation of Transmission Line Temperatures Under Fluctuating Power Flows. IEEE Transactions on Power Delivery, 2011, 26, 2235-2243.	2.9	35
183	Closed loop price signal based market operation within Microgrids. European Transactions on Electrical Power, 2011, 21, 1310-1326.	1.0	10
184	A multi-objective optimization approach for assessment of technical, commercial and environmental performance of microgrids. European Transactions on Electrical Power, 2011, 21, 1269-1288.	1.0	30
185	Statistical appraisal of economic design strategies of LV distribution networks. Electric Power Systems Research, 2011, 81, 1363-1372.	2.1	35
186	Cogeneration planning under uncertainty. Applied Energy, 2011, 88, 1059-1067.	5.1	65
187	Cogeneration planning under uncertainty. Part II: Decision theory-based assessment of planning alternatives. Applied Energy, 2011, 88, 1075-1083.	5.1	56
188	Optimal operation of a microturbine cluster with partial-load efficiency and emission characterization. , 2009, , .		18
189	Cogeneration systems with electric heat pumps: Energy-shifting properties and equivalent plant modelling. Energy Conversion and Management, 2009, 50, 1991-1999.	4.4	73
190	Matrix modelling of small-scale trigeneration systems and application to operational optimization. Energy, 2009, 34, 261-273.	4.5	191
191	Distributed multi-generation: A comprehensive view. Renewable and Sustainable Energy Reviews, 2009, 13, 535-551.	8.2	609
192	Global and local emission impact assessment of distributed cogeneration systems with partial-load models. Applied Energy, 2009, 86, 2096-2106.	5.1	106
193	Assessment of the greenhouse gas emissions from cogeneration and trigeneration systems. Part I: Models and indicators. Energy, 2008, 33, 410-417.	4.5	171
194	Assessment of the greenhouse gas emissions from cogeneration and trigeneration systems. Part II: Analysis techniques and application cases. Energy, 2008, 33, 418-430.	4.5	121
195	A unified model for energy and environmental performance assessment of natural gas-fueled poly-generation systems. Energy Conversion and Management, 2008, 49, 2069-2077.	4.4	65
196	Emission characterization and evaluation of natural gas-fueled cogeneration microturbines and internal combustion engines. Energy Conversion and Management, 2008, 49, 2900-2909.	4.4	89
197	Environmental sustainability of distributed cogeneration systems. , 2008, , .		4
198	Evaluation of multi-generation alternatives: an approach based on load transformations. , 2008, , .		3

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