

# Pierluigi Mancarella

## List of Publications by Year in descending order

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Version: 2024-02-01

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	MES (multi-energy systems): An overview of concepts and evaluation models. <i>Energy</i> , 2014, 65, 1-17.	4.5	1,030
2	Distributed multi-generation: A comprehensive view. <i>Renewable and Sustainable Energy Reviews</i> , 2009, 13, 535-551.	8.2	609
3	Influence of extreme weather and climate change on the resilience of power systems: Impacts and possible mitigation strategies. <i>Electric Power Systems Research</i> , 2015, 127, 259-270.	2.1	499
4	The Grid: Stronger, Bigger, Smarter?: Presenting a Conceptual Framework of Power System Resilience. <i>IEEE Power and Energy Magazine</i> , 2015, 13, 58-66.	1.6	489
5	Metrics and Quantification of Operational and Infrastructure Resilience in Power Systems. <i>IEEE Transactions on Power Systems</i> , 2017, 32, 4732-4742.	4.6	458
6	Integrated Modeling and Assessment of the Operational Impact of Power-to-Gas (P2G) on Electrical and Gas Transmission Networks. <i>IEEE Transactions on Sustainable Energy</i> , 2015, 6, 1234-1244.	5.9	438
7	Power System Resilience to Extreme Weather: Fragility Modeling, Probabilistic Impact Assessment, and Adaptation Measures. <i>IEEE Transactions on Power Systems</i> , 2017, 32, 3747-3757.	4.6	394
8	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
9	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
10	Power Systems Resilience Assessment: Hardening and Smart Operational Enhancement Strategies. <i>Proceedings of the IEEE</i> , 2017, 105, 1202-1213.	16.4	339
11	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
12	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
13	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
14	Review and classification of barriers and enablers of demand response in the smart grid. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 72, 57-72.	8.2	211
15	Matrix modelling of small-scale trigeneration systems and application to operational optimization. <i>Energy</i> , 2009, 34, 261-273.	4.5	191
16	Assessment of the greenhouse gas emissions from cogeneration and trigeneration systems. Part I: Models and indicators. <i>Energy</i> , 2008, 33, 410-417.	4.5	171
17	Optimization Under Uncertainty of Thermal Storage-Based Flexible Demand Response With Quantification of Residential Users'™ Discomfort. <i>IEEE Transactions on Smart Grid</i> , 2015, 6, 2333-2342.	6.2	165
18	Multi-phase assessment and adaptation of power systems resilience to natural hazards. <i>Electric Power Systems Research</i> , 2016, 136, 352-361.	2.1	161

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19	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
20	Storing renewables in the gas network: modelling of power-to-gas seasonal storage flexibility in low-carbon power systems. IET Generation, Transmission and Distribution, 2016, 10, 566-575.	1.4	155
21	Real-Time Demand Response From Energy Shifting in Distributed Multi-Generation. IEEE Transactions on Smart Grid, 2013, 4, 1928-1938.	6.2	151
22	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
23	Active Distribution System Management: A Dual-Horizon Scheduling Framework for DSO/TSO Interface Under Uncertainty. IEEE Transactions on Smart Grid, 2017, 8, 2186-2197.	6.2	142
24	Decentralized Participation of Flexible Demand in Electricity Markets—Part II: Application With Electric Vehicles and Heat Pump Systems. IEEE Transactions on Power Systems, 2013, 28, 3667-3674.	4.6	133
25	How much electrical energy storage do we need? A synthesis for the U.S., Europe, and Germany. Journal of Cleaner Production, 2018, 181, 449-459.	4.6	130
26	Flexible Distributed Multienergy Generation System Expansion Planning Under Uncertainty. IEEE Transactions on Smart Grid, 2016, 7, 348-357.	6.2	128
27	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
28	Techno-economic and environmental modelling and optimization of flexible distributed multi-generation options. Energy, 2014, 71, 516-533.	4.5	118
29	Global and local emission impact assessment of distributed cogeneration systems with partial-load models. Applied Energy, 2009, 86, 2096-2106.	5.1	106
30	Trigeneration primary energy saving evaluation for energy planning and policy development. Energy Policy, 2007, 35, 6132-6144.	4.2	102
31	Liquid air energy storage (LAES): A review on technology state-of-the-art, integration pathways and future perspectives. Advances in Applied Energy, 2021, 3, 100047.	6.6	101
32	Microgrid Evolution Roadmap. , 2015, , .		98
33	High resolution modelling of multi-energy domestic demand profiles. Applied Energy, 2015, 137, 193-210.	5.1	97
34	Unlocking Flexibility: Integrated Optimization and Control of Multienergy Systems. IEEE Power and Energy Magazine, 2017, 15, 43-52.	1.6	96
35	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
36	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

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37	Building-to-grid flexibility: Modelling and assessment metrics for residential demand response from heat pump aggregations. <i>Applied Energy</i> , 2019, 233-234, 709-723.	5.1	79
38	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
39	Probabilistic modeling and assessment of the impact of electric heat pumps on low voltage distribution networks. <i>Applied Energy</i> , 2014, 127, 249-266.	5.1	77
40	Cogeneration systems with electric heat pumps: Energy-shifting properties and equivalent plant modelling. <i>Energy Conversion and Management</i> , 2009, 50, 1991-1999.	4.4	73
41	Flexibility From Distributed Multienergy Systems. <i>Proceedings of the IEEE</i> , 2020, 108, 1496-1517.	16.4	72
42	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
43	A Graph-Based Loss Allocation Framework for Transactive Energy Markets in Unbalanced Radial Distribution Networks. <i>IEEE Transactions on Power Systems</i> , 2019, 34, 4109-4118.	4.6	67
44	Electrical network capacity support from demand side response: Techno-economic assessment of potential business cases for small commercial and residential end-users. <i>Energy Policy</i> , 2015, 82, 222-232.	4.2	66
45	A unified model for energy and environmental performance assessment of natural gas-fueled poly-generation systems. <i>Energy Conversion and Management</i> , 2008, 49, 2069-2077.	4.4	65
46	Cogeneration planning under uncertainty. <i>Applied Energy</i> , 2011, 88, 1059-1067.	5.1	65
47	Framework for capacity credit assessment of electrical energy storage and demand response. <i>IET Generation, Transmission and Distribution</i> , 2016, 10, 2267-2276.	1.4	64
48	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
49	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
50	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
51	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
52	Cogeneration planning under uncertainty. Part II: Decision theory-based assessment of planning alternatives. <i>Applied Energy</i> , 2011, 88, 1075-1083.	5.1	56
53	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
54	Techno-economic and business case assessment of low carbon technologies in distributed multi-energy systems. <i>Applied Energy</i> , 2016, 167, 158-172.	5.1	54

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55	Identifying Optimal Portfolios of Resilient Network Investments Against Natural Hazards, With Applications to Earthquakes. IEEE Transactions on Power Systems, 2020, 35, 1411-1421.	4.6	54
56	Optimization of multi-energy virtual power plants for providing multiple market and local network services. Electric Power Systems Research, 2020, 189, 106775.	2.1	54
57	Reliability and risk assessment of post-contingency demand response in smart distribution networks. Sustainable Energy, Grids and Networks, 2016, 7, 1-12.	2.3	53
58	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
59	From Reliability to Resilience: Planning the Grid Against the Extremes. IEEE Power and Energy Magazine, 2020, 18, 41-53.	1.6	52
60	Risk and Resilience Assessment With Component Criticality Ranking of Electric Power Systems Subject to Earthquakes. IEEE Systems Journal, 2020, 14, 2837-2848.	2.9	52
61	Co-Optimizing Virtual Power Plant Services Under Uncertainty: A Robust Scheduling and Receding Horizon Dispatch Approach. IEEE Transactions on Power Systems, 2021, 36, 3960-3972.	4.6	52
62	Fast Frequency Response From Utility-Scale Hydrogen Electrolyzers. IEEE Transactions on Sustainable Energy, 2021, 12, 1707-1717.	5.9	51
63	Unified Unit Commitment Formulation and Fast Multi-Service LP Model for Flexibility Evaluation in Sustainable Power Systems. IEEE Transactions on Sustainable Energy, 2016, 7, 658-671.	5.9	50
64	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
65	Integrated Dispatch Model for Combined Heat and Power Plant With Phase-Change Thermal Energy Storage Considering Heat Transfer Process. IEEE Transactions on Sustainable Energy, 2018, 9, 1234-1243.	5.9	48
66	System-level assessment of reliability and resilience provision from microgrids. Applied Energy, 2018, 230, 374-392.	5.1	47
67	Spatial Risk Analysis of Power Systems Resilience During Extreme Events. Risk Analysis, 2019, 39, 195-211.	1.5	45
68	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
69	Modelling and Characterisation of Flexibility From Distributed Energy Resources. IEEE Transactions on Power Systems, 2022, 37, 38-50.	4.6	44
70	Ten questions concerning smart districts. Building and Environment, 2017, 118, 362-376.	3.0	43
71	Distributed Software Infrastructure for General Purpose Services in Smart Grid. IEEE Transactions on Smart Grid, 2016, 7, 1156-1163.	6.2	42
72	On Feasibility and Flexibility Operating Regions of Virtual Power Plants and TSO/DSO Interfaces. , 2019, , .		41

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73	Integrated techno-economic assessment of Liquid Air Energy Storage (LAES) under off-design conditions: Links between provision of market services and thermodynamic performance. Applied Energy, 2020, 262, 114589.	5.1	36
74	Grid and Market Services From the Edge: Using Operating Envelopes to Unlock Network-Aware Bottom-Up Flexibility. IEEE Power and Energy Magazine, 2021, 19, 52-62.	1.6	36
75	Probabilistic Modeling and Simulation of Transmission Line Temperatures Under Fluctuating Power Flows. IEEE Transactions on Power Delivery, 2011, 26, 2235-2243.	2.9	35
76	Statistical appraisal of economic design strategies of LV distribution networks. Electric Power Systems Research, 2011, 81, 1363-1372.	2.1	35
77	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
78	Arbitrage opportunities for distributed multi-energy systems in providing power system ancillary services. Energy, 2018, 161, 381-395.	4.5	33
79	Effect of inertia heterogeneity on frequency dynamics of low-inertia power systems. IET Generation, Transmission and Distribution, 2019, 13, 2951-2958.	1.4	33
80	Integrated electricity and gas system modelling with hydrogen injections and gas composition tracking. Applied Energy, 2021, 303, 117598.	5.1	33
81	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
82	A short-term load forecasting model for demand response applications. , 2014, , .		30
83	Modelling and deploying multi-energy flexibility: The energy lattice framework. Advances in Applied Energy, 2021, 2, 100030.	6.6	29
84	System Strength and Weak Grids: Fundamentals, Challenges, and Mitigation Strategies. , 2018, , .		28
85	Data-Driven Dynamic Probabilistic Reserve Sizing Based on Dynamic Bayesian Belief Networks. IEEE Transactions on Power Systems, 2019, 34, 2281-2291.	4.6	28
86	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
87	Evaluation of the impact of electric heat pumps and distributed CHP on LV networks. , 2011, , .		26
88	Smart Multi-Energy Grids: Concepts, benefits and challenges. , 2012, , .		26
89	Demand Response Contracts as Real Options: A Probabilistic Evaluation Framework Under Short-Term and Long-Term Uncertainties. IEEE Transactions on Smart Grid, 2015, , 1-1.	6.2	26
90	Two-stage stochastic sizing and packetized energy scheduling of BEV charging stations with quality of service constraints. Applied Energy, 2020, 260, 114262.	5.1	26

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91	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
92	An Exact Sequential Linear Programming Algorithm for the Optimal Power Flow Problem. <i>IEEE Transactions on Power Systems</i> , 2022, 37, 666-679.	4.6	26
93	Assessment of the resilience of transmission networks to extreme wind events. , 2015, , .		25
94	Integrated energy and ancillary services provision in multi-energy systems. , 2013, , .		24
95	Spatial and sectoral benefit distribution in water-energy system design. <i>Applied Energy</i> , 2020, 269, 114794.	5.1	24
96	Heat Electrification: The Latest Research in Europe. <i>IEEE Power and Energy Magazine</i> , 2018, 16, 69-78.	1.6	22
97	Modelling of gas network transient flows with multiple hydrogen injections and gas composition tracking. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 2220-2233.	3.8	22
98	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
99	Electricity system resilience in a world of increased climate change and cybersecurity risk. <i>Electricity Journal</i> , 2020, 33, 106833.	1.3	20
100	Strategic techno-economic assessment of heat network options for distributed energy systems in the UK. <i>Energy</i> , 2014, 75, 182-193.	4.5	19
101	Operational resilience assessment of power systems under extreme weather and loading conditions. , 2015, , .		19
102	Power system stability in the transition to a low carbon grid: A techno-economic perspective on challenges and opportunities. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2021, 10, e399.	1.9	19
103	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
104	Assessment of the Emissions due to Cogeneration Microturbines under Different Operation Modes. , 2007, , .		18
105	Optimal operation of a microturbine cluster with partial-load efficiency and emission characterization. , 2009, , .		18
106	Virtual Inertia Response and Frequency Control Ancillary Services From Hydrogen Electrolyzers. <i>IEEE Transactions on Power Systems</i> , 2023, 38, 2447-2459.	4.6	18
107	Distributed multi-generation options to increase environmental efficiency in smart cities. , 2012, , .		17
108	Reliability evaluation of demand response to increase distribution network utilisation. , 2014, , .		16

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109	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
110	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
111	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
112	Low-carbon LV networks: Challenges for planning and operation. , 2012, , .		15
113	Distribution network reinforcement planning considering demand response support. , 2014, , .		15
114	Regulatory capital and social trade-offs in planning of smart distribution networks with application to demand response solutions. Electric Power Systems Research, 2016, 141, 63-72.	2.1	15
115	Separation event-constrained optimal power flow to enhance resilience in low-inertia power systems. Electric Power Systems Research, 2020, 189, 106678.	2.1	15
116	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
117	Quantifying the System-Level Resilience of Thermal Power Generation to Extreme Temperatures and Water Scarcity. IEEE Systems Journal, 2020, 14, 749-759.	2.9	14
118	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
119	Physical modeling of electro-thermal domestic heating systems with quantification of economic and environmental costs. , 2013, , .		13
120	Learning from residential load data: Impacts on LV network planning and operation. , 2012, , .		12
121	Online Convex Optimization of Multi-Energy Building-to-Grid Ancillary Services. IEEE Transactions on Control Systems Technology, 2020, 28, 2416-2431.	3.2	12
122	Systemic modelling and integrated assessment of asset management strategies and staff constraints on distribution network reliability. Electric Power Systems Research, 2018, 155, 164-171.	2.1	11
123	Energy-based stochastic MPC for integrated electricity-hydrogen VPP in real-time markets. Electric Power Systems Research, 2021, 195, 106738.	2.1	11
124	Closed loop price signal based market operation within Microgrids. European Transactions on Electrical Power, 2011, 21, 1310-1326.	1.0	10
125	Modelling of household electro-thermal technologies for demand response applications. , 2014, , .		10
126	Assessing the benefits of coordinated operation of aggregated distributed Multi-energy Generation. , 2016, , .		10



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127	PV-battery community energy systems: Economic, energy independence and network deferral analysis. , 2017, , .		10
128	Seismic resilience assessment and adaptation of the Northern Chilean power system. , 2017, , .		10
129	Frequency Stability Provision From Battery Energy Storage System Considering Cascading Failure s with Applications to Separation Events in Australia. , 2019, , .		10
130	From Security to Resilience: Technical and Regulatory Options to Manage Extreme Events in Low-Carbon Grids. IEEE Power and Energy Magazine, 2021, 19, 67-75.	1.6	10
131	Frequency Response From Solar PV: A Dynamic Equivalence Closed-Loop System Identification Approach. IEEE Systems Journal, 2022, 16, 713-722.	2.9	10
132	Decentralized, agent-mediated participation of flexible thermal loads in electricity markets. , 2011, , .		9
133	Integrated electrical and gas network modelling for assessment of different power-and-heat options. , 2014, , .		9
134	Integrated electricity-heat-gas network modelling for the evaluation of system resilience to extreme weather. , 2017, , .		9
135	Application of Utility-Connected Battery Energy Storage System for Integrated Dynamic Services. , 2019, , .		9
136	Flexibility in Sustainable Electricity Systems: Multivector and Multisector Nexus Perspectives. IEEE Electrification Magazine, 2019, 7, 12-21.	1.8	9
137	Frequency Response Capabilities of Utility-scale Battery Energy Storage Systems, with Application to the August 2018 Separation Event in Australia. , 2019, , .		9
138	Incorporating new power system security paradigms into low-carbon electricity markets. Electricity Journal, 2020, 33, 106837.	1.3	9
139	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
140	Emission Assessment of Distributed Generation in Urban Areas. , 2007, , .		8
141	System level cost and environmental performance of integrated energy systems: An assessment of low-carbon scenarios for the UK. , 2015, , .		8
142	Modelling and assessment of business cases for smart multi-energy districts. , 2016, , .		8
143	Power-to-hydrogen and hydrogen-to-X pathways: Opportunities for next generation energy systems. , 2017, , .		8
144	Enhanced Energy Saving Performance in Composite Trigeneration Systems. , 2007, , .		7

#	ARTICLE	IF	CITATIONS
145	Beyond the Electricity-only Production: Towards a Distributed Multi-Generation World. , 2007, , .		7
146	A real options assessment of operational flexibility in district energy systems. , 2013, , .		7
147	Generation adequacy in wind rich power systems: Comparison of analytical and simulation approaches. , 2014, , .		7
148	Towards sustainable urban energy systems: High resolution modelling of electricity and heat demand profiles. , 2016, , .		7
149	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
150	Economic analysis of multi-service provision from PV and battery based community energy systems. , 2017, , .		6
151	Exploiting Small-scale Cogeneration in Energy-related Markets. , 2007, , .		5
152	A sequential programming method for multi-energy districts optimal power flow. , 2017, , .		5
153	The role of power-to-transport via hydrogen and natural gas vehicles in decarbonising the power and transportation sector. , 2017, , .		5
154	The Influence of Location of Distributed Energy Storage Systems on Primary Frequency Response of Low Inertia Power Systems. , 2018, , .		5
155	A Decision Theory Approach to Cogeneration Planning in the Presence of Uncertainties. , 2007, , .		4
156	Environmental sustainability of distributed cogeneration systems. , 2008, , .		4
157	Operational Optimization of Multigeneration Systems. , 2012, , 1-56.		4
158	Participation of electric heat pump resources in electricity markets under uncertainty. , 2013, , .		4
159	Exploring flexibility of aggregated residential electric heat pumps. , 2016, , .		4
160	Exploiting electric heat pump flexibility for renewable generation matching. , 2017, , .		4
161	Modelling and valuing multi-energy flexibility from community energy systems. , 2017, , .		4
162	Frequency Response Constrained Economic Dispatch with Consideration of Generation Contingency Size. , 2018, , .		4

#	ARTICLE	IF	CITATIONS
163	A Modelling Framework for a Virtual Power Plant with Multiple Energy Vectors Providing Multiple Services. , 2019, , .		4
164	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
165	Assessing the Flexibility of Electricity-Gas-Hydrogen Distribution Systems with P2G Units. , 2021, , .		4
166	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
167	Evaluation of multi-generation alternatives: an approach based on load transformations. , 2008, , .		3
168	Optimization of operating and investment costs of active management deployment in distribution networks. , 2011, , .		3
169	Business cases for electric heat pumps under different day-ahead price scenarios. , 2015, , .		3
170	A tool for integrated analysis of multi-vector district energy networks. , 2015, , .		3
171	Application of time-limited ratings to underground cables to enable life extension of network assets. , 2016, , .		3
172	Distribution network capacity support from flexible smart multi-energy districts. , 2016, , .		3
173	Integrated electricity and heat active network management. , 2016, , .		3
174	Energy management: flexibility, risk and optimization. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20170052.	1.6	3
175	Mapping the frequency response adequacy of the Australian national electricity market. , 2017, , .		3
176	Demand Response from an Integrated Electricity-Hydrogen Virtual Power Plant. , 2019, , .		3
177	Flexibility Characterisation from Thermal Inertia of Buildings at City Level: A Bottom-up Approach. , 2020, , .		3
178	Fast Frequency Response Provision from Large-Scale Hydrogen Electrolyzers Considering Stack Voltage-Current Nonlinearity. , 2021, , .		3
179	Online Security Assessment of Low-Inertia Power Systems: A Real-Time Frequency Stability Tool for the Australian South-West Interconnected System. , 2021, , .		3
180	Modelling and assessment of the techno-economic and environmental performance of flexible Multi-Generation systems. , 2014, , .		2

#	ARTICLE	IF	CITATIONS
181	EHP in low voltage networks: Understanding the effects of heat emitters and room temperatures. , 2015, , .		2
182	Sharing energy resources in distribution networks: An initial investigation through OPF studies. , 2016, , .		2
183	Assessment of the impact of heating on integrated gas and electrical network flexibility. , 2016, , .		2
184	System level assessment of PV and energy storage: Application to the Great Britain power system. , 2017, , .		2
185	Techno-economic assessment of community energy solutions to network capacity issues. , 2017, , .		2
186	Possible Negative Interactions between Fast Frequency Response from Utility-scale Battery Storage and Interconnector Protection Schemes. , 2019, , .		2
187	Introduction: the mathematics of energy systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20190425.	1.6	2
188	Techno-economic assessment of flexible combined heat and power plant with Carbon Capture and Storage. , 2014, , .		1
189	Distribution network support from multi-energy demand side response in smart districts. , 2016, , .		1
190	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
191	Adequacy Assessment of Renewables-Dominated Power Systems with Large-Scale Energy Storage. , 2019, , .		1
192	Capacity Credit Evaluation Framework of Wind, Solar and Pumped Hydro Storage Considering Generation Adequacy and Flexibility. , 2019, , .		1
193	Contribution to System Frequency Stability and Resilience from PV Plants: A Closed-loop System Identification Approach. , 2020, , .		1
194	Techno-Economic Analysis of On-grid Transition: A Case Study of Remote Villages in Sarawak. , 2021, , .		1
195	Techno-economic assessment of demand response aggregation under different market price conditions. , 2015, , .		0
196	Risk of cable overheating and premature ageing due to load control measures. , 2017, , .		0
197	Specialized Heuristic Algorithms for AC Transmission Expansion Planning Problem. , 2018, , .		0
198	Increased Frequency and Voltage Interactions Affecting Frequency and Transient Stability in Networks with Large Penetration of Renewable Generation. , 2019, , .		0

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