

# Anastasios G Bakirtzis

## List of Publications by Year in descending order

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139  
papers

7,820  
citations

61984

43  
h-index

51608

86  
g-index

139  
all docs

139  
docs citations

139  
times ranked

5153  
citing authors

#	ARTICLE	IF	CITATIONS
1	A genetic algorithm solution to the unit commitment problem. IEEE Transactions on Power Systems, 1996, 11, 83-92.	6.5	924
2	Optimal power flow by enhanced genetic algorithm. IEEE Transactions on Power Systems, 2002, 17, 229-236.	6.5	534
3	Smart Household Operation Considering Bi-Directional EV and ESS Utilization by Real-Time Pricing-Based DR. IEEE Transactions on Smart Grid, 2015, 6, 1281-1291.	9.0	373
4	Optimal Bidding Strategy for Electric Vehicle Aggregators in Electricity Markets. IEEE Transactions on Power Systems, 2013, 28, 4031-4041.	6.5	355
5	A Solution to the Unit-Commitment Problem Using Integer-Coded Genetic Algorithm. IEEE Transactions on Power Systems, 2004, 19, 1165-1172.	6.5	343
6	Optimal Household Appliances Scheduling Under Day-Ahead Pricing and Load-Shaping Demand Response Strategies. IEEE Transactions on Industrial Informatics, 2015, 11, 1509-1519.	11.3	341
7	A neural network short term load forecasting model for the Greek power system. IEEE Transactions on Power Systems, 1996, 11, 858-863.	6.5	294
8	A decentralized solution to the DC-OPF of interconnected power systems. IEEE Transactions on Power Systems, 2003, 18, 1007-1013.	6.5	201
9	Bidding Strategies for Electricity Producers in a Competitive Electricity Marketplace. IEEE Transactions on Power Systems, 2004, 19, 356-365.	6.5	189
10	Network-constrained economic dispatch using real-coded genetic algorithm. IEEE Transactions on Power Systems, 2003, 18, 198-205.	6.5	188
11	Coordinated Operation of a Neighborhood of Smart Households Comprising Electric Vehicles, Energy Storage and Distributed Generation. IEEE Transactions on Smart Grid, 2016, 7, 2736-2747.	9.0	175
12	Short term load forecasting using fuzzy neural networks. IEEE Transactions on Power Systems, 1995, 10, 1518-1524.	6.5	162
13	Optimal Offering Strategy of a Virtual Power Plant: A Stochastic Bi-Level Approach. IEEE Transactions on Smart Grid, 2015, , 1-1.	9.0	151
14	Optimal Self-Scheduling of a Thermal Producer in Short-Term Electricity Markets by MILP. IEEE Transactions on Power Systems, 2010, 25, 1965-1977.	6.5	147
15	A new perspective for sizing of distributed generation and energy storage for smart households under demand response. Applied Energy, 2015, 143, 26-37.	10.1	142
16	Design of a stand alone system with renewable energy sources using trade off methods. IEEE Transactions on Energy Conversion, 1992, 7, 42-48.	5.2	122
17	Multi-Objective Reconfiguration of Radial Distribution Systems Using Reliability Indices. IEEE Transactions on Power Systems, 2016, 31, 1048-1062.	6.5	116
18	A novel approach to short-term load forecasting using fuzzy neural networks. IEEE Transactions on Power Systems, 1998, 13, 480-492.	6.5	115

#	ARTICLE	IF	CITATIONS
19	A Genetic Algorithm Solution Approach to the Hydrothermal Coordination Problem. IEEE Transactions on Power Systems, 2004, 19, 1356-1364.	6.5	115
20	A Decentralized Implementation of DC Optimal Power Flow on a Network of Computers. IEEE Transactions on Power Systems, 2005, 20, 25-33.	6.5	110
21	Electricity Producer Offering Strategies in Day-Ahead Energy Market With Step-Wise Offers. IEEE Transactions on Power Systems, 2007, 22, 1804-1818.	6.5	101
22	Incorporation of Switching Operations in Power System Corrective Control Computations. IEEE Transactions on Power Systems, 1987, 2, 669-675.	6.5	94
23	Fuzzy modeling for short term load forecasting using the orthogonal least squares method. IEEE Transactions on Power Systems, 1999, 14, 29-36.	6.5	90
24	Short-term load forecasting using neural networks. Electric Power Systems Research, 1995, 33, 1-6.	3.6	88
25	Agent-Based Analysis of Capacity Withholding and Tacit Collusion in Electricity Markets. IEEE Transactions on Power Systems, 2007, 22, 1735-1742.	6.5	84
26	Assessment of Demand-Response-Driven Load Pattern Elasticity Using a Combined Approach for Smart Households. IEEE Transactions on Industrial Informatics, 2016, 12, 1529-1539.	11.3	82
27	Multiple Time Resolution Unit Commitment for Short-Term Operations Scheduling Under High Renewable Penetration. IEEE Transactions on Power Systems, 2014, 29, 149-159.	6.5	79
28	ANN-based scenario generation methodology for stochastic variables of electric power systems. Electric Power Systems Research, 2016, 134, 9-18.	3.6	79
29	Mid-Term Stochastic Scheduling of a Price-Maker Hydro Producer With Pumped Storage. IEEE Transactions on Power Systems, 2011, 26, 1856-1865.	6.5	76
30	Plug-In Electric Vehicles Parking Lot Equilibria With Energy and Reserve Markets. IEEE Transactions on Power Systems, 2017, 32, 2001-2016.	6.5	76
31	Real-Time Charging Management Framework for Electric Vehicle Aggregators in a Market Environment. IEEE Transactions on Smart Grid, 2015, , 1-1.	9.0	75
32	Optimal bidding strategy in transmission-constrained electricity markets. Electric Power Systems Research, 2014, 109, 141-149.	3.6	73
33	European Electricity Market Integration With Mixed Market Designs—Part I: Formulation. IEEE Transactions on Power Systems, 2014, 29, 458-465.	6.5	72
34	An Investigation of Plug-In Electric Vehicle Charging Impact on Power Systems Scheduling and Energy Costs. IEEE Transactions on Power Systems, 2017, 32, 1902-1912.	6.5	71
35	Load-Following Reserves Procurement Considering Flexible Demand-Side Resources Under High Wind Power Penetration. IEEE Transactions on Power Systems, 2015, 30, 1337-1350.	6.5	66
36	Prediction and evaluation of the performance of wind-diesel energy systems. IEEE Transactions on Energy Conversion, 1996, 11, 385-393.	5.2	63

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37	A Bayesian Multiple Models Combination Method for Time Series Prediction. Journal of Intelligent and Robotic Systems: Theory and Applications, 2001, 31, 69-89.	3.4	58
38	A Multi-Objective Optimization Approach to Risk-Constrained Energy and Reserve Procurement Using Demand Response. IEEE Transactions on Power Systems, 2018, 33, 3940-3954.	6.5	58
39	Short term generation scheduling in a small autonomous system with unconventional energy sources. IEEE Transactions on Power Systems, 1988, 3, 1230-1236.	6.5	56
40	Selective Automation Upgrade in Distribution Networks Towards a Smarter Grid. IEEE Transactions on Smart Grid, 2010, 1, 278-285.	9.0	53
41	Risk-Constrained Scheduling and Offering Strategies of a Price-Maker Hydro Producer Under Uncertainty. IEEE Transactions on Power Systems, 2013, 28, 1879-1887.	6.5	51
42	European day-ahead electricity market clearing model. Electric Power Systems Research, 2016, 140, 225-239.	3.6	46
43	Stochastic Scheduling of Hybrid Power Stations in Insular Power Systems With High Wind Penetration. IEEE Transactions on Power Systems, 2016, 31, 3424-3436.	6.5	46
44	A probabilistic method for the evaluation of the reliability of stand alone wind energy systems. IEEE Transactions on Energy Conversion, 1992, 7, 99-107.	5.2	45
45	Optimum operation of a small autonomous system with unconventional energy sources. Electric Power Systems Research, 1992, 23, 93-102.	3.6	44
46	A probabilistic method for the evaluation of the performance and the reliability of wind-diesel energy systems. IEEE Transactions on Energy Conversion, 1993, 8, 197-206.	5.2	40
47	Short-term load forecasting in an autonomous power system using artificial neural networks. IEEE Transactions on Power Systems, 1997, 12, 1591-1596.	6.5	40
48	Qualification and Quantification of Reserves in Power Systems Under High Wind Generation Penetration Considering Demand Response. IEEE Transactions on Sustainable Energy, 2015, 6, 88-103.	8.8	37
49	Cost/worth assessment of reliability improvement in distribution networks by means of artificial intelligence. International Journal of Electrical Power and Energy Systems, 2010, 32, 530-538.	5.5	36
50	Storage management by rolling stochastic unit commitment for high renewable energy penetration. Electric Power Systems Research, 2018, 158, 240-249.	3.6	35
51	Simulation of Optimal Medium-Term Hydro-Thermal System Operation by Grid Computing. IEEE Transactions on Power Systems, 2009, 24, 1208-1217.	6.5	34
52	European Electricity Market Integration With Mixed Market Designs Part II: Solution Algorithm and Case Studies. IEEE Transactions on Power Systems, 2014, 29, 466-475.	6.5	34
53	Decentralised OPF of large multiarea power systems. IET Generation, Transmission and Distribution, 2006, 153, 99.	1.1	33
54	Stochastic and Deterministic Unit Commitment Considering Uncertainty and Variability Reserves for High Renewable Integration. Energies, 2017, 10, 140.	3.1	33

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55	A probabilistic method for the evaluation of the performance of wind-diesel energy systems. IEEE Transactions on Energy Conversion, 1992, 7, 418-425.	5.2	32
56	Efficient Determination of Cournot Equilibria in Electricity Markets. IEEE Transactions on Power Systems, 2004, 19, 1837-1844.	6.5	32
57	Probabilistic evaluation of the performance of wind-diesel energy systems. IEEE Transactions on Energy Conversion, 1994, 9, 743-752.	5.2	28
58	An advanced model for the efficient and reliable short-term operation of insular electricity networks with high renewable energy sources penetration. Renewable and Sustainable Energy Reviews, 2014, 38, 415-427.	16.4	28
59	Short term load forecasting using a Bayesian combination method. International Journal of Electrical Power and Energy Systems, 1997, 19, 171-177.	5.5	27
60	A hybrid fuzzy modeling method for short-term load forecasting. Mathematics and Computers in Simulation, 2000, 51, 221-232.	4.4	25
61	Decentralised congestion management of interconnected power systems. IET Generation, Transmission and Distribution, 2002, 149, 432.	1.1	24
62	Optimal self-scheduling of a dominant power company in electricity markets. International Journal of Electrical Power and Energy Systems, 2012, 43, 640-649.	5.5	24
63	Short-Term Electricity Market Simulation for Pool-Based Multi-Period Auctions. IEEE Transactions on Power Systems, 2013, 28, 2526-2535.	6.5	24
64	Optimal operation of insular electricity grids under high RES penetration. Renewable Energy, 2016, 86, 1308-1316.	8.9	24
65	A load curve based fuzzy modeling technique for short-term load forecasting. Fuzzy Sets and Systems, 2003, 135, 279-303.	2.7	21
66	Electricity market models and RES integration: The Greek case. Energy Policy, 2014, 67, 531-542.	8.8	20
67	Market-based TSO-DSO coordination for enhanced flexibility services provision. Electric Power Systems Research, 2022, 208, 107883.	3.6	19
68	Comparison of two metaheuristics with mathematical programming methods for the solution of OPF. IET Generation, Transmission and Distribution, 2006, 153, 16.	1.1	18
69	Quantitative Risk Management by Demand Response in Distribution Networks. IEEE Transactions on Power Systems, 2018, 33, 1496-1506.	6.5	18
70	Multi-Agent Reinforcement Learning for Strategic Bidding in Power Markets. , 2006, , .		16
71	Comparison of advanced power system operations models for large-scale renewable integration. Electric Power Systems Research, 2015, 128, 90-99.	3.6	16
72	Effect of Risk Aversion on Reserve Procurement With Flexible Demand Side Resources From the ISO Point of View. IEEE Transactions on Sustainable Energy, 2017, 8, 1040-1050.	8.8	16

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73	Probabilistic evaluation of the long-term power system resource adequacy: The Greek case. Energy Policy, 2018, 117, 295-306.	8.8	16
74	Optimal Bidding of Hybrid Power Stations in Insular Power Systems. IEEE Transactions on Power Systems, 2017, 32, 3782-3793.	6.5	15
75	Agent-Based Simulation of Power Markets under Uniform and Pay-as-Bid Pricing Rules using Reinforcement Learning. , 2006, , .		13
76	Demand Response in Electricity Markets. , 2009, , .		13
77	Market coupling feasibility between a power pool and a power exchange. Electric Power Systems Research, 2013, 104, 116-128.	3.6	13
78	High-level design for the compliance of the Greek wholesale electricity market with the Target Model provisions in Europe. Electric Power Systems Research, 2017, 152, 323-341.	3.6	12
79	European Market Integration With Mixed Network Representation Schemes. IEEE Transactions on Power Systems, 2013, 28, 4957-4967.	6.5	10
80	A unified unit commitment &#x2014; Economic dispatch model for short-term power system scheduling under high wind energy penetration. , 2014, , .		10
81	Analysis of a monthly auction for financial transmission rights and flow-gate rights. Electric Power Systems Research, 2007, 77, 594-603.	3.6	9
82	Coordination of smart-household activities for the efficient operation of intelligent distribution systems. , 2014, , .		9
83	Reserve quantification in insular power systems with high wind penetration. , 2014, , .		8
84	Development of Courses on Power System Energy Control Centers. IEEE Transactions on Education, 1984, 27, 66-72.	2.4	7
85	Evaluation of the impact of RES integration on the Greek electricity market by mid-term simulation. , 2011, , .		6
86	A profit maximization model for a power producer in a pool-based energy market with cost recovery mechanism. , 2011, , .		6
87	Evaluation of the capacity credit of RES: The Greek case. , 2013, , .		5
88	Guest Editorial: Introduction to the special section on real-time demand response. IEEE Transactions on Smart Grid, 2013, 4, 1841-1841.	9.0	5
89	Financial viability of investments on electric vehicle charging stations in workplaces with parking lots under flat rate retail tariff schemes. , 2014, , .		5
90	A Stochastic Two-Stage Model for the Integrated Scheduling of the Electric and Natural Gas Systems. IEEE Open Access Journal of Power and Energy, 2020, 7, 453-466.	3.4	5

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91	Optimal participation of RES aggregators in electricity markets under main imbalance pricing schemes: Price taker and price maker approach. Electric Power Systems Research, 2022, 206, 107786.	3.6	5
92	Coordination of day-ahead scheduling with a stochastic weekly unit commitment for the efficient scheduling of slow-start thermal units. , 2010, , .		4
93	Energy and Transmission Allocation in the Presence of Overlapping Electricity Markets. IEEE Transactions on Power Systems, 2010, 25, 1402-1414.	6.5	4
94	Transmission loss allocation through zonal aggregation. Electric Power Systems Research, 2011, 81, 1973-1985.	3.6	4
95	Assessment of the impact of a battery energy storage system on the scheduling and operation of the insular power system of Crete. , 2014, , .		4
96	Artificial neural network-based methodology for short-term electric load scenario generation. , 2015, , .		4
97	Evaluation of load-following reserves for power systems with significant RES penetration considering risk management. , 2015, , .		4
98	Stochastic day-ahead scheduling of thermal and hybrid units in insular power systems with high wind penetration. , 2015, , .		4
99	The impact of load-following reserve requirement levels on the short-term generation scheduling. , 2016, , .		4
100	Analysis of a yearly multi-round, multi-period, multi-product transmission rights auction. Electric Power Systems Research, 2008, 78, 464-474.	3.6	3
101	A MIP approach to the yearly scheduling problem of a mixed hydrothermal system. , 2008, , .		3
102	Price-based annual generation maintenance scheduling of a thermal producer. , 2012, , .		3
103	Optimal Self-Scheduling of Thermal Units During Commissioning. IEEE Transactions on Power Systems, 2012, 27, 181-188.	6.5	3
104	Hydrothermal producer offering strategy in a transmission-constrained electricity market: An MPEC approach. , 2014, , .		3
105	Power flow calculations for small distribution networks under time-dependent and uncertain input data. , 2014, , .		3
106	Security-constrained nodal-based clearing of the European day-ahead electricity market formulated as a MILP model. , 2015, , .		3
107	Dynamic reserves quantification for variable time resolution scheduling. , 2015, , .		3
108	Optimal bidding for risk-averse hybrid power station producers in insular power systems: An MPEC approach. , 2017, , .		3

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109	Power system flexibility: A methodological analytical framework based on unit commitment and economic dispatch modelling. , 2021, , 127-156.		3
110	A methodological approach for assessing the value of energy storage in the power system operation by mid-term simulation. Journal of Energy Storage, 2022, 49, 104066.	8.1	3
111	European electricity market integration under various network representations. , 2013, , .		2
112	Integration of a hybrid power station in the insular power system of Crete. , 2014, , .		2
113	Optimal bidding strategies of a mixed RES portfolio by stochastic programming. , 2014, , .		2
114	Bidding strategy for risk-averse producers in transmission-constrained electricity markets. , 2015, , .		2
115	Storage management by rolling unit commitment for high renewable energy penetration. , 2017, , .		2
116	Demand Response Management by Rolling Unit Commitment for High Renewable Energy Penetration. , 2018, , .		2
117	Hourly-discretized mid-term power system operation in a competitive energy market. , 2009, , .		1
118	Bidding and managing congestion across multiple electricity spot markets. , 2009, , .		1
119	A market splitting approach for the European electricity market integration. , 2013, , .		1
120	Impact of natural gas supply, renewable penetration and demand trends on power system maintenance. , 2013, , .		1
121	Implementation methods for the European day-ahead electricity market integration. , 2014, , .		1
122	An ANFIS based assessment of demand response driven load pattern elasticity. , 2014, , .		1
123	Determination of load-following reserves in power systems with high wind penetration: An application to the Greek power system. , 2014, , .		1
124	Optimum Generation Scheduling Based Dynamic Price Making for Demand Response in a Smart Power Grid. IFIP Advances in Information and Communication Technology, 2014, , 371-379.	0.7	1
125	An EMD-ANN based prediction methodology for DR driven smart household load demand. , 2015, , .		1
126	Benefits of demand response on a wind power producer bidding strategy. , 2015, , .		1



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127	Assessment of load shifting potential on large insular power systems. , 2015, , .		1
128	European day-ahead market clearing model incorporating linearized AC power flow constraints. , 2016, , .		1
129	An integrated simulation platform for assessing the integration of plug-in electric vehicles in electricity markets. , 2017, , .		1
130	Optimal Participation of RES Aggregators in Electricity Markets Under Main Imbalance Pricing Mechanisms. , 2021, , .		1
131	Electricity producer self-scheduling in day-ahead energy and reserves markets. , 2008, , .		0
132	Volume-coupling between a power pool and a power exchange. , 2012, , .		0
133	Risk-constrained scheduling and offering strategies of a price-taker hydro producer under uncertainty. , 2013, , .		0
134	Multi-objective optimization of radial distribution networks using an effective implementation of the &#x03B5;-constraint method. , 2014, , .		0
135	Qualification and quantification of reserves in power systems under high wind generation penetration considering demand response. , 2015, , .		0
136	A nodal-based day-ahead market clearing with multi-period products and transmission security constraints. , 2016, , .		0
137	Guest Editorial Special Section on Reserve and Flexibility for Handling Variability and Uncertainty of Renewable Generation. IEEE Transactions on Sustainable Energy, 2016, 7, 613-613.	8.8	0
138	Scheduling Models and Methods for Efficient and Reliable Operations. , 2015, , 155-224.		0
139	Hydrothermal Producer Self-Scheduling. , 2017, , 263-326.		0