

Antonio J Conejo

List of Publications by Year in descending order

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152
papers

11,727
citations

28736

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32181

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162
all docs

162
docs citations

162
times ranked

6907
citing authors

#	ARTICLE	IF	CITATIONS
1	Gas-Power Coordination: From Day-Ahead Scheduling to Actual Operation. IEEE Transactions on Power Systems, 2022, 37, 1532-1542.	4.6	21
2	Robust optimization in power systems: a tutorial overview. Optimization and Engineering, 2022, 23, 2051-2073.	1.3	8
3	AC network-constrained unit commitment via conic relaxation and convex programming. International Journal of Electrical Power and Energy Systems, 2022, 134, 107364.	3.3	4
4	Multi-Period AC/DC Transmission Expansion Planning Including Shunt Compensation. IEEE Transactions on Power Systems, 2022, 37, 2164-2176.	4.6	11
5	Stealthy monitoring-control attacks to disrupt power system operations. Electric Power Systems Research, 2022, 203, 107636.	2.1	1
6	Risk-Averse Stochastic Programming vs. Adaptive Robust Optimization: A Virtual Power Plant Application. INFORMS Journal on Computing, 2022, 34, 1795-1818.	1.0	3
7	Market Clearing. Profiles in Operations Research, 2022, , 97-116.	0.3	0
8	Operation of an all-solar power system in Saudi Arabia. International Journal of Electrical Power and Energy Systems, 2021, 125, 106466.	3.3	7
9	Sensitivity-based Vulnerability Assessment of State Estimation. Journal of Modern Power Systems and Clean Energy, 2021, 9, 886-896.	3.3	3
10	Sample average approximation for risk-averse problems: A virtual power plant scheduling application. EURO Journal on Computational Optimization, 2021, 9, 100005.	1.5	6
11	Single-Level Electricity Market Equilibrium With Offers and Bids in Energy and Price. IEEE Transactions on Power Systems, 2021, 36, 4185-4193.	4.6	9
12	Conjectural-Variations Equilibria in Electricity, Natural-Gas, and Carbon-Emission Markets. IEEE Transactions on Power Systems, 2021, 36, 4161-4171.	4.6	38
13	A Distributionally Robust AC Network-Constrained Unit Commitment. IEEE Transactions on Power Systems, 2021, 36, 5258-5270.	4.6	13
14	Medium-Term Planning Models. Profiles in Operations Research, 2021, , 281-302.	0.3	0
15	Long-Term Planning Models. Profiles in Operations Research, 2021, , 303-326.	0.3	0
16	Equilibria in investment and spot electricity markets: A conjectural-variations approach. European Journal of Operational Research, 2020, 281, 129-140.	3.5	13
17	Short-Circuit Constrained Power System Expansion Planning Considering Bundling and Voltage Levels of Lines. IEEE Transactions on Power Systems, 2020, 35, 584-593.	4.6	13
18	Operational Equilibria of Electric and Natural Gas Systems With Limited Information Interchange. IEEE Transactions on Power Systems, 2020, 35, 662-671.	4.6	35

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19	Equilibria in Electricity and Natural Gas Markets With Strategic Offers and Bids. IEEE Transactions on Power Systems, 2020, 35, 1956-1966.	4.6	43
20	Complementarity, Not Optimization, is the Language of Markets. IEEE Open Access Journal of Power and Energy, 2020, 7, 344-353.	2.5	21
21	Transmission Expansion Planning Including TCSCs and SFCLs: A MINLP Approach. IEEE Transactions on Power Systems, 2020, 35, 4396-4407.	4.6	24
22	A market equilibrium model for electricity, gas and district heating operations. Energy, 2020, 206, 117934.	4.5	11
23	Strategic-Agent Equilibria in the Operation of Natural Gas and Power Markets. Energies, 2020, 13, 868.	1.6	4
24	Economic and environmental implications of different approaches to hedge against wind production uncertainty in two-settlement electricity markets: A PJM case study. Energy Economics, 2019, 80, 336-354.	5.6	23
25	Unit Commitment With an Enhanced Natural Gas-Flow Model. IEEE Transactions on Power Systems, 2019, 34, 3729-3738.	4.6	76
26	The role of energy storage in mitigating ramping inefficiencies caused by variable renewable generation. Energy Conversion and Management, 2018, 162, 307-320.	4.4	46
27	Hierarchical Clustering to Find Representative Operating Periods for Capacity-Expansion Modeling. IEEE Transactions on Power Systems, 2018, 33, 3029-3039.	4.6	85
28	A Multistage Robust Transmission Expansion Planning Model Based on Mixed Binary Linear Decision Rules—Part I. IEEE Transactions on Power Systems, 2018, 33, 5341-5350.	4.6	33
29	A Multistage Robust Transmission Expansion Planning Model Based on Mixed-Binary Linear Decision Rules—Part II. IEEE Transactions on Power Systems, 2018, 33, 5351-5364.	4.6	8
30	Risk-averse formulations and methods for a virtual power plant. Computers and Operations Research, 2018, 96, 350-373.	2.4	21
31	Rethinking restructured electricity market design: Lessons learned and future needs. International Journal of Electrical Power and Energy Systems, 2018, 98, 520-530.	3.3	68
32	Candidate line selection for transmission expansion planning considering long- and short-term uncertainty. International Journal of Electrical Power and Energy Systems, 2018, 100, 320-330.	3.3	36
33	Multistage Stochastic Investment Planning With Multiscale Representation of Uncertainties and Decisions. IEEE Transactions on Power Systems, 2018, 33, 781-791.	4.6	89
34	Robust Transmission Expansion Planning Representing Long- and Short-Term Uncertainty. IEEE Transactions on Power Systems, 2018, 33, 1329-1338.	4.6	107
35	Adaptive Robust Expansion Planning for a Distribution Network With DERs. IEEE Transactions on Power Systems, 2018, 33, 1698-1715.	4.6	86
36	Adaptive robust AC optimal power flow considering load and wind power uncertainties. International Journal of Electrical Power and Energy Systems, 2018, 96, 132-142.	3.3	43

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37	Power generation scheduling considering stochastic emission limits. International Journal of Electrical Power and Energy Systems, 2018, 95, 374-383.	3.3	16
38	Coordinated Expansion Planning of Natural Gas and Electric Power Systems. IEEE Transactions on Power Systems, 2018, 33, 3064-3075.	4.6	107
39	Market equilibria and interactions between strategic generation, wind, and storage. Applied Energy, 2018, 220, 876-892.	5.1	55
40	Using Electrical Energy Storage to Mitigate Natural Gas-Supply Shortages. IEEE Transactions on Power Systems, 2018, 33, 7076-7086.	4.6	37
41	Robust Security Constrained ACOPF via Conic Programming: Identifying the Worst Contingencies. IEEE Transactions on Power Systems, 2018, 33, 5884-5891.	4.6	31
42	Coordinated Investment in Transmission and Storage Systems Representing Long- and Short-Term Uncertainty. IEEE Transactions on Power Systems, 2018, 33, 7143-7151.	4.6	60
43	Model-Agnostic Linear Estimation of Generator Rotor Speeds Based on Phasor Measurement Units. IEEE Transactions on Power Systems, 2018, 33, 7258-7268.	4.6	17
44	Adaptive Robust Network-Constrained AC Unit Commitment. IEEE Transactions on Power Systems, 2017, 32, 672-683.	4.6	65
45	Adaptive Robust Transmission Expansion Planning Using Linear Decision Rules. IEEE Transactions on Power Systems, 2017, 32, 4024-4034.	4.6	64
46	Long-term coordination of transmission and storage to integrate wind power. CSEE Journal of Power and Energy Systems, 2017, 3, 36-43.	1.7	50
47	Electricity production scheduling under uncertainty: Max social welfare vs. min emission vs. max renewable production. Applied Energy, 2017, 193, 540-549.	5.1	24
48	Three- or Two-Stage Stochastic Market-Clearing Algorithm?. IEEE Transactions on Power Systems, 2017, 32, 3099-3110.	4.6	23
49	Is Being Flexible Advantageous for Demands?. IEEE Transactions on Power Systems, 2017, 32, 2337-2345.	4.6	19
50	Unit Commitment Under Gas-Supply Uncertainty and Gas-Price Variability. IEEE Transactions on Power Systems, 2017, 32, 2394-2405.	4.6	109
51	Alternative linearisations for the operating cost function of UC problems. IET Generation, Transmission and Distribution, 2017, 11, 1992-1996.	1.4	4
52	Stochastic scheduling ensuring air quality through wind power and storage coordination. IET Generation, Transmission and Distribution, 2017, 11, 2031-2040.	1.4	5
53	Optimization in Engineering. Springer Optimization and Its Applications, 2017, , .	0.6	43
54	Pool equilibria including strategic storage. Applied Energy, 2016, 177, 260-270.	5.1	39

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55	Generation Expansion Planning. , 2016, , 61-114.		1
56	Investment in Production Capacity. , 2016, , 169-227.		0
57	Generation and Transmission Expansion Planning. , 2016, , 115-167.		7
58	Transmission Expansion Planning. , 2016, , 21-59.		3
59	Investment Equilibria. , 2016, , 229-267.		1
60	Weekly Two-Stage Robust Generation Scheduling for Hydrothermal Power Systems. IEEE Transactions on Power Systems, 2016, 31, 4554-4564.	4.6	42
61	Strategic Demand-Side Response to Wind Power Integration. IEEE Transactions on Power Systems, 2016, 31, 3495-3505.	4.6	60
62	Investing in Generation Capacity: A Multi-Stage Linear-Decision-Rule Approach. IEEE Transactions on Power Systems, 2016, 31, 4784-4794.	4.6	25
63	Ergodic Energy Management Leveraging Resource Variability in Distribution Grids. IEEE Transactions on Power Systems, 2016, 31, 4765-4775.	4.6	39
64	Reliability-Constrained Robust Power System Expansion Planning. IEEE Transactions on Power Systems, 2016, 31, 2383-2392.	4.6	95
65	Network-Constrained AC Unit Commitment Under Uncertainty: A Bendersâ€™ Decomposition Approach. IEEE Transactions on Power Systems, 2016, 31, 412-422.	4.6	97
66	Stochastic Reactive Power Management in Microgrids With Renewables. IEEE Transactions on Power Systems, 2015, 30, 3386-3395.	4.6	148
67	A robust optimization approach to energy and reserve dispatch in electricity markets. European Journal of Operational Research, 2015, 247, 659-671.	3.5	127
68	Toward Fully Renewable Electric Energy Systems. IEEE Transactions on Power Systems, 2015, 30, 316-326.	4.6	119
69	Weekly self-scheduling, forward contracting, and pool involvement for an electricity producer. An adaptive robust optimization approach. European Journal of Operational Research, 2015, 240, 457-475.	3.5	41
70	Network usage determination using a transformer analogy. IET Generation, Transmission and Distribution, 2014, 8, 81-90.	1.4	25
71	Integrating Renewables in Electricity Markets. Profiles in Operations Research, 2014, , .	0.3	194
72	Virtual Power Plants Virtual power plant. Profiles in Operations Research, 2014, , 243-287.	0.3	10

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73	Trading Stochastic Production in Electricity Pools. Profiles in Operations Research, 2014, , 205-242.	0.3	11
74	Balancing Markets. Profiles in Operations Research, 2014, , 101-136.	0.3	3
75	Clearing the Day-Ahead Market with a High Penetration of Stochastic Production. Profiles in Operations Research, 2014, , 57-100.	0.3	3
76	Facilitating Renewable Integration by Demand Response Demand response. Profiles in Operations Research, 2014, , 289-329.	0.3	2
77	Managing Uncertainty with Flexibility. Profiles in Operations Research, 2014, , 137-171.	0.3	3
78	A tutorial review of complementarity models for decision-making in energy markets. EURO Journal on Decision Processes, 2014, 2, 91-120.	1.8	46
79	Multi-Area Unit Scheduling and Reserve Allocation Under Wind Power Uncertainty. IEEE Transactions on Power Systems, 2014, 29, 1701-1710.	4.6	140
80	Power Cycling: CCGTs: The Critical Link Between the Electricity and Natural Gas Markets. IEEE Power and Energy Magazine, 2014, 12, 40-48.	1.6	19
81	Energy Management of a Cluster of Interconnected Price-Responsive Demands. IEEE Transactions on Power Systems, 2014, 29, 645-655.	4.6	85
82	Minimizing Wind Power Spillage Using an OPF With FACTS Devices. IEEE Transactions on Power Systems, 2014, 29, 2150-2159.	4.6	52
83	Solving Discretely-Constrained Nash-Cournot Games with an Application to Power Markets. Networks and Spatial Economics, 2013, 13, 307-326.	0.7	48
84	Multi-Area Energy and Reserve Dispatch Under Wind Uncertainty and Equipment Failures. IEEE Transactions on Power Systems, 2013, 28, 4373-4383.	4.6	111
85	Estimating the parameters of a fatigue model using Benders decomposition. Annals of Operations Research, 2013, 210, 309-331.	2.6	2
86	Robust WLS estimator using reweighting techniques for electric energy systems. Electric Power Systems Research, 2013, 104, 9-17.	2.1	20
87	Power system observability via optimization. Electric Power Systems Research, 2013, 104, 207-215.	2.1	5
88	Strategic Offering for a Wind Power Producer. IEEE Transactions on Power Systems, 2013, 28, 4645-4654.	4.6	162
89	Using electricity options to hedge against financial risks of power producers. Journal of Modern Power Systems and Clean Energy, 2013, 1, 101-109.	3.3	24
90	Complementarity Modeling in Energy Markets. Profiles in Operations Research, 2013, , .	0.3	220

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91	Solving discretely constrained, mixed linear complementarity problems with applications in energy. Computers and Operations Research, 2013, 40, 1339-1350.	2.4	39
92	Generation Investment Equilibria With Strategic Producersâ€™Part I: Formulation. IEEE Transactions on Power Systems, 2013, 28, 2613-2622.	4.6	83
93	Risk-Constrained Multi-Stage Wind Power Investment. IEEE Transactions on Power Systems, 2013, 28, 401-411.	4.6	108
94	Generation Investment Equilibria With Strategic Producersâ€™Part II: Case Studies. IEEE Transactions on Power Systems, 2013, 28, 2623-2631.	4.6	27
95	Medium-Term Power Dispatch in Predominantly Hydro Systems: An Equilibrium Approach. IEEE Transactions on Power Systems, 2013, 28, 2384-2394.	4.6	11
96	Offering model for a virtual power plant based on stochastic programming. Applied Energy, 2013, 105, 282-292.	5.1	290
97	Contract design and supply chain coordination in the electricity industry. European Journal of Operational Research, 2013, 227, 527-537.	3.5	79
98	Optimal engineering design via Bendersâ€™ decomposition. Annals of Operations Research, 2013, 210, 273-293.	2.6	4
99	Exact Solution Methodologies for Linear and (Mixed) Integer Bilevel Programming. Studies in Computational Intelligence, 2013, , 221-245.	0.7	8
100	Optimization Problems Constrained by Complementarity and Other Optimization Problems. Profiles in Operations Research, 2013, , 221-262.	0.3	0
101	Strategic Generation Investment Considering Futures and Spot Markets. IEEE Transactions on Power Systems, 2012, 27, 1467-1476.	4.6	49
102	Strategic Generation Investment Under Uncertainty Via Benders Decomposition. IEEE Transactions on Power Systems, 2012, 27, 424-432.	4.6	75
103	Pricing Non-Convexities in an Electricity Pool. IEEE Transactions on Power Systems, 2012, 27, 1334-1342.	4.6	127
104	Wind Power Investment: A Benders Decomposition Approach. IEEE Transactions on Power Systems, 2012, 27, 433-441.	4.6	89
105	Equilibria in an Oligopolistic Electricity Pool With Stepwise Offer Curves. IEEE Transactions on Power Systems, 2012, 27, 752-761.	4.6	163
106	Yearly Maintenance Scheduling of Transmission Lines Within a Market Environment. IEEE Transactions on Power Systems, 2012, 27, 407-415.	4.6	55
107	Transmission and Wind Power Investment. IEEE Transactions on Power Systems, 2012, 27, 885-893.	4.6	164
108	Pricing Electricity in Pools With Wind Producers. IEEE Transactions on Power Systems, 2012, 27, 1366-1376.	4.6	162

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109	Equilibria in futures and spot electricity markets. <i>Electric Power Systems Research</i> , 2012, 84, 1-9.	2.1	25
110	Simulating the Impact of Wind Production on Locational Marginal Prices. <i>IEEE Transactions on Power Systems</i> , 2011, 26, 820-828.	4.6	111
111	Strategic Generation Investment Using a Complementarity Approach. <i>IEEE Transactions on Power Systems</i> , 2011, 26, 940-948.	4.6	169
112	Tools for the Analysis and Design of Distributed Resources—Part III: Market Studies. <i>IEEE Transactions on Power Delivery</i> , 2011, 26, 1663-1670.	2.9	26
113	Offering Strategy Via Robust Optimization. <i>IEEE Transactions on Power Systems</i> , 2011, 26, 1418-1425.	4.6	139
114	Decentralized State Estimation and Bad Measurement Identification: An Efficient Lagrangian Relaxation Approach. <i>IEEE Transactions on Power Systems</i> , 2011, 26, 2500-2508.	4.6	38
115	Multiple Bad Data Identification Considering Measurement Dependencies. <i>IEEE Transactions on Power Systems</i> , 2011, 26, 1953-1961.	4.6	39
116	Evaluating alternative offering strategies for wind producers in a pool. <i>Applied Energy</i> , 2011, 88, 4918-4926.	5.1	35
117	Short-Term Trading for Electricity Producers. <i>Profiles in Operations Research</i> , 2011, , 181-201.	0.3	4
118	Real-Time Demand Response Model. <i>IEEE Transactions on Smart Grid</i> , 2010, 1, 236-242.	6.2	879
119	Multi-market energy procurement for a large consumer using a risk-aversion procedure. <i>Electric Power Systems Research</i> , 2010, 80, 63-70.	2.1	75
120	Weekly Self-Scheduling, Forward Contracting, and Offering Strategy for a Producer. <i>IEEE Transactions on Power Systems</i> , 2010, 25, 657-666.	4.6	60
121	Short-Term Trading for a Wind Power Producer. <i>IEEE Transactions on Power Systems</i> , 2010, 25, 554-564.	4.6	412
122	Breaker Status Identification. <i>IEEE Transactions on Power Systems</i> , 2010, 25, 694-702.	4.6	37
123	Calculation of Measurement Correlations Using Point Estimate. <i>IEEE Transactions on Power Delivery</i> , 2010, 25, 2095-2103.	2.9	30
124	Decision Making Under Uncertainty in Electricity Markets. <i>Profiles in Operations Research</i> , 2010, , .	0.3	665
125	Influence of the Emissions Trading Scheme on generation scheduling. <i>International Journal of Electrical Power and Energy Systems</i> , 2009, 31, 465-473.	3.3	55
126	A Bilevel Approach to Transmission Expansion Planning Within a Market Environment. <i>IEEE Transactions on Power Systems</i> , 2009, 24, 1513-1522.	4.6	220

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127	A Bilevel Stochastic Programming Approach for Retailer Futures Market Trading. IEEE Transactions on Power Systems, 2009, 24, 1446-1456.	4.6	202
128	Pool Strategy of a Producer With Endogenous Formation of Locational Marginal Prices. IEEE Transactions on Power Systems, 2009, 24, 1855-1866.	4.6	341
129	Scenario Reduction for Futures Market Trading in Electricity Markets. IEEE Transactions on Power Systems, 2009, 24, 878-888.	4.6	219
130	Economic Valuation of Reserves in Power Systems With High Penetration of Wind Power. IEEE Transactions on Power Systems, 2009, 24, 900-910.	4.6	472
131	Power System State Estimation Considering Measurement Dependencies. IEEE Transactions on Power Systems, 2009, 24, 1875-1885.	4.6	69
132	The Observability Problem in Traffic Network Models. Computer-Aided Civil and Infrastructure Engineering, 2008, 23, 208-222.	6.3	96
133	Electricity Markets Cleared by Merit Order—Part I: Finding the Market Outcomes Supported by Pure Strategy Nash Equilibria. IEEE Transactions on Power Systems, 2008, 23, 361-371.	4.6	33
134	Transmission Expansion Planning in Electricity Markets. IEEE Transactions on Power Systems, 2008, 23, 238-248.	4.6	211
135	The Observability Problem in Traffic Models: Algebraic and Topological Methods. IEEE Transactions on Intelligent Transportation Systems, 2008, 9, 275-287.	4.7	67
136	Optimal Involvement in Futures Markets of a Power Producer. IEEE Transactions on Power Systems, 2008, 23, 703-711.	4.6	130
137	Impact of Unit Failure on Forward Contracting. IEEE Transactions on Power Systems, 2008, 23, 1768-1775.	4.6	27
138	Sensitivity Analysis in Calculus of Variations. Some Applications. SIAM Review, 2008, 50, 294-312.	4.2	8
139	Planning to expand?. IEEE Power and Energy Magazine, 2007, 5, 64-70.	1.6	22
140	State Estimation Sensitivity Analysis. IEEE Transactions on Power Systems, 2007, 22, 1080-1091.	4.6	37
141	$Z_{m \text{ bus}}$ Transmission Network Cost Allocation. IEEE Transactions on Power Systems, 2007, 22, 342-349.	4.6	115
142	Forward Contracting and Selling Price Determination for a Retailer. IEEE Transactions on Power Systems, 2007, 22, 2105-2114.	4.6	207
143	Optimal Network Placement of SVC Devices. IEEE Transactions on Power Systems, 2007, 22, 1851-1860.	4.6	113
144	An Optimization Approach to Multiarea State Estimation. IEEE Transactions on Power Systems, 2007, 22, 213-221.	4.6	111

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145	A Stochastic Programming Approach to Electric Energy Procurement for Large Consumers. IEEE Transactions on Power Systems, 2007, 22, 744-754.	4.6	179
146	Observability in linear systems of equations and inequalities: Applications. Computers and Operations Research, 2007, 34, 1708-1720.	2.4	45
147	Electricity market near-equilibrium under locational marginal pricing and minimum profit conditions. European Journal of Operational Research, 2006, 174, 457-479.	3.5	32
148	A closed formula for local sensitivity analysis in mathematical programming. Engineering Optimization, 2006, 38, 93-112.	1.5	41
149	Forecasting electricity prices for a day-ahead pool-based electric energy market. International Journal of Forecasting, 2005, 21, 435-462.	3.9	438
150	Multi-Period Near-Equilibrium in a Pool-Based Electricity Market Including On/Off Decisions. Networks and Spatial Economics, 2005, 5, 371-393.	0.7	18
151	A Decomposition Methodology Applied to the Multi-Area Optimal Power Flow Problem. Annals of Operations Research, 2003, 120, 99-116.	2.6	164
152	Electricity Pool Prices: Long-Term Uncertainty Characterization for Futures-Market Trading and Risk Management. SSRN Electronic Journal, 0, , .	0.4	0