Jerome Apt

List of Publications by Year in Descending Order

80 papers	3,895 citations	29 h-index	62 g-index
84 ext. papers	4,442 ext. citations	7.6 avg, IF	5.84 L-index

#	Paper	IF	Citations
80	Using PV inverters for voltage support at night can lower grid costs. *Energy Reports*, **2022**, 8, 6347-6354	4.6	0
79	Could on-site fuel storage economically reduce power plant-gas grid dependence in pipeline constrained areas like New England?. *Electricity Journal*, **2021**, 34, 106956	2.6	1
78	The importance of peak pricing in realizing system benefits from distributed storage. *Energy Policy*, **2021**, 157, 112484	7.2	2
77	What causes natural gas fuel shortages at U.S. power plants?. *Energy Policy*, **2020**, 147, 111805	7.2	4
76	Dynamic operating reserve procurement improves scarcity pricing in PJM. *Energy Policy*, **2020**, 147, 111857	7.2	3
75	Resource adequacy implications of temperature-dependent electric generator availability. *Applied Energy*, **2020**, 262, 114424	10.7	6
74	A Solar-Centric Approach to Improving Estimates of Exposure Processes for Coronal Mass Ejections. *Risk Analysis*, **2020**, 40, 1020-1039	3.9	1
73	A time-dependent model of generator failures and recoveries captures correlated events and quantifies temperature dependence. *Applied Energy*, **2019**, 253, 113513	10.7	6
72	How much capacity deferral value can targeted solar deployment create in Pennsylvania?. *Energy Policy*, **2019**, 134, 110902	7.2	5
71	Can flow batteries scale in the behind-the-meter commercial and industrial market? A techno-economic comparison of storage technologies in California. *Journal of Power Sources*, **2019**, 420, 1-8	8.9	14
70	Resource adequacy risks to the bulk power system in North America. *Applied Energy*, **2018**, 212, 1360-1376	10.7	10
69	The economics of commercial demand response for spinning reserve. *Energy Systems*, **2018**, 9, 3-23	1.7	5
68	A Simple Metric for Predicting Revenue from Electric Peak-Shaving and Optimal Battery Sizing. *Energy Technology*, **2018**, 6, 649-657	3.5	2
67	Geographic smoothing of solar photovoltaic electric power production in the Western USA. *Journal of Renewable and Sustainable Energy*, **2018**, 10, 053504	2.5	4
66	Is it always windy somewhere? Occurrence of low-wind-power events over large areas. *Renewable Energy*, **2017**, 101, 1124-1130	8.1	16
65	Evaluation of a proposal for reliable low-cost grid power with 100% wind, water, and solar. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 6722-6727	11.5	177
64	Emissions and Economics of Behind-the-Meter Electricity Storage. *Environmental Science & Technology*, **2017**, 51, 1094-1101	10.3	29

63	Empirical prediction intervals improve energy forecasting. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 8752-8757	11.5	16
62	The climate and health effects of a USA switch from coal to gas electricity generation. *Energy*, **2016**, 109, 1160-1166	7.9	40
61	Robust resource adequacy planning in the face of coal retirements. *Energy Policy*, **2016**, 88, 371-388	7.2	6
60	Are high penetrations of commercial cogeneration good for society?. *Environmental Research Letters*, **2016**, 11, 124014	6.2	5
59	Variability of the Wind Turbine Power Curve. *Applied Sciences (Switzerland)*, **2016**, 6, 262	2.6	16
58	Quantifying sources of uncertainty in reanalysis derived wind speed. *Renewable Energy*, **2016**, 94, 157-165	5.1	17
57	What can reanalysis data tell us about wind power?. *Renewable Energy*, **2015**, 83, 963-969	8.1	48
56	Recent results on the integration of variable renewable electric power into the US grid. *MRS Energy & Sustainability*, **2015**, 2, 1	2.2	3
55	Geographic smoothing of solar PV: results from Gujarat. *Environmental Research Letters*, **2015**, 10, 104006	6.2	27
54	A review of large-scale wind integration studies. *Renewable and Sustainable Energy Reviews*, **2015**, 49, 768-794	16.2	30
53	The cost of curtailing wind turbines for secondary frequency regulation capacity. *Energy Systems*, **2014**, 5, 407-422	1.7	10
52	The effect of variability-mitigating market rules on the operation of wind power plants. *Energy Systems*, **2014**, 5, 737-766	1.7	5
51	Optimal investment timing and capacity choice for pumped hydropower storage. *Energy Systems*, **2014**, 5, 285-306	1.7	9
50	The effects of bulk electricity storage on the PJM market. *Energy Systems*, **2014**, 5, 677-704	1.7	31
49	An effective method for modeling wind power forecast uncertainty. *Energy Systems*, **2013**, 4, 393-417	1.7	12
48	Can hybrid solar-fossil power plants mitigate CO2 at lower cost than PV or CSP?. *Environmental Science & Technology*, **2013**, 47, 2487-93	10.3	14
47	Incorporating seismic concerns in site selection for enhanced geothermal power generation. *Journal of Risk Research*, **2013**, 16, 1021-1036	4.2	7
46	Regional variations in the health, environmental, and climate benefits of wind and solar generation. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 11768-73	11.5	110

45	Quantifying the hurricane catastrophe risk to offshore wind power. *Risk Analysis*, **2013**, 33, 2126-41	3.9	12
44	What day-ahead reserves are needed in electric grids with high levels of wind power?. *Environmental Research Letters*, **2013**, 8, 034013	6.2	14
43	What properties of grid energy storage are most valuable?. *Journal of Power Sources*, **2012**, 206, 436-44	8.9	76
42	Distribution grid reconfiguration reduces power losses and helps integrate renewables. *Energy Policy*, **2012**, 48, 260-273	7.2	48
41	Can a wind farm with CAES survive in the day-ahead market?. *Energy Policy*, **2012**, 48, 584-593	7.2	20
40	The cost of wind power variability. *Energy Policy*, **2012**, 51, 233-243	7.2	65
39	Costs of solar and wind power variability for reducing CO2 emissions. *Environmental Science & Technology*, **2012**, 46, 9761-7	10.3	26
38	Generating wind time series as a hybrid of measured and simulated data. *Wind Energy*, **2012**, 15, 699-715	3.4	14
37	The effect of long-distance interconnection on wind power variability. *Environmental Research Letters*, **2012**, 7, 034017	6.2	44
36	Quantifying the hurricane risk to offshore wind turbines. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 3247-52	11.5	47
35	Economics of compressed air energy storage to integrate wind power: A case study in ERCOT. *Energy Policy*, **2011**, 39, 2330-2342	7.2	110
34	Lester Lave, visionary economist. *Environmental Science & Technology*, **2011**, 45, 5457-8	10.3	1
33	Net air emissions from electric vehicles: the effect of carbon price and charging strategies. *Environmental Science & Technology*, **2011**, 45, 1792-7	10.3	67
32	Battery vehicles reduce CO emissions. *Science*, **2011**, 333, 823	33.3	3
31	Evaluating economics of energy storage under growing renewable penetration scenarios **2010**,		1
30	Implications of compensating property owners for geologic sequestration of CO2. *Environmental Science & Technology*, **2010**, 44, 2897-903	10.3	17
29	Lithium-ion battery cell degradation resulting from realistic vehicle and vehicle-to-grid utilization. *Journal of Power Sources*, **2010**, 195, 2385-2392	8.9	521
28	The air quality and human health effects of integrating utility-scale batteries into the New York State electricity grid. *Journal of Power Sources*, **2010**, 195, 2405-2413	8.9	14

27	Compensating for wind variability using co-located natural gas generation and energy storage. *Energy Systems*, **2010**, 1, 417-439	1.7	41
26	The economics of using plug-in hybrid electric vehicle battery packs for grid storage. *Journal of Power Sources*, **2010**, 195, 2377-2384	8.9	355
25	The variability of interconnected wind plants. *Energy Policy*, **2010**, 38, 4400-4410	7.2	131
24	Large blackouts in North America: Historical trends and policy implications. *Energy Policy*, **2009**, 37, 5249-5259	7.2	177
23	Near-term implications of a ban on new coal-fired power plants in the United States. *Environmental Science & Technology*, **2009**, 43, 3995-4001	10.3	17
22	Air emissions due to wind and solar power. *Environmental Science & Technology*, **2009**, 43, 253-8	10.3	102
21	Response to Comment on "Air Emissions Due to Wind and Solar Power" *Environmental Science & Technology*, **2009**, 43, 6108-6109	10.3	5
20	Trends in the history of large blackouts in the United States **2008**,		59
19	Electricity Load and Carbon Dioxide Emissions: Effects of a Carbon Price in the Short Term **2008**,		2
18	Short run effects of a price on carbon dioxide emissions from U.S. electric generators. *Environmental Science & Technology*, **2008**, 42, 3139-44	10.3	69
17	Regulating the geological sequestration of CO2. *Environmental Science & Technology*, **2008**, 42, 2718-22	10.3	32
16	Analyzing PJM's economic demand response program **2008**,		9
15	An economic welfare analysis of demand response in the PJM electricity market. *Energy Policy*, **2008**, 36, 3692-3702	7.2	63
14	The character of power output from utility-scale photovoltaic systems. *Progress in Photovoltaics: Research and Applications*, **2008**, 16, 241-247	6.8	108
13	Implications of generator siting for CO2 pipeline infrastructure. *Energy Policy*, **2008**, 36, 1776-1787	7.2	20
12	Storing syngas lowers the carbon price for profitable coal gasification. *Environmental Science & Technology*, **2007**, 41, 7974-9	10.3	17
11	Should a coal-fired power plant be replaced or retrofitted?. *Environmental Science & Technology*, **2007**, 41, 7980-6	10.3	33
10	The spectrum of power from wind turbines. *Journal of Power Sources*, **2007**, 169, 369-374	8.9	199

9	Economics of electric energy storage for energy arbitrage and regulation in New York. *Energy Policy* , **2007**, 35, 2558-2568	7.2	306
8	Lessons from the Failure of U.S. Electricity Restructuring. *Electricity Journal*, **2006**, 19, 15-32	2.6	18
7	Power and People. *Electricity Journal*, **2006**, 19, 17-25	2.6	13
6	Planning for natural disasters in a stochastic world. *Journal of Risk and Uncertainty*, **2006**, 33, 117-130	3.1	10
5	Are renewables portfolio standards cost-effective emission abatement policy?. *Environmental Science & Technology*, **2005**, 39, 8578-83	10.3	17
4	Competition Has Not Lowered U.S. Industrial Electricity Prices. *Electricity Journal*, **2005**, 18, 52-61	2.6	22
3	Ecology. Managing soil carbon. *Science*, **2004**, 304, 393	33.3	229
2	Rethinking Electricity Deregulation. *Electricity Journal*, **2004**, 17, 11-26	2.6	50
1	Electricity: Protecting Essential Services211-238		