Aidan Tuohy

List of Publications by Year
in descending order

		516710	794594
33 papers	**2,562** citations	**16** h-index	**19** g-index
35 all docs	**35** docs citations	**35** times ranked	**2369** citing authors

#	Article	IF	Citations
1	Unit Commitment for Systems With Significant Wind Penetration. IEEE Transactions on Power Systems, 2009, 24, 592-601.	6.5	587
2	Grand challenges in the science of wind energy. Science, 2019, 366, .	12.6	482
3	Pumped storage in systems with very high wind penetration. Energy Policy, 2011, 39, 1965-1974.	8.8	186
4	Solar Forecasting: Methods, Challenges, and Performance. IEEE Power and Energy Magazine, 2015, 13, 50-59.	1.6	154
5	Market Designs for the Primary Frequency Response Ancillary Service—Part I: Motivation and Design. IEEE Transactions on Power Systems, 2014, 29, 421-431.	6.5	153
6	Experience From Wind Integration in Some High Penetration Areas. IEEE Transactions on Energy Conversion, 2007, 22, 4-12.	5.2	143
7	The Flexibility Workout: Managing Variable Resources and Assessing the Need for Power System Modification. IEEE Power and Energy Magazine, 2013, 11, 53-62.	1.6	111
8	Impact of pumped storage on power systems with increasing wind penetration. , 2009, , .		75
9	Market Designs for the Primary Frequency Response Ancillary Service—Part II: Case Studies. IEEE Transactions on Power Systems, 2014, 29, 432-440.	6.5	73
10	The impact of increased interconnection on electricity systems with large penetrations of wind generation: A case study of Ireland and Great Britain. Energy Policy, 2010, 38, 6946-6954.	8.8	63
11	Demand side resource operation on the Irish power system with high wind power penetration. Energy Policy, 2011, 39, 2925-2934.	8.8	62
12	Short-Term Energy Balancing With Increasing Levels of Wind Energy. IEEE Transactions on Sustainable Energy, 2012, 3, 769-776.	8.8	55
13	Rolling Unit Commitment for Systems with Significant Installed Wind Capacity. , 2007, , .		50
14	Multicarrier Energy Systems: Shaping Our Energy Future. Proceedings of the IEEE, 2020, 108, 1437-1456.	21.3	50
15	System Impact Studies for Near 100% Renewable Energy Systems Dominated by Inverter Based Variable Generation. IEEE Transactions on Power Systems, 2022, 37, 3249-3258.	6.5	43
16	Alternative Approaches for Incentivizing the Frequency Responsive Reserve Ancillary Service. Electricity Journal, 2012, 25, 88-102.	2.5	40
17	Integration of Renewable Energy into Present and Future Energy Systems. , 2011, , 609-706.		39
18	Storage and demand-side options for integrating wind power. Wiley Interdisciplinary Reviews: Energy and Environment, 2014, 3, 93-109.	4.1	31

#	Article	IF	Citations
19	Burning peat in Ireland: An electricity market dispatch perspective. Energy Policy, 2009, 37, 3035-3042.	8.8	29
20	Integration of variable generation: Capacity value and evaluation of flexibility. , 2010, , .		29
21	Impact of wind power on the unit commitment, operating reserves, and market design. , 2011, , .		23
22	Irish and British electricity prices: what recent history implies for future prices. Economics of Energy and Environmental Policy, 2015, 4, .	1.4	12
23	Operating the Irish power system with increased levels of wind power. , 2008, , .		9
24	Stochastic optimal power flow in systems with wind power. , 2011, , .		8
25	Risk Limiting Dispatch. , 2012, , .		8
26	Evaluating Potential Benefits of Flexible Solar Power Generation in the Southern Company System. IEEE Journal of Photovoltaics, 2022, 12, 152-160.	2.5	8
27	Flexibility assessment tool: IEA grid integration of variable renewables project. , 2011, , .		6
28	Impact of the transmission grid on the operational system flexibility. , 2016, , .		5
29	Should unit commitment be endogenously included in wind power transmission planning optimisation models?. IET Renewable Power Generation, 2014, 8, 132-140.	3.1	4
30	Managing wind uncertainty and variability in the Irish power system. , 2009, , .		3
31	Multi-settlement simulation of reserve procurement using stochastic optimal power flow. , 2012, , .		3
32	Risk-Based Reserve Procurement. , 2020, , .		3
33	Evaluation of storage for bulk system integration of variable generation. , 2012, , .		1