Lars Nolting

List of Publications by Year
in descending order

20 papers	357 citations	1040056 9 h-index	839539 18 g-index
20 all docs	20 docs citations	20 times ranked	313 citing authors

#	Article	IF	Citations
1	A modeler's guide to handle complexity in energy systems optimization. Advances in Applied Energy, 2021, 4, 100063.	13.2	63
2	Are complex energy system models more accurate? An intra-model comparison of power system optimization models. Applied Energy, 2019, 255, 113783.	10.1	48
3	How to model European electricity load profiles using artificial neural networks. Applied Energy, 2020, 277, 115564.	10.1	43
4	Complexity profiles: A large-scale review of energy system models in terms of complexity. Energy Strategy Reviews, 2020, 30, 100515.	7.3	36
5	Techno-economic analysis of flexible heat pump controls. Applied Energy, 2019, 238, 1417-1433.	10.1	28
6	Typical periods or typical time steps? A multi-model analysis to determine the optimal temporal aggregation for energy system models. Applied Energy, 2021, 304, 117825.	10.1	23
7	Time series of useful energy consumption patterns for energy system modeling. Scientific Data, 2021, 8, 148.	5.3	20
8	Can we phase-out all of them? Probabilistic assessments of security of electricity supply for the German case. Applied Energy, 2020, 263, 114704.	10.1	12
9	Does renewable electricity supply match with energy demand? â€“ A spatio-temporal analysis for the German case. Applied Energy, 2022, 308, 118226.	10.1	12
10	Assessing the validity of European labels for energy efficiency of heat pumps. Journal of Building Engineering, 2018, 18, 476-486.	3.4	11
11	Mini-Grids for the Sustainable Electrification of Rural Areas in Sub-Saharan Africa: Assessing the Potential of KeyMaker Models. Energies, 2020, 13, 6350.	3.1	10
12	Can energy system modeling benefit from artificial neural networks? Application of two-stage metamodels to reduce computation of security of supply assessments. Computers and Industrial Engineering, 2020, 142, 106334.	6.3	10
13	Integrating Methods and Empirical Findings from Social and Behavioural Sciences into Energy System Modelsâ€"Motivation and Possible Approaches. Energies, 2020, 13, 4951.	3.1	9
14	Generating Transparency in the Worldwide Use of the Terminology Industry 4.0. Applied Sciences (Switzerland), 2019, 9, 4659.	2.5	7
15	Locating experts and carving out the state of the art: A systematic review on Industry 4.0 and energy system analysis. International Journal of Energy Research, 2019, 43, 3981-4002.	4.5	6
16	Environmental Impacts of Charging Concepts for Battery Electric Vehicles: A Comparison of On-Board and Off-Board Charging Systems Based on a Life Cycle Assessment. Energies, 2020, 13, 6508.	3.1	5
17	Incentivizing timely investments in electrical grids: Analysis of the amendment of the German distribution grid regulation. Energy Policy, 2019, 132, 754-763.	8.8	4
18	The potential of deep learning to reduce complexity in energy system modeling. International Journal of Energy Research, 2022, 46, 4550-4571.	4.5	4

#	Article	IF	Citations
19	A scalable life cycle assessment of alternating and direct current microgrids in office buildings. Applied Energy, 2022, 305, 117878.	10.1	3
20	The complexity dilemma â€“ Insights from security of electricity supply assessments. Energy, 2022, 241, 122522.	8.8	3