Thomas Reindl

List of Publications by Year
in descending order

63 papers	3,112 citations	147566 31 h-index	155451 55 g-index
63 all docs	63 docs citations	63 times ranked	3220 citing authors

#	Article	IF	Citations
1	Terawatt-scale photovoltaics: Transform global energy. Science, 2019, 364, 836-838.	6.0	320
2	Short-term solar irradiance forecasting using exponential smoothing state space model. Energy, 2013, 55, 1104-1113.	4.5	159
3	Field experience and performance analysis of floating PV technologies in the tropics. Progress in Photovoltaics: Research and Applications, 2018, 26, 957-967.	4.4	140
4	Short term solar irradiance forecasting using a mixed wavelet neural network. Renewable Energy, 2016, 90, 481-492.	4.3	137
5	Impact of urban block typology on building solar potential and energy use efficiency in tropical high-density city. Applied Energy, 2019, 240, 513-533.	5.1	112
6	A novel hybrid approach based on self-organizing maps, support vector regression and particle swarm optimization to forecast solar irradiance. Energy, 2015, 82, 570-577.	4.5	111
7	Monofacial vs bifacial Si-based PV modules: Which one is more cost-effective?. Solar Energy, 2018, 176, 412-438.	2.9	98
8	Hybridizing genetic algorithm with differential evolution for solving the unit commitment scheduling problem. Swarm and Evolutionary Computation, 2015, 23, 50-64.	4.5	92
9	Global Techno-Economic Performance of Bifacial and Tracking Photovoltaic Systems. Joule, 2020, 4, 1514-1541.	11.7	92
10	Impact of Distributed Generation on Power Distribution Systems. Energy Procedia, 2012, 25, 93-100.	1.8	91
11	Performance Degradation of Various PV Module Technologies in Tropical Singapore. IEEE Journal of Photovoltaics, 2014, 4, 1288-1294.	1.5	90
12	An improved particle swarm optimisation algorithm applied to battery sizing for stand-alone hybrid power systems. International Journal of Electrical Power and Energy Systems, 2016, 74, 104-117.	3.3	89
13	A multi-objective and robust optimization approach for sizing and placement of PV and batteries in off-grid systems fully operated by diesel generators: An Indonesian case study. Energy, 2018, 160, 410-429.	4.5	85
14	Economic and technical analysis of reactive power provision from distributed energy resources in microgrids. Applied Energy, 2018, 210, 827-841.	5.1	81
15	Satellite image analysis and a hybrid ESSS/ANN model to forecast solar irradiance in the tropics. Energy Conversion and Management, 2014, 79, 66-73.	4.4	76
16	Solar irradiance forecasting using spatio-temporal empirical kriging and vector autoregressive models with parameter shrinkage. Solar Energy, 2014, 103, 550-562.	2.9	72
17	Enhanced Multiobjective Evolutionary Algorithm Based on Decomposition for Solving the Unit Commitment Problem. IEEE Transactions on Industrial Informatics, 2015, 11, 1346-1357.	7.2	61
18	On PV module temperatures in tropical regions. Solar Energy, 2013, 88, 80-87.	2.9	58

#	Article	IF	Citations
19	Distributed Congestion Management of Distribution Grids Under Robust Flexible Buildings Operations. IEEE Transactions on Power Systems, 2017, 32, 4600-4613.	4.6	57
20	Life cycle cost analysis (LCCA) of PV-powered cooling systems with thermal energy and battery storage for off-grid applications. Applied Energy, 2020, 273, 115145.	5.1	57
21	Analytical Approach to Reactive Power Dispatch and Energy Arbitrage in Distribution Systems With DERs. IEEE Transactions on Power Systems, 2018, 33, 6522-6533.	4.6	56
22	On the impact of haze on the yield of photovoltaic systems in Singapore. Renewable Energy, 2016, 89, 389-400.	4.3	48
23	The cooling effect of floating PV in two different climate zones: A comparison of field test data from the Netherlands and Singapore. Solar Energy, 2021, 219, 15-23.	2.9	46
24	A diesel replacement strategy for off-grid systems based on progressive introduction of PV and batteries: An Indonesian case study. Applied Energy, 2018, 229, 1218-1232.	5.1	45
25	Shading analysis for rooftop BIPV embedded in a high-density environment: A case study in Singapore. Energy and Buildings, 2016, 121, 159-164.	3.1	43
26	PV power conversion and short-term forecasting in a tropical, densely-built environment in Singapore. Renewable Energy, 2016, 94, 496-509.	4.3	42
27	Adaptive directional overcurrent relaying scheme for meshed distribution networks. IET Generation, Transmission and Distribution, 2018, 12, 3212-3220.	1.4	42
28	Effect of Solar Spectrum on the Performance of Various Thin-Film PV Module Technologies in Tropical Singapore. IEEE Journal of Photovoltaics, 2014, 4, 1268-1274.	1.5	41
29	Global Prediction of Photovoltaic Field Performance Differences Using Open-Source Satellite Data. Joule, 2018, 2, 307-322.	11.7	40
30	Bidirectional irradiance transposition based on the Perez model. Solar Energy, 2014, 110, 768-780.	2.9	38
31	The balance between aesthetics and performance in building-integrated photovoltaics in the tropics. Progress in Photovoltaics: Research and Applications, 2014, 22, 744-756.	4.4	35
32	Generation and storage scheduling of combined heat and power. Energy, 2017, 124, 693-705.	4.5	31
33	Comprehensive feasibility assessment of building integrated photovoltaics (BIPV) on building surfaces in high-density urban environments. Solar Energy, 2021, 225, 734-746.	2.9	30
34	Outdoor PV Module Performance under Fluctuating Irradiance Conditions in Tropical Climates. Energy Procedia, 2013, 33, 238-247.	1.8	29
35	The Impact of Haze on Performance Ratio and Short-Circuit Current of PV Systems in Singapore. IEEE Journal of Photovoltaics, 2014, 4, 1585-1592.	1.5	29
36	Generation-scheduling-coupled battery sizing of stand-alone hybrid power systems. Energy, 2016, 114, 671-682.	4.5	27

#	Article	IF	Citations
37	A Novel ZVS DCâ€“DC Full-Bridge Converter With Hold-Up Time Operation. IEEE Transactions on Industrial Electronics, 2017, 64, 4491-4500.	5.2	27
38	Stability implications of bulk power networks with large scale PVs. Energy, 2019, 187, 115927.	4.5	25
39	Levelised Cost of Storage (LCOS) for solar-PV-powered cooling in the tropics. Applied Energy, 2019, 242, 640-654.	5.1	24
40	On the PV Tracker Performance: Tracking the Sun Versus Tracking the Best Orientation. IEEE Journal of Photovoltaics, 2020, 10, 1474-1480.	1.5	24
41	Economic Viability Analysis of Silicon Solar Cell Manufacturing: Al-BSF versus PERC. Energy Procedia, 2017, 130, 43-49.	1.8	22
42	A Worldwide Theoretical Comparison of Outdoor Potential for Various Silicon-Based Tandem Module Architecture. Cell Reports Physical Science, 2020, 1, 100037.	2.8	22
43	Use of LiFePO4 Batteries in Stand-Alone Solar System. Energy Procedia, 2012, 25, 135-140.	1.8	21
44	Spatial Load Forecasting With Communication Failure Using Time-Forward Kriging. IEEE Transactions on Power Systems, 2014, 29, 2875-2882.	4.6	21
45	Competitiveness of PV Inverter as a Reactive Power Compensator considering Inverter Lifetime Reduction. Energy Procedia, 2018, 150, 74-82.	1.8	20
46	An irradiance-neutral view on the competitiveness of life-cycle cost of PV rooftop systems across cities. Energy Procedia, 2017, 130, 122-129.	1.8	19
47	Global sensitivity and uncertainty analysis of the levelised cost of storage (LCOS) for solar-PV-powered cooling. Applied Energy, 2021, 286, 116533.	5.1	19
48	Energy meteorology for accurate forecasting of PV power output on different time horizons. Energy Procedia, 2017, 130, 130-138.	1.8	18
49	An Empirical Model for Rack-Mounted PV Module Temperatures for Southeast Asian Locations Evaluated for Minute Time Scales. IEEE Journal of Photovoltaics, 2015, 5, 774-782.	1.5	17
50	Optimization and Evaluation of Naturally Ventilated BIPV FaÃ§ade Design. Energy Procedia, 2018, 150, 87-93.	1.8	16
51	Local reactive power dispatch optimisation minimising global objectives. Applied Energy, 2020, 262, 114529.	5.1	16
52	Photovoltaic module failures after 10 years of operation in the tropics. Renewable Energy, 2021, 177, 327-335.	4.3	16
53	Impact analysis of large power networks with high share of renewables in transient conditions. IET Renewable Power Generation, 2020, 14, 1349-1358.	1.7	15
54	Performance loss rates of floating photovoltaic installations in the tropics. Solar Energy, 2021, 219, 58-64.	2.9	15

#	Article	IF	Citations
55	Comparison of Parameterisation Models for the Estimation of the Maximum Power Output of PV Modules. Energy Procedia, 2012, 25, 101-107.	1.8	11
56	Novel High-Power Nonresonant Multichannel LED Driver. IEEE Transactions on Industrial Electronics, 2017, 64, 5851-5864.	5.2	11
57	Novel forecast-based dispatch strategy optimization for PV hybrid systems in real time. Energy, 2021, 222, 119918.	4.5	10
58	PVâ€CO: A multiobjective and robust optimization approach for the grid metallization design of Siâ€based solar cells and modules. Progress in Photovoltaics: Research and Applications, 2019, 27, 113-135.	4.4	7
59	Visual impact assessment of coloured Building-integrated photovoltaics on retrofitted building facades using saliency mapping. Solar Energy, 2021, 228, 643-658.	2.9	7
60	The PV System Doctor â€“ Comprehensive diagnosis of PV system installations. Energy Procedia, 2017, 130, 108-113.	1.8	6
61	Investigation of the Performance of Commercial Photovoltaic Modules under Tropical Conditions. Japanese Journal of Applied Physics, 2012, 51, 10NF11.	0.8	2
62	Corrigendum to â€œComprehensive feasibility assessment of building integrated photovoltaics (BIPV) on building surfaces in high-density urban environmentsâ€•[Sol. Energy 225 (2021) 734â€“746]. Solar Energy, 2021, 228, 128.	2.9	1
63	Effects of â€˜invisibleâ€™ energy storage on power system operations. Journal of Energy Storage, 2022, 45, 103626.	3.9	0