Peter R Armstrong

List of Publications by Year
in descending order

45 papers	1,148 citations	586496 16 h-index	445137 33 g-index
45 all docs	45 docs citations	45 times ranked	1580 citing authors

#	Article	IF	Citations
1	Dispatchable solar power using molten salt directly irradiated from above. Solar Energy, 2021, 220, 217-229.	2.9	15
2	Net power maximization from a faceted beam-down solar concentrator. Solar Energy, 2020, 204, 476-488.	2.9	17
3	A Study of Local Climate Zones in Abu Dhabi with Urban Weather Stations and Numerical Simulations. Sustainability, 2020, 12, 156.	1.6	14
4	Proposal and evaluation of subordinate standard solar irradiance spectra for applications in solar energy systems. Solar Energy, 2018, 168, 30-43.	2.9	38
5	Energy performance of GCC-specification LCC optimized dedicated outdoor air system configurations coupled to an air-cooled outdoor unit. Energy and Buildings, 2018, 158, 417-430.	3.1	6
6	Testing of a secondary concentrator integrated with a beam-down tower system under non-liquid cooling strategies. AIP Conference Proceedings, 2018, , .	0.3	4
7	Study and comparison of naturally-aged and As-received silvered-glass reflectors. AIP Conference Proceedings, 2018, , .	0.3	3
8	Standardizing accelerated aging testing conditions for silvered-glass reflectors. AIP Conference Proceedings, 2018, , .	0.3	6
9	Where should beam down heliostat central rays intersect the final optical element axis?. AIP Conference Proceedings, 2018, , .	0.3	3
10	Effects of Roof-Edge Roughness on Air Temperature and Pollutant Concentration in Urban Canyons. Boundary-Layer Meteorology, 2017, 164, 249-279.	1.2	42
11	Techno-economic optimization of a scaled-up solar concentrator combined with CSPonD thermal energy storage. AIP Conference Proceedings, 2017, , .	0.3	3
12	Techno-economic analysis of concentrated solar power plants in terms of levelized cost of electricity. AIP Conference Proceedings, 2017, , .	0.3	27
13	Reflectance degradation of a secondary concentrator by nitrate salt vapor deposition in an open volumetric receiver configuration. AIP Conference Proceedings, 2017, , .	0.3	3
14	Thermal modelling and control of 130kw direct contact (salt/air) heat exchanger. AIP Conference Proceedings, 2017, , .	0.3	0
15	Proposal and Evaluation of Subordinate Standard Solar Irradiance Spectra with a Focus on Air Mass Effects. , 2017, , .		4
16	In-situ sensor network for microclimate and urban energy modeling and validation. , 2016, , .		1
17	Performance measurements of new silicon carbide coated reflectors for concentrated solar power applications. AIP Conference Proceedings, 2016, , .	0.3	1
18	Validation of an optical model applied to the beam down CSP facility at the Masdar Institute Solar Platform. AIP Conference Proceedings, 2016, , .	0.3	2

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19	Thermal modeling of a secondary concentrator integrated with an open direct-absorption molten-salt volumetric receiver in a beam-down tower system. AIP Conference Proceedings, 2016, , .	0.3	6
20	The Masdar Institute solar platform: A new research facility in the UAE for development of CSP components and thermal energy storage systems. AIP Conference Proceedings, 2016, , .	0.3	20
21	Optical and radiative properties of aerosols over Abu Dhabi in the United Arab Emirates. Journal of Earth System Science, 2016, 125, 1579-1602.	0.6	2
22	A new validation protocol for an urban microclimate model based on temperature measurements in a Central European city. Energy and Buildings, 2016, 114, 38-53.	3.1	5
23	Preliminary Optical, Thermal and Structural Design of a 100 kWth CSPonD Beam-down On-sun Demonstration Plant. Energy Procedia, 2015, 75, 2163-2168.	1.8	28
24	Reciprocating and Screw Compressor semi-empirical models for establishing minimum energy performance standards. IOP Conference Series: Materials Science and Engineering, 2015, 90, 012077.	0.3	0
25	Design of sensor network for urban micro-climate monitoring. , 2015, , .		8
26	Design of a 100 kW Concentrated Solar Power on Demand Volumetric Receiver With Integral Thermal Energy Storage Prototype. , 2015, , .		5
27	Estimation of urban temperature and humidity using a lumped parameter model coupled with an EnergyPlus model. Energy and Buildings, 2015, 96, 221-235.	3.1	27
28	New Concentrating Solar Power Facility for Testing High Temperature Concrete Thermal Energy Storage. Energy Procedia, 2015, 75, 2144-2149.	1.8	43
29	Performance of a 100 kWth Concentrated Solar Beam-Down Optical Experiment. Journal of Solar Energy Engineering, Transactions of the ASME, 2014, 136, .	1.1	34
30	Mid-term forecasting of urban electricity load to isolate air-conditioning impact. Energy and Buildings, 2014, 80, 72-80.	3.1	25
31	Smart air-conditioning control by wireless sensors. , 2013, , .		9
32	High Efficiency Solar to Electric Energy Conversion through Spectrum Splitting and Multi-channel Full Spectrum Harvesting. Materials Research Society Symposia Proceedings, 2013, 1493, 31-36.	0.1	1
33	Investigation of Nanoscale Interactions by Means of Subharmonic Excitation. Journal of Physical Chemistry Letters, 2012, 3, 2125-2129.	2.1	9
34	Analysis and Evaluation of DC-Link Capacitors for High-Power-Density Electric Vehicle Drive Systems. IEEE Transactions on Vehicular Technology, 2012, 61, 2950-2964.	3.9	205
35	Energy dissipation distributions and dissipative atomic processes in amplitude modulation atomic force microscopy. Nanotechnology, 2012, 23, 125401.	1.3	12
36	Solar-assisted Post-combustion Carbon Capture feasibility study. Applied Energy, 2012, 92, 668-676.	5.1	100

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37	A model for improved solar irradiation measurement at low flux. Solar Energy, 2012, 86, 837-844.	2.9	6
38	A comprehensive techno-economical review of indirect solar desalination. Renewable and Sustainable Energy Reviews, 2011, 15, 4187-4199.	8.2	264
39	A cooling change-point model of community-aggregate electrical load. Energy and Buildings, 2011, 43, 28-37.	3.1	31
40	Hybrid Liquid-Air Transpired Solar Collector: Model Development and Sensitivity Analysis. , 2010, , .		1
41	Systematic comprehensive techno-economic assessment of solar cooling technologies using location-specific climate data. Applied Energy, 2010, 87, 3766-3778.	5.1	62
42	A two-step method for estimating the parameters of induction machine models. , 2009, , .		5
43	Detection of Rooftop Cooling Unit Faults Based on Electrical Measurements. HVAC and R Research, 2006, 12, 151-175.	0.9	46
44	Assessment of Packaged PEM Fuel Cell CHP Systems. Cogeneration and Distributed Generation Journal, 2006, 21, 25-46.	0.1	0
45	A statistical model for the incidence of large hailstones on solar collectors. Solar Energy, 1981, 26, 97-111.	2.9	5