Wilfried Gjhm Van Sark

List of Publications by Year in descending order

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263 papers

10,474 citations

54 h-index 94 g-index

280 all docs

280 docs citations

times ranked

280

10527 citing authors

#	Article	IF	CITATIONS
1	Luminescent Solar Concentrators - A review of recent results. Optics Express, 2008, 16, 21773.	1.7	442
2	Photooxidation and Photobleaching of Single CdSe/ZnS Quantum Dots Probed by Room-Temperature Time-Resolved Spectroscopy. Journal of Physical Chemistry B, 2001, 105, 8281-8284.	1.2	368
3	Upconverter solar cells: materials and applications. Energy and Environmental Science, 2011, 4, 4835.	15.6	344
4	Feasibility of photovoltaic – Thermoelectric hybrid modules. Applied Energy, 2011, 88, 2785-2790.	5.1	283
5	Blueing, Bleaching, and Blinking of Single CdSe/ZnS Quantum Dots. ChemPhysChem, 2002, 3, 871-879.	1.0	261
6	Smart charging of electric vehicles with photovoltaic power and vehicle-to-grid technology in a microgrid; a case study. Applied Energy, 2015, 152, 20-30.	5.1	258
7	Enhanced near-infrared response of a-Si:H solar cells with \hat{l}^2 -NaYF4:Yb3+ (18%), Er3+ (2%) upconversion phosphors. Solar Energy Materials and Solar Cells, 2010, 94, 2395-2398.	3.0	240
8	A cost roadmap for silicon heterojunction solar cells. Solar Energy Materials and Solar Cells, 2016, 147, 295-314.	3.0	226
9	Monitoring and remote failure detection of grid-connected PV systems based on satellite observations. Solar Energy, 2007, 81, 548-564.	2.9	216
10	Fluorescence lifetime imaging in scanning microscopes: acquisition speed, photon economy and lifetime resolution. Journal of Microscopy, 2002, 206, 218-224.	0.8	203
11	Performance ratio revisited: is PR > 90% realistic?. Progress in Photovoltaics: Research and Applications, 2012, 20, 717-726.	4.4	193
12	Upconversion in solar cells. Nanoscale Research Letters, 2013, 8, 81.	3.1	184
13	Techno-economic analysis of household and community energy storage for residential prosumers with smart appliances. Applied Energy, 2018, 209, 266-276.	5.1	173
14	Re-assessment of net energy production and greenhouse gas emissions avoidance after 40 years of photovoltaics development. Nature Communications, 2016, 7, 13728.	5.8	172
15	Enhancing solar cell efficiency by using spectral converters. Solar Energy Materials and Solar Cells, 2005, 87, 395-409.	3.0	169
16	Multi-objective optimization of energy arbitrage in community energy storage systems using different battery technologies. Applied Energy, 2019, 239, 356-372.	5.1	167
17	An integrated blockchain-based energy management platform with bilateral trading for microgrid communities. Applied Energy, 2020, 263, 114613.	5.1	166
18	Fabrication and full characterization of state-of-the-art quantum dot luminescent solar concentrators. Solar Energy Materials and Solar Cells, 2011, 95, 2087-2094.	3.0	161

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19	Crystalline silicon cell performance at low light intensities. Solar Energy Materials and Solar Cells, 2009, 93, 1471-1481.	3.0	148
20	Life cycle assessment of carbon dioxide removal technologies: a critical review. Energy and Environmental Science, 2021, 14, 1701-1721.	15.6	141
21	Tackling self-absorption in luminescent solar concentrators with type-II colloidal quantum dots. Solar Energy Materials and Solar Cells, 2013, 111, 57-65.	3.0	133
22	Technical potential for photovoltaics on buildings in the EU-27. Solar Energy, 2012, 86, 2644-2653.	2.9	132
23	A self-consistent fluid model for radio-frequency discharges in SiH4–H2 compared to experiments. Journal of Applied Physics, 1997, 82, 2060-2071.	1.1	126
24	Unraveling the photovoltaic technology learning curve by incorporation of input price changes and scale effects. Renewable and Sustainable Energy Reviews, 2011, 15, 324-337.	8.2	118
25	Towards upconversion for amorphous silicon solar cells. Solar Energy Materials and Solar Cells, 2010, 94, 1919-1922.	3.0	117
26	An artificial neural network to assess the impact of neighbouring photovoltaic systems in power forecasting in Utrecht, the Netherlands. Renewable Energy, 2016, 85, 631-641.	4.3	112
27	Nanoparticles for Luminescent Solar Concentrators - A review. Optical Materials, 2018, 84, 636-645.	1.7	112
28	Should we reinforce the grid? Cost and emission optimization of electric vehicle charging under different transformer limits. Applied Energy, 2020, 276, 115285.	5.1	100
29	Gamification-based framework for engagement of residential customers in energy applications. Energy Research and Social Science, 2018, 44, 187-195.	3.0	99
30	Life Cycle Assessment of Direct Air Carbon Capture and Storage with Low-Carbon Energy Sources. Environmental Science & Environ	4.6	99
31	Impact of rapid PV fluctuations on power quality in the low-voltage grid and mitigation strategies using electric vehicles. International Journal of Electrical Power and Energy Systems, 2020, 118, 105741.	3.3	95
32	Luminescent solar concentrators – A low cost photovoltaics alternative. Renewable Energy, 2013, 49, 207-210.	4.3	93
33	Photovoltaic systems coupled with batteries that are optimally sized for household self-consumption: Assessment of peak shaving potential. Applied Energy, 2018, 223, 69-81.	5.1	93
34	Renewable energy technologies in the Maldives—determining the potential. Renewable and Sustainable Energy Reviews, 2007, 11, 1650-1674.	8.2	88
35	A comparative review of building integrated photovoltaics ecosystems in selected European countries. Renewable and Sustainable Energy Reviews, 2018, 90, 1027-1040.	8.2	85
36	Charge yield potential of indoor-operated solar cells incorporated into Product Integrated Photovoltaic (PIPV). Renewable Energy, 2011, 36, 642-647.	4.3	84

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37	A new hybrid ocean thermal energy conversion–Offshore solar pond (OTEC–OSP) design: A cost optimization approach. Solar Energy, 2008, 82, 520-527.	2.9	77
38	The energy payback time of advanced crystalline silicon PV modules in 2020: a prospective study. Progress in Photovoltaics: Research and Applications, 2014, 22, 1180-1194.	4.4	77
39	A systematic analysis of meteorological variables for PV output power estimation. Renewable Energy, 2020, 153, 12-22.	4.3	76
40	Analysis of the silicon market: Will thin films profit?. Energy Policy, 2007, 35, 3121-3125.	4.2	74
41	Photovoltaics in the shade: one bypass diode per solar cell revisited. Progress in Photovoltaics: Research and Applications, 2017, 25, 836-849.	4.4	73
42	Unravelling historical cost developments of offshore wind energy in Europe. Energy Policy, 2016, 88, 435-444.	4.2	71
43	Simulation of performance differences between offshore and landâ€based photovoltaic systems. Progress in Photovoltaics: Research and Applications, 2020, 28, 873-886.	4.4	71
44	Luminescence quenching in erbiumâ€doped hydrogenated amorphous silicon. Applied Physics Letters, 1996, 68, 997-999.	1.5	69
45	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. Joule, 2022, 6, 8-15.	11.7	66
46	Enhancement of solar cell performance by employing planar spectral converters. Applied Physics Letters, 2005, 87, 151117.	1.5	64
47	Short-term peer-to-peer solar forecasting in a network of photovoltaic systems. Applied Energy, 2017, 206, 1464-1483.	5.1	64
48	Optimal energy management in all-electric residential energy systems with heat and electricity storage. Applied Energy, 2019, 254, 113580.	5.1	63
49	Fabrication and spectroscopic studies on highly luminescent CdSe/CdS nanorod polymer composites. Beilstein Journal of Nanotechnology, 2010, 1, 94-100.	1.5	61
50	Excellent crystalline silicon surface passivation by amorphous silicon irrespective of the technique used for chemical vapor deposition. Applied Physics Letters, 2011, 98, 153514.	1.5	61
51	Economic benefits of combining self-consumption enhancement with frequency restoration reserves provision by photovoltaic-battery systems. Applied Energy, 2018, 223, 172-187.	5.1	61
52	Annual performance enhancement of building integrated photovoltaic modules by applying phase change materials. Progress in Photovoltaics: Research and Applications, 2013, 21, 620-630.	4.4	60
53	Comprehensive characterisation and analysis of PV module performance under real operating conditions. Progress in Photovoltaics: Research and Applications, 2017, 25, 218-232.	4.4	57
54	Modeling improvement of spectral response of solar cells by deployment of spectral converters containing semiconductor nanocrystals. Semiconductors, 2004, 38, 962-969.	0.2	55

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55	Lowering greenhouse gas emissions in the built environment by combining ground source heat pumps, photovoltaics and battery storage. Energy and Buildings, 2018, 180, 51-71.	3.1	54
56	Diffusion of solar photovoltaic systems and electric vehicles among Dutch consumers: Implications for the energy transition. Energy Research and Social Science, 2018, 46, 68-85.	3.0	54
57	On the Trade-Off Between Environmental and Economic Objectives in Community Energy Storage Operational Optimization. IEEE Transactions on Sustainable Energy, 2020, 11, 2653-2661.	5.9	54
58	On the transmission function of an ion-energy and mass spectrometer. International Journal of Mass Spectrometry and Ion Processes, 1998, 173, 91-98.	1.9	53
59	Compensation of self-absorption losses in luminescent solar concentrators by increasing luminophore concentration. Solar Energy Materials and Solar Cells, 2017, 167, 133-139.	3.0	53
60	Influence of demand patterns on the optimal orientation of photovoltaic systems. Solar Energy, 2017, 155, 1002-1014.	2.9	53
61	Assessment of forecasting methods on performance of photovoltaic-battery systems. Applied Energy, 2018, 221, 358-373.	5.1	53
62	Pooling the cable: A techno-economic feasibility study of integrating offshore floating photovoltaic solar technology within an offshore wind park. Solar Energy, 2021, 219, 65-74.	2.9	53
63	Operational day-ahead solar power forecasting for aggregated PV systems with a varying spatial distribution. Renewable Energy, 2022, 183, 267-282.	4.3	53
64	Accuracy of progress ratios determined from experience curves: the case of crystalline silicon photovoltaic module technology development. Progress in Photovoltaics: Research and Applications, 2008, 16, 441-453.	4.4	52
65	Life $\hat{\mathbf{e}}$ eycle greenhouse gas emissions and energy payback time of current and prospective silicon heterojunction solar cell designs. Progress in Photovoltaics: Research and Applications, 2015, 23, 1406-1428.	4.4	51
66	Status and Outlook for Building Integrated Photovoltaics (BIPV) in Relation to Educational needs in the BIPV Sector. Energy Procedia, 2017, 111, 993-999.	1.8	49
67	Flexibility of Electric Vehicle Demand: Analysis of Measured Charging Data and Simulation for the Future. World Electric Vehicle Journal, 2019, 10, 14.	1.6	49
68	Local structure and bonding states ina‧i1â^'xCx:H. Journal of Applied Physics, 1994, 76, 251-256.	1.1	47
69	A new method for the evaluation of solar cell parameters. Solar Cells, 1986, 17, 241-251.	0.6	46
70	Greenhouse gas emissions associated with photovoltaic electricity from crystalline silicon modules under various energy supply options. Progress in Photovoltaics: Research and Applications, 2011, 19, 603-613.	4.4	46
71	Introducing errors in progress ratios determined from experience curves. Technological Forecasting and Social Change, 2008, 75, 405-415.	6.2	45
72	Structural properties of a-Si:H related to ion energy distributions in VHF silane deposition plasmas. Journal of Non-Crystalline Solids, 1998, 226, 205-216.	1.5	44

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73	Renewable energy technologies in the Maldives—Realizing the potential. Renewable and Sustainable Energy Reviews, 2008, 12, 162-180.	8.2	44
74	Simulating performance of solar cells with spectral downshifting layers. Thin Solid Films, 2008, 516, 6808-6812.	0.8	44
75	"Tropicalisation―of Feed-in Tariffs: A custom-made support scheme for hybrid PV/diesel systems in isolated regions. Renewable and Sustainable Energy Reviews, 2009, 13, 2279-2294.	8.2	43
76	Provision of regulating- and reserve power by electric vehicle owners in the Dutch market. Applied Energy, 2017, 190, 1008-1019.	5.1	43
77	On the search for representative characteristics of PV systems: Data collection and analysis of PV system azimuth, tilt, capacity, yield and shading. Solar Energy, 2018, 173, 1087-1106.	2.9	42
78	FULLSPECTRUM: a new PV wave making more efficient use of the solar spectrum. Solar Energy Materials and Solar Cells, 2005, 87, 467-479.	3.0	40
79	A comprehensive study on partial shading response of c-Si modules and yield modeling of string inverter and module level power electronics. Solar Energy, 2016, 135, 731-741.	2.9	39
80	Powering an island energy system by offshore floating technologies towards 100% renewables: A case for the Maldives. Applied Energy, 2022, 308, 118360.	5.1	38
81	Luminescent solar concentrators with fiber geometry. Optics Express, 2013, 21, A503.	1.7	36
82	Luminescence quenching in erbiumâ€doped hydrogenated amorphous silicon. Applied Physics Letters, 1996, 68, 46-48.	1.5	34
83	Increased Upconversion Response in a-Si:H Solar Cells With Broad-Band Light. IEEE Journal of Photovoltaics, 2013, 3, 17-21.	1.5	34
84	The "Electric Mondrian―as a Luminescent Solar Concentrator Demonstrator Case Study. Solar Rrl, 2017, 1, 1600015.	3.1	33
85	A system perspective to the deployment of flexibility through aggregator companies in the Netherlands. Energy Policy, 2018, 118, 534-551.	4.2	33
86	Comparison of the Greenhouse Gas Emission Reduction Potential of Energy Communities. Energies, 2019, 12, 4440.	1.6	33
87	High quality crystalline silicon surface passivation by combined intrinsic and n-type hydrogenated amorphous silicon. Applied Physics Letters, 2011, 99, .	1.5	31
88	Spatial power fluctuation correlations in urban rooftop photovoltaic systems. Progress in Photovoltaics: Research and Applications, 2015, 23, 1390-1397.	4.4	31
89	Review of barriers to the introduction of residential demand response: a case study in the Netherlands. International Journal of Energy Research, 2017, 41, 790-816.	2.2	31
90	Potential for solar water heating in Zimbabwe. Renewable and Sustainable Energy Reviews, 2009, 13, 567-582.	8.2	30

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91	Agent-Based Modelling of Charging Behaviour of Electric Vehicle Drivers. Jasss, 2019, 22, .	1.0	30
92	Structural, compositional and optical properties of hydrogenated amorphous silicon-carbon alloys. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1992, 66, 787-800.	0.6	29
93	A framework for the provision of flexibility services at the transmission and distribution levels through aggregator companies. Sustainable Energy, Grids and Networks, 2019, 17, 100187.	2.3	29
94	Analysis of high frequency photovoltaic solar energy fluctuations. Solar Energy, 2020, 206, 381-389.	2.9	29
95	Comparison of surface passivation of crystalline silicon by a-Si:H with and without atomic hydrogen treatment using hot-wire chemical vapor deposition. Thin Solid Films, 2011, 519, 4476-4478.	0.8	28
96	Reconsidering the capacity credit of wind power: Application of cumulative prospect theory. Renewable Energy, 2014, 68, 752-760.	4.3	28
97	Urban Environment and Solar PV Performance: The Case of the Netherlands. Energies, 2018, 11, 1333.	1.6	28
98	Depositionâ€rate reduction through improper substrateâ€toâ€electrode attachment in veryâ€highâ€frequency deposition ofa‧i:H. Journal of Applied Physics, 1996, 80, 3546-3551.	1.1	27
99	Towards the determination of metal criticality in home-based battery systems using a Life Cycle Assessment approach. Journal of Cleaner Production, 2019, 221, 667-677.	4.6	27
100	Improving the performance of amorphous and crystalline silicon heterojunction solar cells by monitoring surface passivation. Journal of Non-Crystalline Solids, 2012, 358, 2245-2248.	1.5	26
101	Outdoor characterization and comparison of string and MLPE under clear and partially shaded conditions. Energy Science and Engineering, 2015, 3, 510-519.	1.9	26
102	International collaboration framework for the calculation of performance loss rates: Data quality, benchmarks, and trends (towards a uniform methodology). Progress in Photovoltaics: Research and Applications, 2021, 29, 573-602.	4.4	25
103	Experimental determination of demand side management potential of wet appliances in the Netherlands. Sustainable Energy, Grids and Networks, 2017, 9, 80-94.	2.3	23
104	Multiple roads ahead: How charging behavior can guide charging infrastructure roll-out policy. Transportation Research, Part D: Transport and Environment, 2020, 85, 102452.	3.2	23
105	Using CAD software to simulate PV energy yield – The case of product integrated photovoltaic operated under indoor solar irradiation. Solar Energy, 2010, 84, 1526-1537.	2.9	22
106	Solar water heating potential in South Africa in dynamic energy market conditions. Renewable and Sustainable Energy Reviews, 2012, 16, 3002-3013.	8.2	22
107	Assessment of policy based residential solar PV potential using GIS-based multicriteria decision analysis: A case study of Apeldoorn, The Netherlands. Energy Procedia, 2017, 134, 110-120.	1.8	22
108	A spatio-temporal city-scale assessment of residential photovoltaic power integration scenarios. Solar Energy, 2018, 174, 1185-1197.	2.9	22

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109	Do we really need rotor equivalent wind speed?. Wind Energy, 2019, 22, 745-763.	1.9	22
110	Calibration and Validation of ArcGIS Solar Radiation Tool for Photovoltaic Potential Determination in the Netherlands. Energies, 2021, 14, 1865.	1.6	22
111	Frequency effects in capacitively coupled radio-frequency glow discharges: a comparison between a 2-D fluid model and experiments. IEEE Transactions on Plasma Science, 1995, 23, 644-649.	0.6	20
112	Nanoclustering of hydrogen in ion-implanted and plasma-grown amorphous silicon. Physical Review B, 1998, 58, 12853-12864.	1.1	20
113	Time-Resolved Fluorescence Spectroscopy Study on the Photophysical Behavior of Quantum Dots. Journal of Fluorescence, 2002, 12, 69-76.	1.3	20
114	A solar powered wireless computer mouse: Industrial design concepts. Solar Energy, 2009, 83, 202-210.	2.9	19
115	Benchmark analysis of day-ahead solar power forecasting techniques using weather predictions. , 2019, , .		19
116	Review of Energy in the Built Environment. Smart Cities, 2020, 3, 248-288.	5.5	19
117	High Sensitivity Spectrograph for Use in Fluorescence Microscopy. Applied Spectroscopy, 2001, 55, 1005-1012.	1.2	18
118	Temperatureâ€dependent aluminum incorporation in AlxGa1â^'xAs layers grown by metalorganic vapor phase epitaxy. Journal of Applied Physics, 1988, 64, 195-199.	1.1	17
119	Analytical models for growth by metal organic vapour phase epitaxy: I. Isothermal models. Semiconductor Science and Technology, 1990, 5, 16-35.	1.0	17
120	Provision of Ancillary Services from an Aggregated Portfolio of Residential Heat Pumps on the Dutch Frequency Containment Reserve Market. Applied Sciences (Switzerland), 2019, 9, 590.	1.3	17
121	Response to simulated typical daily outdoor irradiation conditions of thin-film silicon-based triple-band-gap, triple-junction solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 691-697.	3.0	16
122	Longâ€term optical stability of fluorescent solar concentrator plates. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1150-1154.	0.8	16
123	Solar Irradiance Forecasting Using Triple Exponential Smoothing. , 2018, , .		16
124	Price development of photovoltaic modules, inverters, and systems in the Netherlands in 2012. Renewable Energy, 2014, 71, 18-22.	4.3	15
125	Geospatial analysis of the energy yield and environmental footprint of different photovoltaic module technologies. Solar Energy, 2017, 155, 1339-1353.	2.9	15
126	Methods of Deposition of Hydrogenated Amorphous Silicon for Device Applications. Thin Films and Nanostructures, 2002, 30, 1-215.	0.1	14

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127	Solar eclipse: The rise and 'dusk' of the Dutch PV innovation system. International Journal of Technology, Policy and Management, 2012, 12, 135.	0.1	13
128	Visual Appearance of Nanocrystal-Based Luminescent Solar Concentrators. Materials, 2019, 12, 885.	1.3	13
129	Empirical Evaluation of V2G Round-trip Efficiency. , 2020, , .		13
130	An Exploration of the Three-Layer Model Including Stakeholders, Markets and Technologies for Assessments of Residential Smart Grids. Applied Sciences (Switzerland), 2018, 8, 2363.	1.3	12
131	A Comparison of Households' Energy Balance in Residential Smart Grid Pilots in the Netherlands. Applied Sciences (Switzerland), 2019, 9, 2993.	1.3	12
132	On the Use of Average versus Marginal Emission Factors. , 2019, , .		12
133	Analysis of photon-driven solar-to-hydrogen production methods in the Netherlands. Sustainable Energy Technologies and Assessments, 2021, 48, 101631.	1.7	12
134	Economic evaluation of offshore wind power in the liberalized Dutch power market. Wind Energy, 2009, 12, 507-523.	1.9	11
135	Renewable energy fueled desalination in Israel. Desalination and Water Treatment, 2010, 13, 450-463.	1.0	11
136	Improvement of Shade Resilience in Photovoltaic Modules Using Buck Converters in a Smart Module Architecture. Energies, 2018, 11, 250.	1.6	11
137	PV System Performance Evaluation by Clustering Production Data to Normal and Non-Normal Operation. Energies, 2018, 11, 977.	1.6	11
138	Visualization of Operational Performance of Grid-Connected PV Systems in Selected European Countries. Energies, 2018, 11, 1330.	1.6	11
139	Fast Imaging of Single Molecules and Nanoparticles by Wide-Field Microscopy and Spectrally Resolved Confocal Microscopy. Single Molecules, 2000, 1, 291-298.	1.6	10
140	Teaching the relation between solar cell efficiency and annual energy yield. European Journal of Physics, 2007, 28, 415-427.	0.3	10
141	On the influence of electricity demand patterns, battery storage and PV system design on PV self-consumption and grid interaction. , 2016 , , .		10
142	A Review of the Dutch Ecosystem for Building Integrated Photovoltaics. Energy Procedia, 2017, 111, 974-981.	1.8	10
143	Inverse photovoltaic yield model for global horizontal irradiance reconstruction. Energy Science and Engineering, 2017, 5, 226-239.	1.9	10
144	Three years experience in a Dutch public awareness campaign on photovoltaic system performance. IET Renewable Power Generation, 2017, 11, 1229-1233.	1.7	10

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145	Should Anisotropic Emission or Reabsorption of Nanoparticle Luminophores Be Optimized for Increasing Luminescent Solar Concentrator Efficiency?. Solar Rrl, 2020, 4, 2000279.	3.1	10
146	An operational bidding framework for aggregated electric vehicles on the electricity spot market. Applied Energy, 2022, 308, 118280.	5.1	10
147	Frequency effects in capacitively coupled radioâ€frequency glow discharges: A comparison between experiments and a twoâ€dimensional fluid model. Applied Physics Letters, 1994, 64, 1780-1782.	1.5	9
148	Ion Bombardment in Silane VHF Deposition Plasmas. Materials Research Society Symposia Proceedings, 1997, 467, 603.	0.1	9
149	Using amorphous silicon solar cells to boost the viability of luminescent solar concentrators. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1045-1048.	0.8	9
150	Luminescent Solar Concentrators – a low cost photovoltaics alternative. EPJ Web of Conferences, 2012, 33, 02003.	0.1	9
151	Product-Integrated Photovoltaics. , 2012, , 709-732.		9
152	Smart charging of community storage units using Markov chains. , 2017, , .		9
153	A Time-Series Data Analysis Methodology for Effective Monitoring of Partially Shaded Photovoltaic Systems. Energies, 2019, 12, 1722.	1.6	9
154	A Blockchain-Based Configuration for Balancing the Electricity Grid with Distributed Assets. World Electric Vehicle Journal, 2020, 11, 62.	1.6	9
155	Escaping the niche market: An innovation system analysis of the Dutch building integrated photovoltaics (BIPV) sector. Renewable and Sustainable Energy Reviews, 2022, 155, 111912.	8.2	9
156	Regulation strategies for mitigating voltage fluctuations induced by photovoltaic solar systems in an urban low voltage grid. International Journal of Electrical Power and Energy Systems, 2022, 137, 107695.	3.3	9
157	Grid congestion mitigation in the era of shared electric vehicles. Journal of Energy Storage, 2022, 48, 103806.	3.9	9
158	Impact of measured spectrum variation on solar photovoltaic efficiencies worldwide. Renewable Energy, 2022, 196, 995-1016.	4.3	9
159	Laser alloying of Cu and Cr. Journal of Materials Research, 1986, 1, 652-660.	1.2	8
160	Role of ions in PECVD of amorphous silicon. Surface and Coatings Technology, 1995, 74-75, 63-66.	2.2	8
161	Structural defects and hydrogen clustering in amorphous silicon. Journal of Non-Crystalline Solids, 1998, 227-230, 128-132.	1.5	8
162	VHF <i>>a</i> i>–Si: H solar cells: A systematic material and cell study. Journal of Materials Research, 1998, 13, 45-52.	1.2	8

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163	Grid parity reached for consumers in the Netherlands. , 2012, , .		8
164	Operational performance of grid-connected PV systems. , 2014, , .		8
165	Indirect air CO2 capture and refinement based on OTEC seawater outgassing. IScience, 2021, 24, 102754.	1.9	8
166	Introduction – Physics and Technology of Amorphous-Crystalline Heterostructure Silicon Solar Cells. Engineering Materials, 2012, , 1-12.	0.3	8
167	The pulse reactor—A high-efficiency, high-precision low-pressure MOCVD machine. Journal of Crystal Growth, 1988, 93, 201-206.	0.7	7
168	Analytical models for growth by metal organic vapour phase epitaxy: II. Influence of temperature gradient. Semiconductor Science and Technology, 1990, 5, 36-44.	1.0	7
169	Analytical models for the growth by metal organic vapour phase epitaxy: III. Applications. Semiconductor Science and Technology, 1990, 5, 291-298.	1.0	7
170	Structural order in thina‧i:H films. Journal of Applied Physics, 1995, 78, 1964-1967.	1.1	7
171	Sheath thickness in very-high-frequency plasma chemical vapor deposition of hydrogenated amorphous silicon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 654-658.	0.9	7
172	Exploration of parameters influencing the self-absorption losses in luminescent solar concentrators with an experimentally validated combined ray-tracing/Monte-Carlo model. Proceedings of SPIE, 2013, , .	0.8	7
173	Evaluation of different indicators for representing solar spectral variation. , 2016, , .		7
174	Evaluation and Analysis of Selective Deployment of Power Optimizers for Residential PV Systems. Energies, 2021, 14, 811.	1.6	7
175	Bond-Angle Variation and Microstructure in Hydrogenated Amorphous Silicon. Materials Research Society Symposia Proceedings, 1992, 258, 275.	0.1	6
176	The Influence of the Void Structure on Deuterium Diffusion in a-Si:H. Materials Research Society Symposia Proceedings, 1992, 258, 407.	0.1	6
177	Nanoparticles for solar spectrum conversion. Proceedings of SPIE, 2010, , .	0.8	6
178	Inter-system time lag due to clouds in an urban PV ensemble. , 2014, , .		6
179	Luminescent Solar Concentrators: The route to 10% efficiency., 2014,,.		6
180	Photovoltaic System Design and Performance. Energies, 2019, 12, 1826.	1.6	6

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181	Photovoltaic solar energy. , 2020, , 65-86.		6
182	An observational method for determining daily and regional photovoltaic solar energy statistics. Solar Energy, 2021, 228, 12-26.	2.9	6
183	Ion Energy Distributions in Silane-Hydrogen Plasmas. Materials Research Society Symposia Proceedings, 1996, 420, 461.	0.1	5
184	A-Si:H Solar Cells Deposited Using VHF–PECVD. Materials Research Society Symposia Proceedings, 1996, 420, 21.	0.1	5
185	A new method for estimating insolation based on PV-module currents in a cluster of stand-alone solar systems. Progress in Photovoltaics: Research and Applications, 2007, 15, 387-404.	4.4	5
186	Using CAD software to simulate PV energy yield: Predicting the charge yield of solar cells incorporated into a PV powered consumer product under 3D-irradiation conditions., 2009,,.		5
187	Concentrating solar power. , 2020, , 221-231.		5
188	Will luminescent solar concentrators surpass the 10% device efficiency limit?. SPIE Newsroom, 0 , , .	0.1	5
189	The Importance of Predictor Variables and Feature Selection in Day-ahead Electricity Price Forecasting. , 2020, , .		5
190	The Impact of Transitioning to Shared Electric Vehicles on Grid Congestion and Management. , 2020, , .		5
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