

# Wilfried Gjhm Van Sark

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/4663942/wilfried-gjhm-van-sark-publications-by-year.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

245  
papers

7,707  
citations

45  
h-index

81  
g-index

280  
ext. papers

9,093  
ext. citations

5.9  
avg, IF

6.65  
L-index

#	Paper	IF	Citations
245	Historical and Future Cost Dynamics of Photovoltaic Technology <b>2022</b> , 50-81		
244	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. <i>Joule</i> , <b>2022</b> , 6, 8-15	27.8	14
243	Grid congestion mitigation in the era of shared electric vehicles. <i>Journal of Energy Storage</i> , <b>2022</b> , 48, 103806	7.8	2
242	Operational day-ahead solar power forecasting for aggregated PV systems with a varying spatial distribution. <i>Renewable Energy</i> , <b>2022</b> , 183, 267-282	8.1	7
241	An operational bidding framework for aggregated electric vehicles on the electricity spot market. <i>Applied Energy</i> , <b>2022</b> , 308, 118280	10.7	2
240	Powering an island energy system by offshore floating technologies towards 100% renewables: A case for the Maldives. <i>Applied Energy</i> , <b>2022</b> , 308, 118360	10.7	1
239	Escaping the niche market: An innovation system analysis of the Dutch building integrated photovoltaics (BIPV) sector. <i>Renewable and Sustainable Energy Reviews</i> , <b>2021</b> , 111912	16.2	1
238	Regulation strategies for mitigating voltage fluctuations induced by photovoltaic solar systems in an urban low voltage grid. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2021</b> , 137, 107695	5.1	1
237	Solar Power Forecasts <b>2021</b> , 213-213		
236	Luminescent Solar Concentrator <b>2021</b> ,		
235	Floating Photovoltaic Systems <b>2021</b> ,		1
234	Product-Integrated Photovoltaics <b>2021</b> ,		
233	Analysis of photon-driven solar-to-hydrogen production methods in the Netherlands. <i>Sustainable Energy Technologies and Assessments</i> , <b>2021</b> , 48, 101631	4.7	3
232	International collaboration framework for the calculation of performance loss rates: Data quality, benchmarks, and trends (towards a uniform methodology). <i>Progress in Photovoltaics: Research and Applications</i> , <b>2021</b> , 29, 573-602	6.8	9
231	Calibration and Validation of ArcGIS Solar Radiation Tool for Photovoltaic Potential Determination in the Netherlands. <i>Energies</i> , <b>2021</b> , 14, 1865	3.1	6
230	Cost-Effective Increase of Photovoltaic Electricity Feed-In on Congested Transmission Lines: A Case Study of The Netherlands. <i>Energies</i> , <b>2021</b> , 14, 2868	3.1	0
229	Effects of solar cell group granularity and modern system architectures on partial shading response of crystalline silicon modules and systems. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2021</b> , 29, 977-989	6.8	0

228	Pooling the cable: A techno-economic feasibility study of integrating offshore floating photovoltaic solar technology within an offshore wind park. <i>Solar Energy</i> , <b>2021</b> , 219, 65-74	6.8	11
227	Insights on the capacity value of photovoltaics, community batteries and electric vehicles. <i>Sustainable Energy, Grids and Networks</i> , <b>2021</b> , 26, 100421	3.6	0
226	Evaluation and Analysis of Selective Deployment of Power Optimizers for Residential PV Systems. <i>Energies</i> , <b>2021</b> , 14, 811	3.1	3
225	Indirect air CO capture and refinement based on OTEC seawater outgassing. <i>IScience</i> , <b>2021</b> , 24, 102754	6.1	2
224	Life Cycle Assessment of Direct Air Carbon Capture and Storage with Low-Carbon Energy Sources. <i>Environmental Science &amp; Technology</i> , <b>2021</b> ,	10.3	14
223	Optimal Design and Operation of Temporary Power Installations: Case Study on CO 2 and Cost Savings for Outdoor Festivals in the Netherlands. <i>Journal of the Urban Planning and Development Division, ASCE</i> , <b>2021</b> , 147, 04021038	2.2	
222	An observational method for determining daily and regional photovoltaic solar energy statistics. <i>Solar Energy</i> , <b>2021</b> , 228, 12-26	6.8	0
221	Life cycle assessment of carbon dioxide removal technologies: a critical review. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 1701-1721	35.4	38
220	A Blockchain-Based Configuration for Balancing the Electricity Grid with Distributed Assets. <i>World Electric Vehicle Journal</i> , <b>2020</b> , 11, 62	2.5	5
219	Simulation of performance differences between offshore and land-based photovoltaic systems. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2020</b> , 28, 873-886	6.8	28
218	Analysis of high frequency photovoltaic solar energy fluctuations. <i>Solar Energy</i> , <b>2020</b> , 206, 381-389	6.8	9
217	On the Trade-Off Between Environmental and Economic Objectives in Community Energy Storage Operational Optimization. <i>IEEE Transactions on Sustainable Energy</i> , <b>2020</b> , 11, 2653-2661	8.2	18
216	An integrated blockchain-based energy management platform with bilateral trading for microgrid communities. <i>Applied Energy</i> , <b>2020</b> , 263, 114613	10.7	86
215	A systematic analysis of meteorological variables for PV output power estimation. <i>Renewable Energy</i> , <b>2020</b> , 153, 12-22	8.1	35
214	Review of Energy in the Built Environment. <i>Smart Cities</i> , <b>2020</b> , 3, 248-288	3.3	11
213	The Importance of Predictor Variables and Feature Selection in Day-ahead Electricity Price Forecasting <b>2020</b> ,		3
212	Towards a Near-Zero Energy Landmark Building Using Building Integrated Photovoltaics: The Case of the Van Unnik Building at Utrecht Science Park. <i>Smart Innovation, Systems and Technologies</i> , <b>2020</b> , 339-348	0.5	
211	Building-Integrated Photovoltaics <b>2020</b> , 127-163		

210	Steps Towards an Optimal Building-Integrated Photovoltaics (BIPV) Value Chain in the Netherlands. <i>Smart Innovation, Systems and Technologies</i> , <b>2020</b> , 407-419	0.5	2
209	Impact of rapid PV fluctuations on power quality in the low-voltage grid and mitigation strategies using electric vehicles. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2020</b> , 118, 105741	5.1	49
208	Concentrating solar power <b>2020</b> , 221-231		1
207	Photovoltaic solar energy <b>2020</b> , 65-86		3
206	Multiple roads ahead: How charging behavior can guide charging infrastructure roll-out policy. <i>Transportation Research, Part D: Transport and Environment</i> , <b>2020</b> , 85, 102452	6.4	7
205	Empirical Evaluation of V2G Round-trip Efficiency <b>2020</b> ,		5
204	Should we reinforce the grid? Cost and emission optimization of electric vehicle charging under different transformer limits. <i>Applied Energy</i> , <b>2020</b> , 276, 115285	10.7	45
203	Should Anisotropic Emission or Reabsorption of Nanoparticle Luminescences Be Optimized for Increasing Luminescent Solar Concentrator Efficiency?. <i>Solar Rrl</i> , <b>2020</b> , 4, 2000279	7.1	5
202	Development and Implementation of BIPV Courseware for Higher Education and Professionals. <i>Smart Innovation, Systems and Technologies</i> , <b>2019</b> , 209-217	0.5	
201	A Time-Series Data Analysis Methodology for Effective Monitoring of Partially Shaded Photovoltaic Systems. <i>Energies</i> , <b>2019</b> , 12, 1722	3.1	5
200	Visual Appearance of Nanocrystal-Based Luminescent Solar Concentrators. <i>Materials</i> , <b>2019</b> , 12,	3.5	7
199	Towards the determination of metal criticality in home-based battery systems using a Life Cycle Assessment approach. <i>Journal of Cleaner Production</i> , <b>2019</b> , 221, 667-677	10.3	16
198	Flexibility of Electric Vehicle Demand: Analysis of Measured Charging Data and Simulation for the Future. <i>World Electric Vehicle Journal</i> , <b>2019</b> , 10, 14	2.5	23
197	Do we really need rotor equivalent wind speed?. <i>Wind Energy</i> , <b>2019</b> , 22, 745-763	3.4	15
196	Provision of Ancillary Services from an Aggregated Portfolio of Residential Heat Pumps on the Dutch Frequency Containment Reserve Market. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 590	2.6	9
195	Optimal energy management in all-electric residential energy systems with heat and electricity storage. <i>Applied Energy</i> , <b>2019</b> , 254, 113580	10.7	38
194	A Comparison of Households' Energy Balance in Residential Smart Grid Pilots in the Netherlands. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 2993	2.6	5
193	Agent-Based Modelling of Charging Behaviour of Electric Vehicle Drivers. <i>Jasss</i> , <b>2019</b> , 22,	4.8	15

192	On the Use of Average versus Marginal Emission Factors <b>2019</b> ,		6
191	Multi-objective optimization of energy arbitrage in community energy storage systems using different battery technologies. <i>Applied Energy</i> , <b>2019</b> , 239, 356-372	10.7	83
190	On the Interdependence and Importance of Meteorological Variables for Photovoltaic Output Power Estimation <b>2019</b> ,		1
189	Comparison of the Greenhouse Gas Emission Reduction Potential of Energy Communities. <i>Energies</i> , <b>2019</b> , 12, 4440	3.1	21
188	Development of a big data bank for PV monitoring data, analysis and simulation in COST Action BEARL PVI <b>2019</b> ,		2
187	Benchmark analysis of day-ahead solar power forecasting techniques using weather predictions <b>2019</b> ,		7
186	Proof of concept for a novel and smart shade resilient photovoltaic module. <i>IET Renewable Power Generation</i> , <b>2019</b> , 13, 2184-2194	2.9	2
185	A Method for Developing a Game-Enhanced Tool Targeting Consumer Engagement in Demand Response Mechanisms. <i>Progress in IS</i> , <b>2019</b> , 213-235	0.9	1
184	A framework for the provision of flexibility services at the transmission and distribution levels through aggregator companies. <i>Sustainable Energy, Grids and Networks</i> , <b>2019</b> , 17, 100187	3.6	21
183	Assessment of forecasting methods on performance of photovoltaic-battery systems. <i>Applied Energy</i> , <b>2018</b> , 221, 358-373	10.7	32
182	Photovoltaic systems coupled with batteries that are optimally sized for household self-consumption: Assessment of peak shaving potential. <i>Applied Energy</i> , <b>2018</b> , 223, 69-81	10.7	59
181	A comparative review of building integrated photovoltaics ecosystems in selected European countries. <i>Renewable and Sustainable Energy Reviews</i> , <b>2018</b> , 90, 1027-1040	16.2	54
180	Nanoparticles for Luminescent Solar Concentrators - A review. <i>Optical Materials</i> , <b>2018</b> , 84, 636-645	3.3	79
179	Improvement of Shade Resilience in Photovoltaic Modules Using Buck Converters in a Smart Module Architecture. <i>Energies</i> , <b>2018</b> , 11, 250	3.1	7
178	PV System Performance Evaluation by Clustering Production Data to Normal and Non-Normal Operation. <i>Energies</i> , <b>2018</b> , 11, 977	3.1	7
177	Visualization of Operational Performance of Grid-Connected PV Systems in Selected European Countries. <i>Energies</i> , <b>2018</b> , 11, 1330	3.1	9
176	Urban Environment and Solar PV Performance: The Case of the Netherlands. <i>Energies</i> , <b>2018</b> , 11, 1333	3.1	17
175	Diffusion of solar photovoltaic systems and electric vehicles among Dutch consumers: Implications for the energy transition. <i>Energy Research and Social Science</i> , <b>2018</b> , 46, 68-85	7.7	26

174	Economic benefits of combining self-consumption enhancement with frequency restoration reserves provision by photovoltaic-battery systems. <i>Applied Energy</i> , <b>2018</b> , 223, 172-187	10.7	41
173	On the search for representative characteristics of PV systems: Data collection and analysis of PV system azimuth, tilt, capacity, yield and shading. <i>Solar Energy</i> , <b>2018</b> , 173, 1087-1106	6.8	25
172	A New Hybrid Ocean Thermal Energy Conversion-Offshore Solar Pond (OTEC-OSP) Design: A Cost Optimization Approach <b>2018</b> , 501-513		1
171	Techno-economic analysis of household and community energy storage for residential prosumers with smart appliances. <i>Applied Energy</i> , <b>2018</b> , 209, 266-276	10.7	117
170	Introducing PEARL-PV Performance and Reliability of Photovoltaic Systems: Evaluations of Large-Scale Monitoring Data <b>2018</b> ,		2
169	An Exploration of the Three-Layer Model Including Stakeholders, Markets and Technologies for Assessments of Residential Smart Grids. <i>Applied Sciences (Switzerland)</i> , <b>2018</b> , 8, 2363	2.6	8
168	Lowering greenhouse gas emissions in the built environment by combining ground source heat pumps, photovoltaics and battery storage. <i>Energy and Buildings</i> , <b>2018</b> , 180, 51-71	7	37
167	A spatio-temporal city-scale assessment of residential photovoltaic power integration scenarios. <i>Solar Energy</i> , <b>2018</b> , 174, 1185-1197	6.8	12
166	Solar Irradiance Forecasting Using Triple Exponential Smoothing <b>2018</b> ,		11
165	Gamification-based framework for engagement of residential customers in energy applications. <i>Energy Research and Social Science</i> , <b>2018</b> , 44, 187-195	7.7	55
164	A system perspective to the deployment of flexibility through aggregator companies in the Netherlands. <i>Energy Policy</i> , <b>2018</b> , 118, 534-551	7.2	22
163	Review of barriers to the introduction of residential demand response: a case study in the Netherlands. <i>International Journal of Energy Research</i> , <b>2017</b> , 41, 790-816	4.5	23
162	Experimental determination of demand side management potential of wet appliances in the Netherlands. <i>Sustainable Energy, Grids and Networks</i> , <b>2017</b> , 9, 80-94	3.6	18
161	Heterojunction Silicon Solar Cells <b>2017</b> , 104-113		
160	The Luminescent Solar Concentrator (LSC) <b>2017</b> , 420-430		2
159	PV System Monitoring and Characterization <b>2017</b> , 553-563		3
158	Product Integrated Photovoltaics <b>2017</b> , 590-600		
157	The Electric Mondrian as a Luminescent Solar Concentrator Demonstrator Case Study. <i>Solar Rrl</i> , <b>2017</b> , 1, 1600015	7.1	26

156	Status and Outlook for Building Integrated Photovoltaics (BIPV) in Relation to Educational needs in the BIPV Sector. <i>Energy Procedia</i> , <b>2017</b> , 111, 993-999	2.3	35
155	Compensation of self-absorption losses in luminescent solar concentrators by increasing luminophore concentration. <i>Solar Energy Materials and Solar Cells</i> , <b>2017</b> , 167, 133-139	6.4	42
154	A Review of the Dutch Ecosystem for Building Integrated Photovoltaics. <i>Energy Procedia</i> , <b>2017</b> , 111, 974-981	2.3	4
153	Photovoltaics in the shade: one bypass diode per solar cell revisited. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2017</b> , 25, 836-849	6.8	45
152	Provision of regulating- and reserve power by electric vehicle owners in the Dutch market. <i>Applied Energy</i> , <b>2017</b> , 190, 1008-1019	10.7	35
151	Comprehensive characterisation and analysis of PV module performance under real operating conditions. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2017</b> , 25, 218-232	6.8	42
150	Short-term peer-to-peer solar forecasting in a network of photovoltaic systems. <i>Applied Energy</i> , <b>2017</b> , 206, 1464-1483	10.7	45
149	Assessment of policy based residential solar PV potential using GIS-based multicriteria decision analysis: A case study of Apeldoorn, The Netherlands. <i>Energy Procedia</i> , <b>2017</b> , 134, 110-120	2.3	14
148	Influence of demand patterns on the optimal orientation of photovoltaic systems. <i>Solar Energy</i> , <b>2017</b> , 155, 1002-1014	6.8	32
147	Analytic model for correlations of cloud induced fluctuations of clear-sky index. <i>Solar Energy</i> , <b>2017</b> , 155, 985-1001	6.8	3
146	Geospatial analysis of the energy yield and environmental footprint of different photovoltaic module technologies. <i>Solar Energy</i> , <b>2017</b> , 155, 1339-1353	6.8	9
145	Inverse photovoltaic yield model for global horizontal irradiance reconstruction. <i>Energy Science and Engineering</i> , <b>2017</b> , 5, 226-239	3.4	8
144	Three years experience in a Dutch public awareness campaign on photovoltaic system performance. <i>IET Renewable Power Generation</i> , <b>2017</b> , 11, 1229-1233	2.9	7
143	Smart charging of community storage units using Markov chains <b>2017</b> ,		8
142	Enabling Flexibility from Demand-Side Resources Through Aggregator Companies. <i>Progress in IS</i> , <b>2017</b> , 333-353	0.9	2
141	An artificial neural network to assess the impact of neighbouring photovoltaic systems in power forecasting in Utrecht, the Netherlands. <i>Renewable Energy</i> , <b>2016</b> , 85, 631-641	8.1	84
140	A cost roadmap for silicon heterojunction solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2016</b> , 147, 295-314	6.4	155
139	Unravelling historical cost developments of offshore wind energy in Europe. <i>Energy Policy</i> , <b>2016</b> , 88, 435-444	7.2	53

138	A comprehensive study on partial shading response of c-Si modules and yield modeling of string inverter and module level power electronics. <i>Solar Energy</i> , <b>2016</b> , 135, 731-741	6.8	32
137	Re-assessment of net energy production and greenhouse gas emissions avoidance after 40 years of photovoltaics development. <i>Nature Communications</i> , <b>2016</b> , 7, 13728	17.4	125
136	On the influence of electricity demand patterns, battery storage and PV system design on PV self-consumption and grid interaction <b>2016</b> ,		5
135	Co-evolution of smart energy products and services: A novel approach towards smart grids <b>2016</b> ,		0
134	Evaluation of different indicators for representing solar spectral variation <b>2016</b> ,		5
133	The electric mondrian toolbox concept [A luminescent solar concentrator design study <b>2016</b> ,		1
132	The Growing Role of Photovoltaic Solar, Wind and Geothermal Energy as Renewables for Electricity Generation <b>2015</b> , 19-36		
131	Life-cycle greenhouse gas emissions and energy payback time of current and prospective silicon heterojunction solar cell designs. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2015</b> , 23, 1406-1428	6.8	40
130	Outdoor characterization and comparison of string and MLPE under clear and partially shaded conditions. <i>Energy Science and Engineering</i> , <b>2015</b> , 3, 510-519	3.4	17
129	Smart charging of electric vehicles with photovoltaic power and vehicle-to-grid technology in a microgrid; a case study. <i>Applied Energy</i> , <b>2015</b> , 152, 20-30	10.7	188
128	Visualization of operational performance of grid-connected PV systems in selected European countries <b>2015</b> ,		3
127	Spatial power fluctuation correlations in urban rooftop photovoltaic systems. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2015</b> , 23, 1390-1397	6.8	24
126	Reconsidering the capacity credit of wind power: Application of cumulative prospect theory. <i>Renewable Energy</i> , <b>2014</b> , 68, 752-760	8.1	19
125	Operational performance of grid-connected PV systems <b>2014</b> ,		5
124	Price development of photovoltaic modules, inverters, and systems in the Netherlands in 2012. <i>Renewable Energy</i> , <b>2014</b> , 71, 18-22	8.1	12
123	<b>2014</b> ,		5
122	Long-term optical stability of fluorescent solar concentrator plates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2014</b> , 211, 1150-1154	1.6	14
121	Luminescent Solar Concentrators: The route to 10% efficiency <b>2014</b> ,		4



120	The energy payback time of advanced crystalline silicon PV modules in 2020: a prospective study. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2014</b> , 22, 1180-1194	6.8	62
119	Recent developments in luminescent solar concentrators <b>2014</b> ,		1
118	Annual performance enhancement of building integrated photovoltaic modules by applying phase change materials. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2013</b> , 21, 620-630	6.8	47
117	Upconversion in solar cells. <i>Nanoscale Research Letters</i> , <b>2013</b> , 8, 81	5	164
116	Luminescent solar concentrators A low cost photovoltaics alternative. <i>Renewable Energy</i> , <b>2013</b> , 49, 207-210	8.1	83
115	Tackling self-absorption in luminescent solar concentrators with type-II colloidal quantum dots. <i>Solar Energy Materials and Solar Cells</i> , <b>2013</b> , 111, 57-65	6.4	116
114	Increased Upconversion Response in a-Si:H Solar Cells With Broad-Band Light. <i>IEEE Journal of Photovoltaics</i> , <b>2013</b> , 3, 17-21	3.7	32
113	Exploration of parameters influencing the self-absorption losses in luminescent solar concentrators with an experimentally validated combined ray-tracing/Monte-Carlo model <b>2013</b> ,		4
112	Price development of photovoltaic modules, inverters, and systems in The Netherlands in 2012 <b>2013</b> ,		1
111	Luminescent solar concentrators with fiber geometry. <i>Optics Express</i> , <b>2013</b> , 21 Suppl 3, A503-14	3.3	33
110	Cost analysis of two Silicon Heterojunction solar cell designs <b>2013</b> ,		1
109	Power Output Variability in randomly spaced dutch urban rooftop solar photovoltaic systems <b>2013</b> ,		1
108	Solar water heating potential in South Africa in dynamic energy market conditions. <i>Renewable and Sustainable Energy Reviews</i> , <b>2012</b> , 16, 3002-3013	16.2	15
107	Introduction to Photovoltaic Technology <b>2012</b> , 5-11		1
106	Technical potential for photovoltaics on buildings in the EU-27. <i>Solar Energy</i> , <b>2012</b> , 86, 2644-2653	6.8	93
105	<b>2012</b> ,		7
104	Design and Components of Photovoltaic Systems <b>2012</b> , 679-695		2
103	Product-Integrated Photovoltaics <b>2012</b> , 709-732		8

102 Energy Technologies **2012**, 139-228

101	Improving the performance of amorphous and crystalline silicon heterojunction solar cells by monitoring surface passivation. <i>Journal of Non-Crystalline Solids</i> , <b>2012</b> , 358, 2245-2248	3.9	22
100	Performance ratio revisited: is PR > 90% realistic?. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2012</b> , 20, 717-726	6.8	155
99	Case E: Design of a Solar-Powered Wireless Computer Mouse <b>2012</b> , 295-305		
98	Luminescent Solar Concentrators ▯ a low cost photovoltaics alternative. <i>EPJ Web of Conferences</i> , <b>2012</b> , 33, 02003	0.3	5
97	Solar eclipse: The rise and 'dusk' of the Dutch PV innovation system. <i>International Journal of Technology, Policy and Management</i> , <b>2012</b> , 12, 135	0.3	12
96	Tackling self-absorption in luminescent solar concentrators with type-II colloidal quantum dots <b>2012</b> ,		1
95	Introduction ▯ Physics and Technology of Amorphous-Crystalline Heterostructure Silicon Solar Cells. <i>Engineering Materials</i> , <b>2012</b> , 1-12	0.4	7
94	Luminescent Solar Concentrators with a Fibre Geometry <b>2012</b> ,		1
93	Upconverter solar cells: materials and applications. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 4835	35.4	309
92	Greenhouse gas emissions associated with photovoltaic electricity from crystalline silicon modules under various energy supply options. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2011</b> , 19, 603-613	6.8	32
91	Feasibility of photovoltaic ▯ Thermoelectric hybrid modules. <i>Applied Energy</i> , <b>2011</b> , 88, 2785-2790	10.7	223
90	Charge yield potential of indoor-operated solar cells incorporated into Product Integrated Photovoltaic (PIPV). <i>Renewable Energy</i> , <b>2011</b> , 36, 642-647	8.1	61
89	Unraveling the photovoltaic technology learning curve by incorporation of input price changes and scale effects. <i>Renewable and Sustainable Energy Reviews</i> , <b>2011</b> , 15, 324-337	16.2	101
88	Fabrication and full characterization of state-of-the-art quantum dot luminescent solar concentrators. <i>Solar Energy Materials and Solar Cells</i> , <b>2011</b> , 95, 2087-2094	6.4	142
87	Comparison of surface passivation of crystalline silicon by a-Si:H with and without atomic hydrogen treatment using hot-wire chemical vapor deposition. <i>Thin Solid Films</i> , <b>2011</b> , 519, 4476-4478	2.2	24
86	High quality crystalline silicon surface passivation by combined intrinsic and n-type hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 203503	3.4	28
85	Excellent crystalline silicon surface passivation by amorphous silicon irrespective of the technique used for chemical vapor deposition. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 153514	3.4	54

84	Thin Film Silicon Solar Cells Under Moderate Concentration. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1321, 9		
83	Nanoparticles for solar spectrum conversion <b>2010</b> ,		4
82	Optimizing Quantum Dot Solar Concentrators with Thin Film Solar Cells. <i>Advances in Science and Technology</i> , <b>2010</b> , 74, 176-181	0.1	2
81	Renewable energy fueled desalination in Israel. <i>Desalination and Water Treatment</i> , <b>2010</b> , 13, 450-463		9
80	Fabrication and spectroscopic studies on highly luminescent CdSe/CdS nanorod polymer composites. <i>Beilstein Journal of Nanotechnology</i> , <b>2010</b> , 1, 94-100	3	55
79	Using CAD software to simulate PV energy yield – The case of product integrated photovoltaic operated under indoor solar irradiation. <i>Solar Energy</i> , <b>2010</b> , 84, 1526-1537	6.8	19
78	Towards upconversion for amorphous silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2010</b> , 94, 1919-1922	6.4	108
77	Enhanced near-infrared response of a-Si:H solar cells with $\text{Er}^{3+}$ (2%) upconversion phosphors. <i>Solar Energy Materials and Solar Cells</i> , <b>2010</b> , 94, 2395-2398	6.4	218
76	Potential errors when fitting experience curves by means of spreadsheet software. <i>Energy Policy</i> , <b>2010</b> , 38, 7508-7511	7.2	2
75	Using amorphous silicon solar cells to boost the viability of luminescent solar concentrators. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, NA-NA		2
74	Technological Learning in the Energy Sector <b>2010</b> ,		37
73	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 <b>2009</b> ,		4
72	Economic evaluation of offshore wind power in the liberalized Dutch power market. <i>Wind Energy</i> , <b>2009</b> , 12, 507-523	3.4	11
71	A solar powered wireless computer mouse: Industrial design concepts. <i>Solar Energy</i> , <b>2009</b> , 83, 202-210	6.8	18
70	Response to simulated typical daily outdoor irradiation conditions of thin-film silicon-based triple-band-gap, triple-junction solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2009</b> , 93, 691-697	6.4	15
69	Crystalline silicon cell performance at low light intensities. <i>Solar Energy Materials and Solar Cells</i> , <b>2009</b> , 93, 1471-1481	6.4	131
68	Potential for solar water heating in Zimbabwe. <i>Renewable and Sustainable Energy Reviews</i> , <b>2009</b> , 13, 567-582	16.2	24
67	Tropicalisation of Feed-in Tariffs: A custom-made support scheme for hybrid PV/diesel systems in isolated regions. <i>Renewable and Sustainable Energy Reviews</i> , <b>2009</b> , 13, 2279-2294	16.2	38

66	Introducing errors in progress ratios determined from experience curves. <i>Technological Forecasting and Social Change</i> , <b>2008</b> , 75, 405-415	9.5	37
65	Luminescent Solar Concentrators--a review of recent results. <i>Optics Express</i> , <b>2008</b> , 16, 21773-92	3.3	364
64	Accuracy of progress ratios determined from experience curves: the case of crystalline silicon photovoltaic module technology development. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2008</b> , 16, 441-453	6.8	46
63	Renewable energy technologies in the Maldives--Realizing the potential. <i>Renewable and Sustainable Energy Reviews</i> , <b>2008</b> , 12, 162-180	16.2	40
62	A new hybrid ocean thermal energy conversion/Offshore solar pond (OTEC/DSP) design: A cost optimization approach. <i>Solar Energy</i> , <b>2008</b> , 82, 520-527	6.8	60
61	Simulating performance of solar cells with spectral downshifting layers. <i>Thin Solid Films</i> , <b>2008</b> , 516, 6808-6812	6.8	40
60	Monitoring and remote failure detection of grid-connected PV systems based on satellite observations. <i>Solar Energy</i> , <b>2007</b> , 81, 548-564	6.8	166
59	Analysis of the silicon market: Will thin films profit?. <i>Energy Policy</i> , <b>2007</b> , 35, 3121-3125	7.2	64
58	Renewable energy technologies in the Maldives--determining the potential. <i>Renewable and Sustainable Energy Reviews</i> , <b>2007</b> , 11, 1650-1674	16.2	67
57	A new method for estimating insolation based on PV-module currents in a cluster of stand-alone solar systems. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2007</b> , 15, 387-404	6.8	4
56	Teaching the relation between solar cell efficiency and annual energy yield. <i>European Journal of Physics</i> , <b>2007</b> , 28, 415-427	0.8	8
55	The Potential of Renewables as a Feedstock for Chemistry and Energy <b>2006</b> , 19-37		
54	Estimating insolation based on PV-module currents in a cluster of stand-alone solar systems: Introduction of a new method. <i>Solar Energy</i> , <b>2006</b> , 80, 1220-1222	6.8	2
53	FULLSPECTRUM: a new PV wave making more efficient use of the solar spectrum. <i>Solar Energy Materials and Solar Cells</i> , <b>2005</b> , 87, 467-479	6.4	34
52	Enhancing solar cell efficiency by using spectral converters. <i>Solar Energy Materials and Solar Cells</i> , <b>2005</b> , 87, 395-409	6.4	153
51	Enhancement of solar cell performance by employing planar spectral converters. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 1511-17	3.4	54
50	Modeling improvement of spectral response of solar cells by deployment of spectral converters containing semiconductor nanocrystals. <i>Semiconductors</i> , <b>2004</b> , 38, 962-969	0.7	47
49	Methods of deposition of hydrogenated amorphous silicon for device applications <b>2002</b> , 1-102		0

48	Blueing, Bleaching, and Blinking of Single CdSe/ZnS Quantum Dots. <i>ChemPhysChem</i> , <b>2002</b> , 3, 871-879	3.2	236
47	Fluorescence lifetime imaging in scanning microscopes: acquisition speed, photon economy and lifetime resolution. <i>Journal of Microscopy</i> , <b>2002</b> , 206, 218-24	1.9	178
46	Time-Resolved Fluorescence Spectroscopy Study on the Photophysical Behavior of Quantum Dots. <i>Journal of Fluorescence</i> , <b>2002</b> , 12, 69-76	2.4	17
45	Methods of Deposition of Hydrogenated Amorphous Silicon for Device Applications. <i>Thin Films and Nanostructures</i> , <b>2002</b> , 30, 1-215		10
44	Spectral Imaging of Single CdSe/ZnS Quantum Dots Employing Spectrally- and Time-resolved Confocal Microscopy. <i>Springer Series on Fluorescence</i> , <b>2002</b> , 317-335	0.5	2
43	Photooxidation and Photobleaching of Single CdSe/ZnS Quantum Dots Probed by Room-Temperature Time-Resolved Spectroscopy. <i>Journal of Physical Chemistry B</i> , <b>2001</b> , 105, 8281-8284	3.4	340
42	High Sensitivity Spectrograph for Use in Fluorescence Microscopy. <i>Applied Spectroscopy</i> , <b>2001</b> , 55, 1005-1012	3.12	17
41	Fast Imaging of Single Molecules and Nanoparticles by Wide-Field Microscopy and Spectrally Resolved Confocal Microscopy. <i>Single Molecules</i> , <b>2000</b> , 1, 291-298		9
40	On the transmission function of an ion-energy and mass spectrometer. <i>International Journal of Mass Spectrometry and Ion Processes</i> , <b>1998</b> , 173, 91-98		47
39	Structural defects and hydrogen clustering in amorphous silicon. <i>Journal of Non-Crystalline Solids</i> , <b>1998</b> , 227-230, 128-132	3.9	8
38	Structural properties of a-Si:H related to ion energy distributions in VHF silane deposition plasmas. <i>Journal of Non-Crystalline Solids</i> , <b>1998</b> , 226, 205-216	3.9	44
37	Nanoclustering of hydrogen in ion-implanted and plasma-grown amorphous silicon. <i>Physical Review B</i> , <b>1998</b> , 58, 12853-12864	3.3	18
36	VHF a-Si:H solar cells: A systematic material and cell study. <i>Journal of Materials Research</i> , <b>1998</b> , 13, 45-52	2.5	8
35	Sheath thickness in very-high-frequency plasma chemical vapor deposition of hydrogenated amorphous silicon. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1997</b> , 15, 654-658	2.9	7
34	A self-consistent fluid model for radio-frequency discharges in SiH <sub>4</sub> /H <sub>2</sub> compared to experiments. <i>Journal of Applied Physics</i> , <b>1997</b> , 82, 2060-2071	2.5	117
33	Role of Material Structure on Molecular Diffusion of Hydrogen in a-Si:C:H Films. <i>Materials Research Society Symposia Proceedings</i> , <b>1997</b> , 467, 141		
32	Ion Bombardment in Silane VHF Deposition Plasmas. <i>Materials Research Society Symposia Proceedings</i> , <b>1997</b> , 467, 603		8
31	Inhomogeneities in PECVD deposited a-Si:H films induced by a spacing between substrate and substrate holder. <i>Solar Energy Materials and Solar Cells</i> , <b>1997</b> , 45, 57-63	6.4	4

30	Ion Energy Distributions in Silane-Hydrogen Plasmas. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 420, 461		5
29	A-Si:H Solar Cells Deposited Using VHFPECVD. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 420, 21		4
28	Plasma Induced Changes to TCO/a-Si:H Interfaces. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 420, 57		3
27	Luminescence Quenching in Erbium-Doped Hydrogenated Amorphous Silicon. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 422, 239		4
26	Deposition-rate reduction through improper substrate-to-electrode attachment in very-high-frequency deposition of a-Si:H. <i>Journal of Applied Physics</i> , <b>1996</b> , 80, 3546-3551	2.5	27
25	Luminescence quenching in erbium-doped hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 997-999	3.4	67
24	Luminescence quenching in erbium-doped hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 46-48	3.4	30
23	Role of ions in PECVD of amorphous silicon. <i>Surface and Coatings Technology</i> , <b>1995</b> , 74-75, 63-66	4.4	8
22	Structural order in thin a-Si:H films. <i>Journal of Applied Physics</i> , <b>1995</b> , 78, 1964-1967	2.5	6
21	. <i>IEEE Transactions on Plasma Science</i> , <b>1995</b> , 23, 644-649	1.3	17
20	Frequency effects in capacitively coupled radio-frequency glow discharges: A comparison between experiments and a two-dimensional fluid model. <i>Applied Physics Letters</i> , <b>1994</b> , 64, 1780-1782	3.4	6
19	Local structure and bonding states in a-Si <sub>1-x</sub> C <sub>x</sub> :H. <i>Journal of Applied Physics</i> , <b>1994</b> , 76, 251-256	2.5	41
18	Hydrogen Bonding and Microvoid Stability in a-Si:H. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 336, 299		1
17	Structural, compositional and optical properties of hydrogenated amorphous silicon-carbon alloys. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , <b>1992</b> , 66, 787-800		28
16	Bond-Angle Variation and Microstructure in Hydrogenated Amorphous Silicon. <i>Materials Research Society Symposia Proceedings</i> , <b>1992</b> , 258, 275		6
15	The Influence of the Void Structure on Deuterium Diffusion in a-Si:H. <i>Materials Research Society Symposia Proceedings</i> , <b>1992</b> , 258, 407		4
14	Novel Application of Amorphous Silicon in Electrostatic Loudspeakers. <i>Materials Research Society Symposia Proceedings</i> , <b>1991</b> , 219, 519		2
13	Theoretical and experimental description of the growth of GaAs and Al <sub>x</sub> Ga <sub>1-x</sub> As in the pulse reactor. <i>Journal of Crystal Growth</i> , <b>1990</b> , 102, 1-15	1.6	1

12	Simulation of crystalline GaAs solar cell structures with the amorphous semiconductors analysis package. <i>Solar Cells</i> , <b>1990</b> , 29, 319-333		1
11	Analytical models for growth by metal organic vapour phase epitaxy: I. Isothermal models. <i>Semiconductor Science and Technology</i> , <b>1990</b> , 5, 16-35	1.8	17
10	Analytical models for growth by metal organic vapour phase epitaxy: II. Influence of temperature gradient. <i>Semiconductor Science and Technology</i> , <b>1990</b> , 5, 36-44	1.8	7
9	Computer automation of the Pulse Reactor, a pulse operated low-pressure metal organic vapor phase epitaxy machine. <i>Review of Scientific Instruments</i> , <b>1990</b> , 61, 146-157	1.7	2
8	Characterization of GaAs solar cells made by ion implantation and rapid thermal annealing using selective photoetching. <i>Journal of Materials Research</i> , <b>1990</b> , 5, 1042-1051	2.5	2
7	Analytical models for the growth by metal organic vapour phase epitaxy: III. Applications. <i>Semiconductor Science and Technology</i> , <b>1990</b> , 5, 291-298	1.8	6
6	The pulse reactor—a high-efficiency, high-precision low-pressure MOCVD machine. <i>Journal of Crystal Growth</i> , <b>1988</b> , 93, 201-206	1.6	5
5	Temperature-dependent aluminum incorporation in Al <sub>x</sub> Ga <sub>1-x</sub> As layers grown by metalorganic vapor phase epitaxy. <i>Journal of Applied Physics</i> , <b>1988</b> , 64, 195-199	2.5	17
4	A new method for the evaluation of solar cell parameters. <i>Solar Cells</i> , <b>1986</b> , 17, 241-251		44
3	Laser alloying of Cu and Cr. <i>Journal of Materials Research</i> , <b>1986</b> , 1, 652-660	2.5	8
2	CHAPTER 14: Spectral Conversion for Thin Film Solar Cells and Luminescent Solar Concentrators. <i>RSC Energy and Environment Series</i> , 455-488	0.6	
1	Will luminescent solar concentrators surpass the 10% device efficiency limit?. <i>SPIE Newsroom</i> ,		3