

Peter Lund

List of Publications by Year in descending order

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360
papers

15,616
citations

18482
62
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27406
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380
all docs

380
docs citations

380
times ranked

14533
citing authors

#	ARTICLE	IF	CITATIONS
1	Review of energy system flexibility measures to enable high levels of variable renewable electricity. Renewable and Sustainable Energy Reviews, 2015, 45, 785-807.	16.4	1,133
2	A model for generating household electricity load profiles. International Journal of Energy Research, 2006, 30, 273-290.	4.5	398
3	Device Physics of Dye Solar Cells. Advanced Materials, 2010, 22, E210-34.	21.0	371
4	Device stability of perovskite solar cells – A review. Renewable and Sustainable Energy Reviews, 2017, 77, 131-146.	16.4	345
5	Impact of H ₂ O on organic–inorganic hybrid perovskite solar cells. Energy and Environmental Science, 2017, 10, 2284-2311.	30.8	345
6	A multicomponent PCM wall optimized for passive solar heating. Energy and Buildings, 1991, 17, 259-270.	6.7	274
7	Review of stability for advanced dye solar cells. Energy and Environmental Science, 2010, 3, 418.	30.8	260
8	Effects of energy policies on industry expansion in renewable energy. Renewable Energy, 2009, 34, 53-64.	8.9	229
9	Stability assessment of alternative platinum free counter electrodes for dye-sensitized solar cells. Energy and Environmental Science, 2015, 8, 3495-3514.	30.8	225
10	Effects of large-scale photovoltaic power integration on electricity distribution networks. Renewable Energy, 2007, 32, 216-234.	8.9	210
11	Review of materials and manufacturing options for large area flexible dye solar cells. Renewable and Sustainable Energy Reviews, 2011, 15, 3717-3732.	16.4	185
12	Optimal and rule-based control strategies for energy flexibility in buildings with PV. Applied Energy, 2016, 161, 425-436.	10.1	175
13	Improving renewable energy policy planning and decision-making through a hybrid MCDM method. Energy Policy, 2020, 137, 111174.	8.8	169
14	Schottky Junction Effect on High Performance Fuel Cells Based on Nanocomposite Materials. Advanced Energy Materials, 2015, 5, 1401895.	19.5	166
15	Spectral Characteristics of Light Harvesting, Electron Injection, and Steady-State Charge Collection in Pressed TiO ₂ Dye Solar Cells. Journal of Physical Chemistry C, 2008, 112, 5623-5637.	3.1	163
16	Measurement of current distribution in a free-breathing PEMFC. Journal of Power Sources, 2002, 106, 304-312.	7.8	162
17	Scalability and feasibility of photoelectrochemical H ₂ evolution: the ultimate limit of Pt nanoparticle as an HER catalyst. Energy and Environmental Science, 2015, 8, 2991-2999.	30.8	162
18	A high-performance self-powered broadband photodetector based on a CH ₃ NH ₃ PbI ₃ perovskite/ZnO nanorod array heterostructure. Journal of Materials Chemistry C, 2016, 4, 7302-7308.	5.5	159

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19	Progress on Electrolytes Development in Dye-Sensitized Solar Cells. <i>Materials</i> , 2019, 12, 1998.	2.9	152
20	Carbonâ€Doubleâ€Bondâ€Free Printed Solar Cells from $\text{TiO}_2/\text{CH}_3\text{NH}_3\text{PbI}_3/\text{CuSCN}/\text{Au}$: Structural Control and Photoaging Effects. <i>ChemPhysChem</i> , 2014, 15, 1194-1200.	2.1	148
21	Novel fuel cell with nanocomposite functional layer designed by perovskite solar cell principle. <i>Nano Energy</i> , 2016, 19, 156-164.	16.0	137
22	Air Processed Inkjet Infiltrated Carbon Based Printed Perovskite Solar Cells with High Stability and Reproducibility. <i>Advanced Materials Technologies</i> , 2017, 2, 1600183.	5.8	137
23	Options for improving the load matching capability of distributed photovoltaics: Methodology and application to high-latitude data. <i>Solar Energy</i> , 2009, 83, 1953-1966.	6.1	129
24	Breakthrough fuel cell technology using ceria-based multi-functional nanocomposites. <i>Applied Energy</i> , 2013, 106, 163-175.	10.1	126
25	Improved flexibility with large-scale variable renewable power in cities through optimal demand side management and power-to-heat conversion. <i>Energy Conversion and Management</i> , 2016, 126, 649-661.	9.2	122
26	A new energy conversion technology based on nano-redox and nano-device processes. <i>Nano Energy</i> , 2013, 2, 1179-1185.	16.0	117
27	A review on solid oxide fuel cell durability: Latest progress, mechanisms, and study tools. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 161, 112339.	16.4	116
28	Charge separation and transport in $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ and ion-doping ceria heterostructure material for new generation fuel cell. <i>Nano Energy</i> , 2017, 37, 195-202.	16.0	115
29	Nanostructured dye solar cells on flexible substrates-Review. <i>International Journal of Energy Research</i> , 2009, 33, 1145-1160.	4.5	109
30	Impacts of distributed photovoltaics on network voltages: Stochastic simulations of three Swedish low-voltage distribution grids. <i>Electric Power Systems Research</i> , 2010, 80, 1562-1571.	3.6	109
31	Urban energy systems with smart multi-carrier energy networks and renewable energy generation. <i>Renewable Energy</i> , 2012, 48, 524-536.	8.9	109
32	Measurement of ohmic voltage losses in individual cells of a PEMFC stack. <i>Journal of Power Sources</i> , 2002, 112, 261-272.	7.8	105
33	Effect of energy storage on variations in wind power. <i>Wind Energy</i> , 2005, 8, 421-441.	4.2	102
34	Spray deposition and compression of TiO_2 nanoparticle films for dye-sensitized solar cells on plastic substrates. <i>Solar Energy Materials and Solar Cells</i> , 2006, 90, 887-899.	6.2	100
35	Effect of extreme temperatures on battery charging and performance of electric vehicles. <i>Journal of Power Sources</i> , 2016, 328, 37-45.	7.8	100
36	Review and analysis of characterization methods and ionic conductivities for low-temperature solid oxide fuel cells (LT-SOFC). <i>Journal of Power Sources</i> , 2014, 263, 315-331.	7.8	99

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37	Industrial sheet metals for nanocrystalline dye-sensitized solar cell structures. <i>Solar Energy Materials and Solar Cells</i> , 2006, 90, 2881-2893.	6.2	97
38	Smart energy system design for large clean power schemes in urban areas. <i>Journal of Cleaner Production</i> , 2015, 103, 437-445.	9.3	95
39	A review of demand side flexibility potential in Northern Europe. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 91, 654-664.	16.4	95
40	Market penetration rates of new energy technologies. <i>Energy Policy</i> , 2006, 34, 3317-3326.	8.8	92
41	An organic PCM storage system with adjustable melting temperature. <i>Solar Energy</i> , 1991, 46, 275-278.	6.1	90
42	Electrochemical mechanisms of an advanced low-temperature fuel cell with a $\text{SrTiO}_{3-x}\text{F}_x$ electrolyte. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9638-9645.	10.3	90
43	Energy integration and interaction between buildings and vehicles: A state-of-the-art review. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 114, 109337.	16.4	85
44	Application of a Triple-Conducting Heterostructure Electrolyte of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.1}\text{Fe}_{0.7}\text{Zr}_{0.1}\text{Y}_{0.1}\text{O}_{3-\delta}$ and $\text{Ca}_{0.04}\text{Ce}_{0.80}\text{Sm}_{0.16}\text{O}_{2-\delta}$ in a High-Performance Low-Temperature Solid Oxide Fuel Cell. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 35071-35080.	8.0	84
45	Impacts of EU carbon emission trade directive on energy-intensive industries – Indicative micro-economic analyses. <i>Ecological Economics</i> , 2007, 63, 799-806.	5.7	82
46	Review of modelling energy transitions pathways with application to energy system flexibility. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 101, 440-452.	16.4	82
47	Use of bio-based carbon materials for improving biogas yield and digestate stability. <i>Energy</i> , 2018, 164, 898-909.	8.8	81
48	Outlook on biofuels in future studies: A systematic literature review. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 134, 110326.	16.4	81
49	Energy system resilience – A review. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 150, 111476.	16.4	81
50	Promoted electrocatalytic activity and ionic transport simultaneously in dual functional $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Fe}_{0.8}\text{Sb}_{0.2}\text{O}_{3-\delta}\text{-Sm}_{0.2}\text{Ce}_{0.8}\text{O}_{2-\delta}$ heterostructure. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120503.	20.2	78
51	Semiconductor Electrochemistry for Clean Energy Conversion and Storage. <i>Electrochemical Energy Reviews</i> , 2021, 4, 757-792.	25.5	77
52	Multivariate optimization of design trade-offs for solar low energy buildings. <i>Energy and Buildings</i> , 1999, 29, 189-205.	6.7	76
53	Flexibility of electric vehicles and space heating in net zero energy houses: an optimal control model with thermal dynamics and battery degradation. <i>Applied Energy</i> , 2017, 190, 800-812.	10.1	75
54	Review of zinc dendrite formation in zinc bromine redox flow battery. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 127, 109838.	16.4	75

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55	Charge transfer resistance of spray deposited and compressed counter electrodes for dye-sensitized nanoparticle solar cells on plastic substrates. <i>Solar Energy Materials and Solar Cells</i> , 2006, 90, 872-886.	6.2	73
56	Evaluation of planar free-breathing polymer electrolyte membrane fuel cell design. <i>Journal of Power Sources</i> , 2004, 129, 68-72.	7.8	69
57	An integrated scenario-based robust planning approach for foresight and strategic management with application to energy industry. <i>Technological Forecasting and Social Change</i> , 2016, 104, 162-171.	11.6	69
58	A single-component fuel cell reactor. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 8536-8541.	7.1	67
59	Cobalt-Phosphate modified TiO ₂ /BiVO ₄ nanoarrays photoanode for efficient water splitting. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 5496-5504.	7.1	67
60	Sustainability evaluation and sensitivity analysis of district heating systems coupled to geothermal and solar resources. <i>Energy Conversion and Management</i> , 2020, 220, 113084.	9.2	67
61	Title is missing!. <i>Journal of Applied Electrochemistry</i> , 2003, 33, 265-271.	2.9	66
62	Large-scale urban renewable electricity schemes – Integration and interfacing aspects. <i>Energy Conversion and Management</i> , 2012, 63, 162-172.	9.2	66
63	Dye-sensitized solar cells with inkjet-printed dyes. <i>Energy and Environmental Science</i> , 2016, 9, 2453-2462.	30.8	65
64	High performance dye-sensitized solar cells with inkjet printed ionic liquid electrolyte. <i>Nano Energy</i> , 2015, 17, 206-215.	16.0	62
65	Modeling flexibility and optimal use of existing power plants with large-scale variable renewable power schemes. <i>Energy</i> , 2016, 112, 364-375.	8.8	62
66	Thermodynamic performance analysis and multi-criteria optimization of a hybrid combined heat and power system coupled with geothermal energy. <i>Energy Conversion and Management</i> , 2020, 210, 112741.	9.2	61
67	Deep decarbonization of urban energy systems through renewable energy and sector-coupling flexibility strategies. <i>Journal of Environmental Management</i> , 2020, 260, 110090.	7.8	60
68	Co-estimating the state of charge and health of lithium batteries through combining a minimalist electrochemical model and an equivalent circuit model. <i>Energy</i> , 2022, 240, 122815.	8.8	60
69	Effect of cathode structure on planar free-breathing PEMFC. <i>Journal of Power Sources</i> , 2004, 138, 205-210.	7.8	57
70	Analyzing National and Local Pathways to Carbon-Neutrality from Technology, Emissions, and Resilience Perspectives – Case of Finland. <i>Energies</i> , 2019, 12, 949.	3.1	57
71	Photovoltaic fiber. <i>Thin Solid Films</i> , 2009, 517, 2799-2802.	1.8	56
72	Combining solar resource mapping and energy system integration methods for realistic valuation of urban solar energy potential. <i>Solar Energy</i> , 2016, 135, 325-336.	6.1	56

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73	Wide bandgap oxides for low-temperature single-layered nanocomposite fuel cell. Nano Energy, 2018, 53, 391-397.	16.0	55
74	Performance evaluation of complex electricity generation systems: A dynamic network-based data envelopment analysis approach. Energy Economics, 2020, 91, 104894.	12.1	55
75	Initial Performance of Dye Solar Cells on Stainless Steel Substrates. Journal of Physical Chemistry C, 2008, 112, 4011-4017.	3.1	54
76	Dye Solar Cells on ITO-PET Substrate with TiO ₂ Recombination Blocking Layers. Journal of the Electrochemical Society, 2009, 156, B876.	2.9	54
77	Boosting new renewable technologies towards grid parity – Economic and policy aspects. Renewable Energy, 2011, 36, 2776-2784.	8.9	54
78	Mechanically manufactured selective solar absorber surfaces. Solar Energy Materials and Solar Cells, 2003, 79, 273-283.	6.2	53
79	A durable SWCNT/PET polymer foil based metal free counter electrode for flexible dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 19609-19615.	10.3	53
80	Semiconductor Fe-doped SrTiO ₃ - δ perovskite electrolyte for low-temperature solid oxide fuel cell (LT-SOFC) operating below 520°C. International Journal of Hydrogen Energy, 2020, 45, 14470-14479.	7.1	52
81	Mutual Conversion of CO and CO ₂ on a Perovskite Fuel Electrode with Endogenous Alloy Nanoparticles for Reversible Solid Oxide Cells. ACS Applied Materials & Interfaces, 2022, 14, 9138-9150.	8.0	52
82	A new energy conversion technology joining electrochemical and physical principles. RSC Advances, 2012, 2, 5066.	3.6	51
83	Nanocellulose aerogel membranes for optimal electrolyte filling in dye solar cells. Nano Energy, 2014, 8, 95-102.	16.0	51
84	TiO ₂ nanotubes for dye-sensitized solar cells – A review. Energy Science and Engineering, 2021, 9, 921-937.	4.0	51
85	Single-Walled Carbon Nanotube Thin-Film Counter Electrodes for Indium Tin Oxide-Free Plastic Dye Solar Cells. Journal of the Electrochemical Society, 2010, 157, B1831.	2.9	50
86	Effect of electrolyte bleaching on the stability and performance of dye solar cells. Physical Chemistry Chemical Physics, 2014, 16, 6092.	2.8	50
87	Climate-friendly but socially rejected energy-transition pathways: The integration of techno-economic and socio-technical approaches in the Nordic-Baltic region. Energy Research and Social Science, 2020, 67, 101559.	6.4	50
88	Functional ceria-based nanocomposites for advanced low-temperature (300–600°C) solid oxide fuel cell: A comprehensive review. Materials Today Energy, 2020, 15, 100373.	4.7	48
89	In situ image processing method to investigate performance and stability of dye solar cells. Solar Energy, 2012, 86, 331-338.	6.1	47
90	Configuration optimization and selection of a photovoltaic-gas integrated energy system considering renewable energy penetration in power grid. Energy Conversion and Management, 2022, 254, 115260.	9.2	46

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91	Effect of Nonuniform Generation and Inefficient Collection of Electrons on the Dynamic Photocurrent and Photovoltage Response of Nanostructured Photoelectrodes. Journal of Physical Chemistry C, 2008, 112, 20491-20504.	3.1	45
92	Impacts of different data averaging times on statistical analysis of distributed domestic photovoltaic systems. Solar Energy, 2010, 84, 492-500.	6.1	45
93	Metallic and plastic dye solar cells. Wiley Interdisciplinary Reviews: Energy and Environment, 2013, 2, 104-120.	4.1	45
94	Models for generating place and time dependent urban energy demand profiles. Applied Energy, 2014, 130, 256-264.	10.1	45
95	Improving the performance of a 2-stage large aperture parabolic trough solar concentrator using a secondary reflector designed by adaptive method. Renewable Energy, 2020, 152, 23-33.	8.9	45
96	Title is missing!. Journal of Applied Electrochemistry, 2002, 32, 1081-1089.	2.9	44
97	The role of micro-nano pores in interfacial solar evaporation systems – A review. Applied Energy, 2021, 292, 116871.	10.1	44
98	Titanium sinter as gas diffusion backing in PEMFC. Journal of Power Sources, 2003, 118, 183-188.	7.8	43
99	Rediscovering a Key Interface in Dye-Sensitized Solar Cells: Guanidinium and Iodine Competition for Binding Sites at the Dye/Electrolyte Surface. Journal of the American Chemical Society, 2014, 136, 7286-7294.	13.7	43
100	Development of a self-sufficient solar-hydrogen energy system. International Journal of Hydrogen Energy, 1994, 19, 99-106.	7.1	42
101	The link between political decision-making and energy options: Assessing future role of renewable energy and energy efficiency in Finland. Energy, 2007, 32, 2271-2281.	8.8	42
102	Effectiveness of policy measures in transforming the energy system. Energy Policy, 2007, 35, 627-639.	8.8	42
103	Improving the state of charge estimation of reused lithium-ion batteries by abating hysteresis using machine learning technique. Journal of Energy Storage, 2020, 32, 101678.	8.1	42
104	Performance analysis and exergo-economic optimization of a solar-driven adjustable tri-generation system. Energy Conversion and Management, 2021, 233, 113873.	9.2	42
105	Optimal sizing of grid-connected PV-systems for different climates and array orientations: a simulation study. Solar Energy Materials and Solar Cells, 1994, 35, 445-451.	6.2	40
106	Integrated performance analysis of a space heating system assisted by photovoltaic/thermal collectors and ground source heat pump for hotel and office building types. Renewable Energy, 2021, 169, 925-934.	8.9	40
107	Stability of Dye Solar Cells with Photoelectrode on Metal Substrates. Journal of the Electrochemical Society, 2010, 157, B814.	2.9	39
108	Influence of TiO ₂ compact layer precursor on the performance of perovskite solar cells. Organic Electronics, 2017, 41, 287-293.	2.6	39

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109	Mechanism for Major Improvement in SOFC Electrolyte Conductivity When Using Lithium Compounds as Anode. ACS Applied Energy Materials, 2020, 3, 4134-4138.	5.1	39
110	Exergo-economic assessment and sensitivity analysis of a solar-driven combined cooling, heating and power system with organic Rankine cycle and absorption heat pump. Energy, 2021, 230, 120717.	8.8	39
111	Multi-objective optimization of an integrated energy system against energy, supply-demand matching and exergo-environmental cost over the whole life-cycle. Energy Conversion and Management, 2022, 254, 115203.	9.2	39
112	An improved synthesis method of ceria-carbonate based composite electrolytes for low-temperature SOFC fuel cells. International Journal of Hydrogen Energy, 2013, 38, 16532-16538.	7.1	38
113	Advanced low-temperature ceramic nanocomposite fuel cells using ultra high ionic conductivity electrolytes synthesized through freeze-dried method and solid-route. Materials Today Energy, 2017, 5, 338-346.	4.7	38
114	Daylight optimization of multifunctional solar facades. Solar Energy, 2000, 68, 223-235.	6.1	37
115	Regenerative effects by temperature variations in dye-sensitized solar cells. Solar Energy Materials and Solar Cells, 2007, 91, 1733-1742.	6.2	37
116	Optimal sizing of solar array and inverter in grid-connected photovoltaic systems. Solar Energy Materials and Solar Cells, 1994, 32, 95-114.	6.2	36
117	AB ₂ metal hydrides for high-pressure and narrow temperature interval applications. Journal of Alloys and Compounds, 1998, 269, 288-293.	5.5	36
118	A carbon gel catalyst layer for the roll-to-roll production of dye solar cells. Carbon, 2011, 49, 528-532.	10.3	36
119	Potential of distributed photovoltaics in urban Chile. Solar Energy, 2016, 135, 43-49.	6.1	36
120	Status and future strategies for Concentrating Solar Power in China. Energy Science and Engineering, 2017, 5, 100-109.	4.0	36
121	Impact of Film Thickness of Ultrathin Dip-Coated Compact TiO ₂ Layers on the Performance of Mesoscopic Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 17906-17913.	8.0	36
122	Novel Perovskite Semiconductor Based on Co/Fe-Codoped LBZY (La _{0.5} Ba _{0.5}) _{1-x} Ti _x O ₃ as Solid Electrolyte in Ceramic Fuel Cells. ACS Applied Energy Materials, 2021, 4, 5798-5808.	5.1	36
123	A numerical model for seasonal storage of solar heat in the ground by vertical pipes. Solar Energy, 1985, 34, 351-366.	6.1	35
124	Modeling and simulation of aquifer storage energy systems. Solar Energy, 1994, 53, 237-247.	6.1	35
125	Metal hydride hydrogen storage for near-ambient temperature and atmospheric pressure applications, a PDSC study. International Journal of Hydrogen Energy, 1995, 20, 897-909.	7.1	35
126	Mass transport in the cathode of a free-breathing polymer electrolyte membrane fuel cell. Journal of Applied Electrochemistry, 2003, 33, 979-987.	2.9	35

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127	Exploring past energy changes and their implications for the pace of penetration of new energy technologies. <i>Energy</i> , 2010, 35, 647-656.	8.8	35
128	A novel 2-stage dish concentrator with improved optical performance for concentrating solar power plants. <i>Renewable Energy</i> , 2017, 108, 92-97.	8.9	35
129	Critical analysis on the quality of stability studies of perovskite and dye solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 730-738.	30.8	35
130	A novel clustering algorithm for grouping and cascade utilization of retired Li-ion batteries. <i>Journal of Energy Storage</i> , 2020, 29, 101303.	8.1	35
131	Encapsulation of commercial and emerging solar cells with focus on perovskite solar cells. <i>Solar Energy</i> , 2022, 237, 264-283.	6.1	35
132	Combined hydrogen compressing and heat transforming through metal hydrides. <i>International Journal of Hydrogen Energy</i> , 1999, 24, 441-448.	7.1	34
133	Sizing and applicability considerations of solar combisystems. <i>Solar Energy</i> , 2005, 78, 59-71.	6.1	34
134	Reducing convective heat losses in solar dish cavity receivers through a modified air-curtain system. <i>Solar Energy</i> , 2018, 166, 50-58.	6.1	34
135	Estimation and prediction of state of health of electric vehicle batteries using discrete incremental capacity analysis based on real driving data. <i>Energy</i> , 2021, 225, 120160.	8.8	34
136	Ideal scheme selection of an integrated conventional and renewable energy system combining multi-objective optimization and matching performance analysis. <i>Energy Conversion and Management</i> , 2022, 251, 114989.	9.2	34
137	Computational approaches for improving seasonal storage systems based on hydrogen technologies. <i>International Journal of Hydrogen Energy</i> , 1995, 20, 575-585.	7.1	33
138	Fast market penetration of energy technologies in retrospect with application to clean energy futures. <i>Applied Energy</i> , 2010, 87, 3575-3583.	10.1	33
139	Different flexibility options for better system integration of wind power. <i>Energy Strategy Reviews</i> , 2019, 26, 100368.	7.3	33
140	Stabilization of metal counter electrodes for dye solar cells. <i>Journal of Electroanalytical Chemistry</i> , 2011, 653, 93-99.	3.8	32
141	Do Counter Electrodes on Metal Substrates Work with Cobalt Complex Based Electrolyte in Dye Sensitized Solar Cells?. <i>Journal of the Electrochemical Society</i> , 2013, 160, H132-H137.	2.9	32
142	Validating the technological feasibility of yttria-stabilized zirconia-based semiconducting-ionic composite in intermediate-temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2018, 384, 318-327.	7.8	32
143	Two-Dimensional Time-Dependent Numerical Modeling of Edge Effects in Dye Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011, 115, 7019-7031.	3.1	31
144	TiO ₂ /ZnO/TiO ₂ sandwich multi-layer films as a hole-blocking layer for efficient perovskite solar cells. <i>International Journal of Energy Research</i> , 2016, 40, 806-813.	4.5	31

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145	Electrolyser-metal hydride-fuel cell system for seasonal energy storage. International Journal of Hydrogen Energy, 1998, 23, 267-271.	7.1	30
146	Standardized Procedures Important for Improving Single-Component Ceramic Fuel Cell Technology. ACS Energy Letters, 2017, 2, 2752-2755.	17.4	30
147	Semiconductor Nb-Doped SrTiO ₃ Perovskite Electrolyte for a Ceramic Fuel Cell. ACS Applied Energy Materials, 2021, 4, 365-375.	5.1	30
148	Simulation of solar hydrogen energy systems. Solar Energy, 1994, 53, 267-278.	6.1	29
149	High conductive (LiNaK) 2 CO 3 Ce 0.85 Sm 0.15 O 2 electrolyte compositions for IT-SOFC applications. International Journal of Hydrogen Energy, 2017, 42, 20904-20909.	7.1	29
150	Coral-shaped porous LiFePO ₄ /graphene hybrids for high rate and all-climate battery applications. Energy Storage Materials, 2019, 21, 457-463.	18.0	29
151	Rational design of highly efficient flexible and transparent p-type composite electrode based on single-walled carbon nanotubes. Nano Energy, 2020, 67, 104183.	16.0	29
152	Straight-through all-glass evacuated tube solar collector for low and medium temperature applications. Solar Energy, 2020, 201, 935-943.	6.1	29
153	Long-Term Stability of Dye-Sensitized Solar Cells Assembled with Cobalt Polymer Gel Electrolyte. Journal of Physical Chemistry C, 2017, 121, 17577-17585.	3.1	28
154	Semiconductor-ionic materials could play an important role in advanced fuel-to-electricity conversion. International Journal of Energy Research, 2018, 42, 3413-3415.	4.5	28
155	Analyzing the effects of uncertainties on the modelling of low-carbon energy system pathways. Energy, 2020, 201, 117652.	8.8	28
156	Interface engineering of bi-layer semiconductor SrCoSnO ₃ -CeO ₂ heterojunction electrolyte for boosting the electrochemical performance of low-temperature ceramic fuel cell. International Journal of Hydrogen Energy, 2021, 46, 33969-33977.	7.1	28
157	Multi-objective optimization of a solar-driven trigeneration system considering power-to-heat storage and carbon tax. Energy, 2022, 250, 123756.	8.8	28
158	Design and performance evaluation of a high-temperature cavity receiver for a 2-stage dish concentrator. Solar Energy, 2018, 174, 1126-1132.	6.1	27
159	Radiation transmission measurements for solar ponds. Solar Energy, 1984, 33, 237-240.	6.1	26
160	Policy inclusiveness and niche development: Examples from wind energy and photovoltaics in Denmark, Germany, Finland, and Spain. Energy Research and Social Science, 2015, 6, 136-145.	6.4	26
161	Frugal energy innovations for developing countries – a framework. Global Challenges, 2017, 1, 9-19.	3.6	26
162	Tailoring triple charge conduction in BaCo _{0.2} Fe _{0.1} Ce _{0.2} Tm _{0.1} Zr _{0.3} Y _{0.1} O ₃ semiconductor electrolyte for boosting solid oxide fuel cell performance. Renewable Energy, 2021, 172, 336-349.	8.9	26

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163	Low temperature ceramic fuel cells employing lithium compounds: A review. Journal of Power Sources, 2021, 503, 230070.	7.8	26
164	Operation experiences of a phosphoric acid fuel cell in a solar hydrogen energy system. International Journal of Hydrogen Energy, 1997, 22, 707-713.	7.1	25
165	Optical analysis of solar collector with new V-shaped CPC. Solar Energy, 2016, 135, 780-785.	6.1	25
166	Effect of major policy disruptions in energy system transition: Case Finland. Energy Policy, 2018, 116, 323-336.	8.8	25
167	Improving the performance of large-aperture parabolic trough solar concentrator using semi-circular absorber tube with external fin and flat-plate radiation shield. Renewable Energy, 2020, 159, 1215-1223.	8.9	25
168	Flexible metal-free counter electrode for dye solar cells based on conductive polymer and carbon nanotubes. Journal of Electroanalytical Chemistry, 2012, 683, 70-74.	3.8	24
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