Tapas Mallick

List of Publications by Citations

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186 papers	4,142 citations	37 h-index	53 g-index
192 ext. papers	5,406 ext. citations	6.3 avg, IF	6.6 L-index

#	Paper	IF	Citations
186	Review on natural dye sensitized solar cells: Operation, materials and methods. *Renewable and Sustainable Energy Reviews*, **2015**, 51, 1306-1325	16.2	177
185	Optics for concentrating photovoltaics: Trends, limits and opportunities for materials and design. *Renewable and Sustainable Energy Reviews*, **2016**, 60, 394-407	16.2	148
184	Performance enhancement of a Building-Integrated Concentrating Photovoltaic system using phase change material. *Solar Energy Materials and Solar Cells*, **2016**, 149, 29-39	6.4	120
183	Improving spectral modification for applications in solar cells: A review. *Renewable Energy*, **2019**, 132, 186-205	8.1	115
182	Performance analysis of tilted photovoltaic system integrated with phase change material under varying operating conditions. *Energy*, **2017**, 133, 887-899	7.9	92
181	Opportunities and challenges in micro- and nano-technologies for concentrating photovoltaic cooling: A review. *Renewable and Sustainable Energy Reviews*, **2013**, 20, 595-610	16.2	92
180	Optimization of finned solar photovoltaic phase change material (finned pv pcm) system. *International Journal of Thermal Sciences*, **2018**, 130, 313-322	4.1	80
179	Structural and electronic properties of oxygen defective and Se-doped p-type BiVO4(001) thin film for the applications of photocatalysis. *Applied Catalysis B: Environmental*, **2018**, 224, 895-903	21.8	79
178	A Review of Hybrid Solar PV and Wind Energy System. *Smart Science*, **2015**, 3, 127-138	1.5	74
177	Enhancing the efficiency of transparent dye-sensitized solar cells using concentrated light. *Solar Energy Materials and Solar Cells*, **2018**, 175, 29-34	6.4	74
176	Facile Surfactant-Free Synthesis of p-Type SnSe Nanoplates with Exceptional Thermoelectric Power Factors. *Angewandte Chemie - International Edition*, **2016**, 55, 6433-7	16.4	71
175	Polypyrrole/TiO2 composites for the application of photocatalysis. *Sensors and Actuators B: Chemical*, **2017**, 241, 1161-1169	8.5	70
174	Optimization of solar photovoltaic system integrated with phase change material. *Solar Energy*, **2018**, 163, 591-599	6.8	69
173	Performance, limits and economic perspectives for passive cooling of High Concentrator Photovoltaics. *Solar Energy Materials and Solar Cells*, **2016**, 153, 164-178	6.4	62
172	A Review on Heavy Metal Ions and Containing Dyes Removal Through Graphene Oxide-Based Adsorption Strategies for Textile Wastewater Treatment. *Chemical Record*, **2021**, 21, 1570-1610	6.6	59
171	Evaluation of thermal performance for a smart switchable adaptive polymer dispersed liquid crystal (PDLC) glazing. *Solar Energy*, **2020**, 195, 185-193	6.8	58
170	Investigation of thermal and electrical performances of a combined semi-transparent PV-vacuum glazing. *Applied Energy*, **2018**, 228, 1591-1600	10.7	56

169	The colour rendering index and correlated colour temperature of dye-sensitized solar cell for adaptive glazing application. *Solar Energy*, **2018**, 163, 537-544	6.8	49
168	Thermal performance of semitransparent CdTe BIPV window at temperate climate. *Solar Energy*, **2020**, 195, 536-543	6.8	49
167	Chlorine-Enabled Electron Doping in Solution-Synthesized SnSe Thermoelectric Nanomaterials. *Advanced Energy Materials*, **2017**, 7, 1602328	21.8	48
166	An analytical indoor experimental study on the effect of soiling on PV, focusing on dust properties and PV surface material. *Solar Energy*, **2020**, 203, 46-68	6.8	48
165	Integrated semi-transparent cadmium telluride photovoltaic glazing into windows: Energy and daylight performance for different architecture designs. *Applied Energy*, **2018**, 231, 972-984	10.7	48
164	Numerical studies of thermal comfort for semi-transparent building integrated photovoltaic (BIPV)-vacuum glazing system. *Solar Energy*, **2019**, 190, 608-616	6.8	46
163	An experimental and numerical study on the effect of inclination angle of phase change materials thermal energy storage system. *Journal of Energy Storage*, **2019**, 23, 57-68	7.8	46
162	Hydrophilic and Superhydrophilic Self-Cleaning Coatings by Morphologically Varying ZnO Microstructures for Photovoltaic and Glazing Applications. *ACS Omega*, **2020**, 5, 1033-1039	3.9	46
161	Dust and PV Performance in Nigeria: A review. *Renewable and Sustainable Energy Reviews*, **2020**, 121, 109704	16.2	45
160	Climatic behaviour of solar photovoltaic integrated with phase change material. *Energy Conversion and Management*, **2018**, 166, 590-601	10.6	45
159	Performance analysis of a novel rotationally asymmetrical compound parabolic concentrator. *Applied Energy*, **2015**, 154, 221-231	10.7	43
158	Optical characterisation and optimisation of a static Window Integrated Concentrating Photovoltaic system. *Solar Energy*, **2013**, 91, 273-282	6.8	42
157	Color Comfort Evaluation of Dye-Sensitized Solar Cell (DSSC) Based Building-Integrated Photovoltaic (BIPV) Glazing after 2 Years of Ambient Exposure. *Journal of Physical Chemistry C*, **2019**, 123, 23834-23837	3.8	41
156	Use of Nanofluids in Solar PV/Thermal Systems. *International Journal of Photoenergy*, **2019**, 2019, 1-17	2.1	40
155	Electronic properties of TaON and its surfaces for solar water splitting. *Applied Catalysis B: Environmental*, **2018**, 229, 24-31	21.8	39
154	Multiple Phase Change Material (PCM) Configuration for PCM-Based Heat Sinks—An Experimental Study. *Energies*, **2018**, 11, 1629	3.1	39
153	Colour properties and glazing factors evaluation of multicrystalline based semi-transparent Photovoltaic-vacuum glazing for BIPV application. *Renewable Energy*, **2019**, 131, 730-736	8.1	39
152	Investigation of semi-transparent dye-sensitized solar cells for fenestration integration. *Renewable Energy*, **2019**, 141, 516-525	8.1	38

151	Modelling photovoltaic soiling losses through optical characterization. *Scientific Reports*, **2020**, 10, 58	4.9	38
150	Daylight characteristics of a polymer dispersed liquid crystal switchable glazing. *Solar Energy Materials and Solar Cells*, **2018**, 174, 572-576	6.4	37
149	Increasing efficiency of perovskite solar cells using low concentrating photovoltaic systems. *Sustainable Energy and Fuels*, **2020**, 4, 528-537	5.8	36
148	Control Strategy for Uninterrupted Microgrid Mode Transfer During Unintentional Islanding Scenarios. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 4831-4839	8.9	35
147	A >3000 suns high concentrator photovoltaic design based on multiple Fresnel lens primaries focusing to one central solar cell. *Solar Energy*, **2018**, 169, 457-467	6.8	34
146	Design, fabrication and outdoor performance analysis of a low concentrating photovoltaic system. *Solar Energy*, **2015**, 112, 361-372	6.8	33
145	Realization of Poly(methyl methacrylate)-Encapsulated Solution-Processed Carbon-Based Solar Cells: An Emerging Candidate for Buildings' Comfort. *Industrial & Engineering Chemistry Research*, **2020**, 59, 11063-11071	3.9	33
144	Influence of atmospheric clearness on PDLC switchable glazing transmission. *Energy and Buildings*, **2018**, 172, 257-264	7	31
143	Screening of effective electrolyte additives for zinc-based redox flow battery systems. *Journal of Power Sources*, **2019**, 412, 44-54	8.9	31
142	Trapping light escaping from the edges of the optical element in a Concentrating Photovoltaic system. *Energy Conversion and Management*, **2015**, 90, 238-246	10.6	30
141	Investigation of performance and emission characteristics of a biogas fuelled electric generator integrated with solar concentrated photovoltaic system. *Renewable Energy*, **2016**, 92, 233-243	8.1	30
140	Performance assessment of cadmium telluride-based semi-transparent glazing for power saving in façade buildings. *Energy and Buildings*, **2020**, 215, 109585	7	30
139	Optical modeling of four Fresnel-based high-CPV units. *Solar Energy*, **2017**, 155, 805-815	6.8	29
138	Study of COVID-19 pandemic in London (UK) from urban context. *Cities*, **2020**, 106, 102928	5.6	29
137	Experimental comparison of micro-scaled plate-fins and pin-fins under natural convection. *International Communications in Heat and Mass Transfer*, **2016**, 75, 59-66	5.8	29
136	Thermal Performance Analysis of Multi-Phase Change Material Layer-Integrated Building Roofs for Energy Efficiency in Built-Environment. *Energies*, **2017**, 10, 1367	3.1	28
135	Theoretical investigation considering manufacturing errors of a high concentrating photovoltaic of cassegrain design and its experimental validation. *Solar Energy*, **2016**, 131, 235-245	6.8	28
134	Performance of WO-Incorporated Carbon Electrodes for Ambient Mesoscopic Perovskite Solar Cells. *ACS Omega*, **2020**, 5, 422-429	3.9	28

133	Optimization of fins fitted phase change material equipped solar photovoltaic under various working circumstances. *Energy Conversion and Management*, **2019**, 180, 1185-1195	10.6	28
132	Carbon counter electrode mesoscopic ambient processed & characterised perovskite for adaptive BIPV fenestration. *Renewable Energy*, **2020**, 145, 2151-2158	8.1	28
131	Donor-acceptor polymer for the design of All-Solid-State dye-sensitized solar cells. *Journal of Alloys and Compounds*, **2017**, 696, 914-922	5.7	27
130	White butterflies as solar photovoltaic concentrators. *Scientific Reports*, **2015**, 5, 12267	4.9	27
129	D□A system based on zinc porphyrin dyes for dye-sensitized solar cells: Combined experimental and DFT□TDDFT study. *Polyhedron*, **2015**, 100, 313-320	2.7	26
128	Plate Micro-fins in Natural Convection: An Opportunity for Passive Concentrating Photovoltaic Cooling. *Energy Procedia*, **2015**, 82, 301-308	2.3	26
127	Soft-template synthesis of high surface area mesoporous titanium dioxide for dye-sensitized solar cells. *International Journal of Energy Research*, **2019**, 43, 523-534	4.5	25
126	Effect of climate on electrical performance of finned phase change material integrated solar photovoltaic. *Solar Energy*, **2018**, 174, 593-605	6.8	25
125	Correlating photovoltaic soiling losses to waveband and single-value transmittance measurements. *Energy*, **2019**, 180, 376-386	7.9	24
124	Electrical enhancement period of solar photovoltaic using phase change material. *Journal of Cleaner Production*, **2019**, 221, 878-884	10.3	24
123	Temperature regulation of concentrating photovoltaic window using argon gas and polymer dispersed liquid crystal films. *Renewable Energy*, **2021**, 164, 96-108	8.1	24
122	Enhanced Efficiency of Carbon-Based Mesoscopic Perovskite Solar Cells through a Tungsten Oxide Nanoparticle Additive in the Carbon Electrode. *Scientific Reports*, **2019**, 9, 8778	4.9	23
121	Applicability of silicon micro-finned heat sinks for 500□concentrating photovoltaics systems. *Journal of Materials Science*, **2015**, 50, 5378-5388	4.3	23
120	Experimental and Numerical Thermal Analysis of Multi-Layered Microchannel Heat Sink for Concentrating Photovoltaic Application. *Energies*, **2019**, 12, 122	3.1	23
119	Analysis of the daylight performance of window integrated photovoltaics systems. *Renewable Energy*, **2020**, 145, 153-163	8.1	23
118	General correlations among geometry, orientation and thermal performance of natural convective micro-finned heat sinks. *International Journal of Heat and Mass Transfer*, **2015**, 91, 711-724	4.9	22
117	Coupled heat transfer performance of a high temperature cup shaped porous absorber. *Energy Conversion and Management*, **2016**, 110, 327-337	10.6	22
116	Performance analysis of perovskite and dye-sensitized solar cells under varying operating conditions and comparison with monocrystalline silicon cell. *Applied Thermal Engineering*, **2017**, 127, 559-565	5.8	22

115	Perovskite Solar Cells for BIPV Application: A Review. *Buildings*, **2020**, 10, 129	3.2	22
114	Enhanced Photoactivity and Hydrogen Generation of LaFeO3 Photocathode by Plasmonic Silver Nanoparticle Incorporation. *ACS Applied Energy Materials*, **2018**, 1, 3449-3456	6.1	21
113	Enhanced performance of natural dye sensitised solar cells fabricated using rutile TIO2 nanorods. *Optical Materials*, **2016**, 58, 76-83	3.3	21
112	Supervisory Control for Power Management of an Islanded AC Microgrid Using a Frequency Signalling-Based Fuzzy Logic Controller. *IEEE Transactions on Sustainable Energy*, **2019**, 10, 94-104	8.2	21
111	Investigations on Performance Enhancement Measures of the Bidirectional Converter in PV–Wind Interconnected Microgrid System. *Energies*, **2019**, 12, 2672	3.1	19
110	Perceiving the temperature coefficients of carbon-based perovskite solar cells. *Sustainable Energy and Fuels*, **2020**, 4, 6283-6298	5.8	19
109	Conceptual design and performance evaluation of a hybrid concentrating photovoltaic system in preparation for energy. *Energy*, **2018**, 147, 547-560	7.9	18
108	Incorporating Solution-Processed Mesoporous WO as an Interfacial Cathode Buffer Layer for Photovoltaic Applications. *Journal of Physical Chemistry A*, **2020**, 124, 5709-5719	2.8	17
107	Thermal effectiveness and mass usage of horizontal micro-fins under natural convection. *Applied Thermal Engineering*, **2016**, 97, 39-47	5.8	17
106	Influence of spectrum and latitude on the annual optical performance of a dielectric based BICPV system. *Solar Energy*, **2016**, 124, 268-277	6.8	17
105	Development, indoor characterisation and comparison to optical modelling of four Fresnel-based high-CPV units equipped with refractive secondary optics. *Solar Energy Materials and Solar Cells*, **2018**, 186, 273-283	6.4	17
104	Evaluation of solar factor using spectral analysis for CdTe photovoltaic glazing. *Materials Letters*, **2019**, 237, 332-335	3.3	17
103	Performance evaluation of single multi-junction solar cell for high concentrator photovoltaics using minichannel heat sink with nanofluids. *Applied Thermal Engineering*, **2021**, 182, 115868	5.8	17
102	Prototype fabrication and experimental investigation of a conjugate refractive reflective homogeniser in a cassegrain concentrator. *Solar Energy*, **2017**, 142, 97-108	6.8	16
101	Design and analysis of dense array CPV receiver for square parabolic dish system with CPC array as secondary concentrator. *Solar Energy*, **2020**, 199, 782-795	6.8	16
100	Density Functional Theory Study of Selenium-Substituted Low-Bandgap Donor–Acceptor–Donor Polymer. *Journal of Physical Chemistry C*, **2016**, 120, 27200-27211	3.8	16
99	A novel absorptive/reflective solar concentrator for heat and electricity generation: An optical and thermal analysis. *Energy Conversion and Management*, **2016**, 114, 142-153	10.6	16
98	Plasmonic nickel nanoparticles decorated on to LaFeO3 photocathode for enhanced solar hydrogen generation. *International Journal of Hydrogen Energy*, **2019**, 44, 578-586	6.7	16

97	Performance Analysis of Models for Calculating the Maximum Power of High Concentrator Photovoltaic Modules. *IEEE Journal of Photovoltaics*, **2015**, 5, 947-955	3.7	15
96	Ultralight three-dimensional, carbon-based nanocomposites for thermal energy storage. *Journal of Materials Science and Technology*, **2020**, 36, 70-78	9.1	15
95	Indoor and outdoor characterization of concentrating photovoltaic attached to multi-layered microchannel heat sink. *Solar Energy*, **2020**, 202, 55-72	6.8	15
94	Ba6□x Nd8+2x Ti18O54 Tungsten Bronze: A New High-Temperature n-Type Oxide Thermoelectric. *Journal of Electronic Materials*, **2016**, 45, 1894-1899	1.9	14
93	Estimation of the performance limits of a concentrator solar cell coupled with a micro heat sink based on a finite element simulation. *Applied Thermal Engineering*, **2020**, 176, 115315	5.8	14
92	Experimental investigation of solar photovoltaic panel integrated with phase change material and multiple conductivity-enhancing-containers. *Energy*, **2020**, 205, 118047	7.9	13
91	Power improvement of finned solar photovoltaic phase change material system. *Energy*, **2020**, 193, 116735	7.9	13
90	Advances and limitations of increasing solar irradiance for concentrating photovoltaics thermal system. *Renewable and Sustainable Energy Reviews*, **2021**, 138, 110517	16.2	13
89	Enhanced efficiency for building integrated concentrator photovoltaic modules based on rare earth doped optics. *Solar Energy Materials and Solar Cells*, **2019**, 199, 83-90	6.4	12
88	Optimisation of the performance of a novel rotationally asymmetrical optical concentrator design for building integrated photovoltaic system. *Energy*, **2015**, 90, 1033-1045	7.9	12
87	A review on applications of Cu2ZnSnS4 as alternative counter electrodes in dye-sensitized solar cells. *AIP Advances*, **2018**, 8, 070701	1.5	12
86	Thermal analysis of a multi-layer microchannel heat sink for cooling concentrator photovoltaic (CPV) cells **2017**,		12
85	Effect of Spectral Irradiance Variations on the Performance of Highly Efficient Environment-Friendly Solar Cells. *IEEE Journal of Photovoltaics*, **2015**, 5, 1150-1157	3.7	11
84	Theoretical Investigation of the Temperature Limits of an Actively Cooled High Concentration Photovoltaic System. *Energies*, **2020**, 13, 1902	3.1	11
83	Morphology tuned BaSnO3 active layer for ambient perovskite solar cells. *Materials Letters*, **2018**, 219, 166-169	3.3	11
82	Enhancing ultra-high CPV passive cooling using least-material finned heat sinks **2015**,		11
81	Enhancing the performance of BICPV systems using phase change materials **2015**,		11
80	Improved Reactive Power Sharing for Parallel-operated Inverters in Islanded Microgrids. *Journal of Power Electronics*, **2016**, 16, 1152-1162	0.9	11

79	Experimental and numerical study on the effect of multiple phase change materials thermal energy storage system. *Journal of Energy Storage*, **2021**, 36, 102226	7.8	11
78	Deformation of receiver in solar parabolic trough collector due to non uniform temperature and solar flux distribution and use of bimetallic absorber tube with multiple supports. *Energy*, **2018**, 165, 1078-1088	7.9	11
77	Highly conductive double perovskite oxides A2LuTaO6 (A = Ba, Sr, Ca) as promising photoanode material for dye sensitized solar cells. *Materials Letters*, **2020**, 276, 128220	3.3	9
76	Impact of different light induced effect on organic hole-transporting layer in perovskite solar cells. *Materials Letters*, **2020**, 268, 127568	3.3	9
75	Synergistic effect of nanoflower-like CdS for removal of highly toxic aqueous Cr(VI). *Materials Letters*, **2020**, 270, 127734	3.3	9
74	Performance analysis of a solar window incorporating a novel rotationally asymmetrical concentrator. *Energy*, **2016**, 99, 181-192	7.9	9
73	Role of Hafnium Doping on Wetting Transition Tuning the Wettability Properties of ZnO and Doped Thin Films: Self-Cleaning Coating for Solar Application. *ACS Applied Materials & Interfaces*, **2021**, 13, 25540-25552	9.5	9
72	Thermal stress in bimetallic receiver of solar parabolic trough concentrator induced due to non uniform temperature and solar flux distribution. *Solar Energy*, **2018**, 176, 301-311	6.8	9
71	Charge transfer mechanics in transparent dye-sensitised solar cells under low concentration. *Materials Letters*, **2018**, 222, 78-81	3.3	8
70	Modelling and experimental analysis of a seasonally tracked V-trough PV/T system in India. *Solar Energy*, **2018**, 170, 618-632	6.8	8
69	A small signal model of an inverter-based microgrid including DC link voltages **2015**,		7
68	Techno-Economic Investigation of Solar Powered Electric Auto-Rickshaw for a Sustainable Transport System. *Energies*, **2017**, 10, 754	3.1	7
67	A comprehensive review of air gap membrane distillation process110, 27-64		7
66	Effect of using an infrared filter on the performance of a silicon solar cell for an ultra-high concentrator photovoltaic system. *Materials Letters*, **2020**, 277, 128332	3.3	7
65	Emplacement of screen-printed graphene oxide coating for building thermal comfort discernment. *Scientific Reports*, **2020**, 10, 15578	4.9	7
64	Experimental and Theoretical Research on Bending Behavior of Photovoltaic Panels with a Special Boundary Condition. *Energies*, **2018**, 11, 3435	3.1	7
63	Understanding the Semi-Switchable Thermochromic Behavior of Mixed Halide Hybrid Perovskite Nanorods. *Journal of Physical Chemistry C*, **2021**, 125, 18058-18070	3.8	7
62	Simulation study for a switchable adaptive polymer dispersed liquid crystal smart window for two climate zones (Riyadh and London). *Energy and Buildings*, **2021**, 251, 111381	7	7

61	Optical losses and durability of flawed Fresnel lenses for concentrated photovoltaic application. *Materials Letters*, **2020**, 275, 128145	3.3	6
60	DC microgrid power coordination based on fuzzy logic control **2016**,		6
59	Graphene as a pre-illumination cooling approach for a concentrator photovoltaic (CPV) system. *Solar Energy Materials and Solar Cells*, **2021**, 222, 110922	6.4	6
58	Experimental Investigations for Dust build-up on Low-Iron Glass exterior and its effects on the performance of Solar PV systems. *Energy*, **2021**, 122213	7.9	6
57	Solar Photovoltaic Panels with Finned Phase Change Material Heat Sinks. *Energies*, **2020**, 13, 2558	3.1	5
56	Conjugate refractive□reflective homogeniser in a 500□Cassegrain concentrator: design and limits. *IET Renewable Power Generation*, **2016**, 10, 440-447	2.9	5
55	Performance Comparison of a Freeform Lens and a CDTIRO When Combined With an LED. *IEEE Photonics Journal*, **2017**, 9, 1-8	1.8	5
54	Scalable solar thermoelectrics and photovoltaics (SUNTRAP) **2016**,		5
53	In-situ assessment of photovoltaic soiling mitigation techniques in northern Nigeria. *Energy Conversion and Management*, **2021**, 244, 114442	10.6	5
52	Soiling on PV performance influenced by weather parameters in Northern Nigeria. *Renewable Energy*, **2021**, 180, 874-892	8.1	5
51	An experimental analysis of the optical, thermal and power to weight performance of plastic and glass optics with AR coatings for embedded CPV windows. *Solar Energy Materials and Solar Cells*, **2019**, 200, 110027	6.4	4
50	Optical study of a cocktail structural Space-based Solar Power Station. *Solar Energy*, **2019**, 194, 156-166	6.8	4
49	Potential of Implementing the Low Concentration Photovoltaic Systems in the United Kingdom. *International Journal of Electrical and Computer Engineering*, **2017**, 7, 1398	1.4	4
48	Thermal regulation of building-integrated concentrating photovoltaic system using phase change material **2016**,		4
47	An optimisation of a freeform lens design for LED street lighting **2016**,		4
46	Electricity enhancement and thermal energy production from concentrated photovoltaic integrated with a 3-layered stacked micro-channel heat sink **2018**,		4
45	Photovoltaic system integrated with phase change material for South west UK climate **2018**,		4
44	Experimental performance investigations of an elliptical hyperbolic non-imaging solar concentrator with trapezoidal surface receiver for process heat applications. *Journal of Cleaner Production*, **2018**, 192, 735-750	10.3	4

43	Evaluation of concentrating photovoltaic performance under different homogeniser materials. *Materials Letters*, **2019**, 241, 219-222	3.3	3
42	Rotationally asymmetric optical concentrators for solar PV and BIPV systems **2013**,		3
41	Thermal performance evaluation and energy saving potential of semi-transparent CdTe in Fa□de BIPV. *Solar Energy*, **2022**, 232, 84-91	6.8	3
40	State-of-the-Art Review on the Energy Performance of Semi-Transparent Building Integrated Photovoltaic across a Range of Different Climatic and Environmental Conditions. *Energies*, **2021**, 14, 3412	3.1	3
39	Cu2ZnSnS4, a Fascinating Counter Electrode for TiO2-Free Dye-Sensitized Solar Cells. *ChemistrySelect*, **2021**, 6, 1541-1547	1.8	3
38	Fins integrated phase change material for solar photovoltaic for South East United Kingdom **2019**,		2
37	Hydrogen-Rich Syngas from Jatropha curcas Shell Biomass Char in Fresnel Lens Solar Concentrator Assembly. *Energy & Fuels*, **2017**, 31, 8335-8347	4.1	2
36	Optical and heat transfer performance of a novel non-imaging concentrator **2015**,		2
35	Spectral losses of high concentrator photovoltaic modules depending on latitude **2015**,		2
34	Optimization of the least-material approach for passive Ultra-High CPV cooling **2015**,		2
33	Design and production of a 2.5 kWe insulated metal substrate-based densely packed CPV assembly **2014**,		2
32	Producing uniform illumination within a rectangular area by using a nonimaging optic. *Applied Optics*, **2018**, 57, 9357-9364	1.7	2
31	Cotton soot derived carbon nanoparticles for NiO supported processing temperature tuned ambient perovskite solar cells. *Scientific Reports*, **2021**, 11, 23388	4.9	2
30	Performance Improvement of a CPV System: Experimental Investigation into Passive Cooling with Phase Change Materials. *Energies*, **2021**, 14, 3550	3.1	2
29	Indoor characterization of a reflective type 3D LCPV system **2016**,		2
28	Three dimensional analysis of dye-sensitized, perovskite and monocrystalline silicon solar photovoltaic cells under non uniform solar flux. *Applied Thermal Engineering*, **2021**, 182, 115613	5.8	2
27	Conjugate refractive□eflective based building integrated photovoltaic system. *Materials Letters*, **2018**, 228, 25-28	3.3	2
26	Effect of dye sensitization□ temperature on ZnO-based solar cells. *Chemical Physics Letters*, **2021**, 776, 138688	2.5	2

25	Thermal Spray Coatings for Electromagnetic Wave Absorption and Interference Shielding: A Review and Future Challenges. *Advanced Engineering Materials*,2200171	3.5	2
24	The emergence of concentrator photovoltaics for perovskite solar cells. *Applied Physics Reviews*, **2021**, 8, 041324	17.3	2
23	Outdoor performance of a reflective type 3D LCPV system under different climatic conditions **2017** ,		1
22	Single Parameter Exponential Time Series Smoothening to Dampen Wind Power Irregularities in Grid-Integrated Doubly Fed Induction Generator **2020**,		1
21	Design and characterization of refractive secondary optical elements for a point-focus Fresnel lens-based high CPV system **2017**,		1
20	Novel thermal conductivity enhancing containers for performance enhancement of solar photovoltaics system integrated with phase change material. *Energy*, **2022**, 243, 122923	7.9	1
19	Optimization of a novel Hybrid Wind Bio Battery Solar Photovoltaic System Integrated with Phase Change Material. *Energies*, **2021**, 14, 6373	3.1	1
18	A poly(styrene-co-acrylonitrile) gel electrolyte for dye-sensitized solar cells with improved photoelectrochemical performance. *New Journal of Chemistry*, **2020**, 44, 20212-20221	3.6	1
17	Photoelectrochemical Water Splitting Using a Concentrated Solar Flux-Assisted LaFeO3 Photocathode. *ACS Applied Energy Materials*, **2020**, 3, 9002-9009	6.1	1
16	Investigation of Thermal Stress Arising in a Graphene Neutral Density Filter for Concentrated Photovoltaic System. *Energies*, **2021**, 14, 3515	3.1	1
15	Small-Volume Fabrication of a 144-Cell Assembly for High-Concentrating Photovoltaic Receivers. *Journal of Solar Energy Engineering, Transactions of the ASME*, **2016**, 138,	2.3	1
14	Photovoltaic Characteristics of Low Concentration CdTe Solar Cells. *IOP Conference Series: Materials Science and Engineering*, **2019**, 556, 012005	0.4	1
13	Large-scale manufacturing route to metamaterial coatings using thermal spray techniques and their response to solar radiation. *Emergent Materials*,1	3.5	1
12	Model Based Generation Prediction of SPV Power Plant Due to Weather Stressed Soiling. *Energies*, **2021**, 14, 5305	3.1	1
11	Energy and exergy analyses of new cooling schemes based on a serpentine configuration for a high concentrator photovoltaic system. *Applied Thermal Engineering*, **2021**, 199, 117528	5.8	1
10	Smart glazing thermal comfort improvement through near-infrared shielding paraffin incorporated SnO2-Al2O3 composite. *Construction and Building Materials*, **2022**, 331, 127319	6.7	1
9	Application of MSVPC- 5G Multicast SDN Network Eminence Video Transmission in Drone Thermal Imaging for Solar Farm Monitoring. *Energies*, **2021**, 14, 8255	3.1	1
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7	Symmetric and asymmetric freeform lens to produce uniform illumination. *Optical Engineering*, **2020**, 59, 1	1.1	0
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