

Kylie R Catchpole

List of Publications by Year in descending order

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158
papers

13,168
citations

26630

56
h-index

22832

112
g-index

160
all docs

160
docs citations

160
times ranked

12424
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface plasmon enhanced silicon solar cells. <i>Journal of Applied Physics</i> , 2007, 101, 093105.	2.5	1,624
2	Plasmonic solar cells. <i>Optics Express</i> , 2008, 16, 21793.	3.4	1,411
3	Design principles for particle plasmon enhanced solar cells. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	762
4	Tunable light trapping for solar cells using localized surface plasmons. <i>Journal of Applied Physics</i> , 2009, 105, .	2.5	476
5	Rubidium Multication Perovskite with Optimized Bandgap for Perovskite-Silicon Tandem with over 26% Efficiency. <i>Advanced Energy Materials</i> , 2017, 7, 1700228.	19.5	443
6	A Universal Double-Side Passivation for High Open-Circuit Voltage in Perovskite Solar Cells: Role of Carbonyl Groups in Poly(methyl methacrylate). <i>Advanced Energy Materials</i> , 2018, 8, 1801208.	19.5	387
7	Interface passivation using ultrathin polymer-fullerene films for high-efficiency perovskite solar cells with negligible hysteresis. <i>Energy and Environmental Science</i> , 2017, 10, 1792-1800.	30.8	381
8	The 2020 photovoltaic technologies roadmap. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 493001.	2.8	274
9	Nanoscale localized contacts for high fill factors in polymer-passivated perovskite solar cells. <i>Science</i> , 2021, 371, 390-395.	12.6	270
10	Nanophotonic light trapping in solar cells. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	243
11	Enhanced emission from Si-based light-emitting diodes using surface plasmons. <i>Applied Physics Letters</i> , 2006, 88, 161102.	3.3	242
12	Designing periodic arrays of metal nanoparticles for light-trapping applications in solar cells. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	214
13	Mechanically-stacked perovskite/CIGS tandem solar cells with efficiency of 23.9% and reduced oxygen sensitivity. <i>Energy and Environmental Science</i> , 2018, 11, 394-406.	30.8	209
14	Plasmon-enhanced internal photoemission for photovoltaics: Theoretical efficiency limits. <i>Applied Physics Letters</i> , 2012, 101, 073905.	3.3	197
15	Monolithic perovskite/silicon-homojunction tandem solar cell with over 22% efficiency. <i>Energy and Environmental Science</i> , 2017, 10, 2472-2479.	30.8	178
16	Efficient Indium-Doped TiO _x Electron Transport Layers for High-Performance Perovskite Solar Cells and Perovskite-Silicon Tandems. <i>Advanced Energy Materials</i> , 2017, 7, 1601768.	19.5	167
17	Tandem Solar Cells Based on High-Efficiency c-Si Bottom Cells: Top Cell Requirements for >30% Efficiency. <i>IEEE Journal of Photovoltaics</i> , 2014, 4, 208-214.	2.5	164
18	Hysteresis phenomena in perovskite solar cells: the many and varied effects of ionic accumulation. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 3094-3103.	2.8	159

#	ARTICLE	IF	CITATIONS
19	Asymmetry in photocurrent enhancement by plasmonic nanoparticle arrays located on the front or on the rear of solar cells. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	153
20	Centimetre-scale perovskite solar cells with fill factors of more than 86 per cent. <i>Nature</i> , 2022, 601, 573-578.	27.8	137
21	Structural engineering using rubidium iodide as a dopant under excess lead iodide conditions for high efficiency and stable perovskites. <i>Nano Energy</i> , 2016, 30, 330-340.	16.0	133
22	Doubleâ€sided Surface Passivation of 3D Perovskite Film for Highâ€efficiency Mixedâ€dimensional Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 1907962.	14.9	130
23	Effective light trapping in polycrystalline silicon thin-film solar cells by means of rear localized surface plasmons. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	128
24	The effect of dielectric spacer thickness on surface plasmon enhanced solar cells for front and rear side depositions. <i>Journal of Applied Physics</i> , 2011, 109, .	2.5	125
25	Highly stable carbon-based perovskite solar cell with a record efficiency of over 18% via hole transport engineering. <i>Journal of Materials Science and Technology</i> , 2019, 35, 987-993.	10.7	123
26	In situ recombination junction between p-Si and TiO ₂ enables high-efficiency monolithic perovskite/Si tandem cells. <i>Science Advances</i> , 2018, 4, eaau9711.	10.3	122
27	A review of thin-film crystalline silicon for solar cell applications. Part 2: Foreign substrates. <i>Solar Energy Materials and Solar Cells</i> , 2001, 68, 173-215.	6.2	115
28	Plasmonic lightâ€trapping for Si solar cells using selfâ€assembled, Ag nanoparticles. <i>Progress in Photovoltaics: Research and Applications</i> , 2010, 18, 500-504.	8.1	114
29	Optics and Light Trapping for Tandem Solar Cells on Silicon. <i>IEEE Journal of Photovoltaics</i> , 2014, 4, 1380-1386.	2.5	114
30	Light and Electrically Induced Phase Segregation and Its Impact on the Stability of Quadruple Cation High Bandgap Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 26859-26866.	8.0	114
31	The two faces of capacitance: New interpretations for electrical impedance measurements of perovskite solar cells and their relation to hysteresis. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	110
32	High Efficiency Perovskiteâ€silicon Tandem Solar Cells: Effect of Surface Coating versus Bulk Incorporation of 2D Perovskite. <i>Advanced Energy Materials</i> , 2020, 10, 1903553.	19.5	110
33	Plasmonics and nanophotonics for photovoltaics. <i>MRS Bulletin</i> , 2011, 36, 461-467.	3.5	108
34	Design and operando/in situ characterization of preciousâ€metalâ€free electrocatalysts for alkaline water splitting. , 2020, 2, 582-613.		105
35	Identifying the Cause of Voltage and Fill Factor Losses in Perovskite Solar Cells by Using Luminescence Measurements. <i>Energy Technology</i> , 2017, 5, 1827-1835.	3.8	103
36	A review of thin-film crystalline silicon for solar cell applications. Part 1: Native substrates. <i>Solar Energy Materials and Solar Cells</i> , 2001, 68, 135-171.	6.2	101

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37	The Effect of Stoichiometry on the Stability of Inorganic Cesium Lead Mixed-Halide Perovskites Solar Cells. <i>Journal of Physical Chemistry C</i> , 2017, 121, 19642-19649.	3.1	101
38	Origin of Efficiency and Stability Enhancement in High-Performing Mixed Dimensional 2D-3D Perovskite Solar Cells: A Review. <i>Advanced Functional Materials</i> , 2022, 32, 2009164.	14.9	96
39	Device Performance of Emerging Photovoltaic Materials (Version 1). <i>Advanced Energy Materials</i> , 2021, 11, 2002774.	19.5	93
40	Large-scale stationary hydrogen storage via liquid organic hydrogen carriers. <i>IScience</i> , 2021, 24, 102966.	4.1	93
41	Perovskite Solar Cells Employing Copper Phthalocyanine Hole-Transport Material with an Efficiency over 20% and Excellent Thermal Stability. <i>ACS Energy Letters</i> , 2018, 3, 2441-2448.	17.4	90
42	Absorption enhancement due to scattering by dipoles into silicon waveguides. <i>Journal of Applied Physics</i> , 2006, 100, 044504.	2.5	87
43	Monolithic Perovskite/Si Tandem Solar Cells: Pathways to Over 30% Efficiency. <i>Advanced Energy Materials</i> , 2020, 10, 1902840.	19.5	87
44	Roadmap on optical energy conversion. <i>Journal of Optics (United Kingdom)</i> , 2016, 18, 073004.	2.2	85
45	Superior Self-Powered Room-Temperature Chemical Sensing with Light-Activated Inorganic Halides Perovskites. <i>Small</i> , 2018, 14, 1702571.	10.0	82
46	Light Management: A Key Concept in High-Efficiency Perovskite/Silicon Tandem Photovoltaics. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3159-3170.	4.6	81
47	Semitransparent Perovskite Solar Cell With Sputtered Front and Rear Electrodes for a Four-Terminal Tandem. <i>IEEE Journal of Photovoltaics</i> , 2016, 6, 679-687.	2.5	80
48	Design guidelines for perovskite/silicon 2-terminal tandem solar cells: an optical study. <i>Optics Express</i> , 2016, 24, A1454.	3.4	76
49	Optimal wavelength scale diffraction gratings for light trapping in solar cells. <i>Journal of Optics (United Kingdom)</i> , 2012, 14, 024012.	2.2	74
50	Ultralow Absorption Coefficient and Temperature Dependence of Radiative Recombination of $\text{CH}_3\text{NH}_3\text{PbI}_3$ Perovskite from Photoluminescence. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 767-772.	4.6	73
51	Surface plasmons for enhanced silicon light-emitting diodes and solar cells. <i>Journal of Luminescence</i> , 2006, 121, 315-318.	3.1	71
52	Inverted Hysteresis in $\text{CH}_3\text{NH}_3\text{PbI}_3$ Solar Cells: Role of Stoichiometry and Band Alignment. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2672-2680.	4.6	71
53	Light trapping with plasmonic particles: beyond the dipole model. <i>Optics Express</i> , 2011, 19, 25230.	3.4	70
54	Device Performance of Emerging Photovoltaic Materials (Version 2). <i>Advanced Energy Materials</i> , 2021, 11, .	19.5	66

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55	Resonant SPP modes supported by discrete metal nanoparticles on high-index substrates. Optics Express, 2011, 19, A146.	3.4	65
56	Resonant nano-antennas for light trapping in plasmonic solar cells. Journal Physics D: Applied Physics, 2011, 44, 185101.	2.8	61
57	Over 17% Efficiency Stand-Alone Solar Water Splitting Enabled by Perovskite-Silicon Tandem Absorbers. Advanced Energy Materials, 2020, 10, 2000772.	19.5	58
58	A conceptual model of light coupling by pillar diffraction gratings. Journal of Applied Physics, 2007, 101, 063105.	2.5	55
59	Unconventional direct synthesis of Ni ₃ N/Ni with N-vacancies for efficient and stable hydrogen evolution. Energy and Environmental Science, 2022, 15, 185-195.	30.8	44
60	Light and elevated temperature induced degradation (LeTID) in perovskite solar cells and development of stable semi-transparent cells. Solar Energy Materials and Solar Cells, 2018, 188, 27-36.	6.2	43
61	Total absorption of visible light in ultrathin weakly absorbing semiconductor gratings. Optica, 2016, 3, 556.	9.3	42
62	A re-evaluation of transparent conductor requirements for thin-film solar cells. Journal of Materials Chemistry A, 2016, 4, 4490-4496.	10.3	42
63	Improved Reproducibility for Perovskite Solar Cells with 1 cm ² Active Area by a Modified Two-Step Process. ACS Applied Materials & Interfaces, 2017, 9, 5974-5981.	8.0	41
64	Evaporated and solution deposited planar Sb ₂ S ₃ solar cells: A comparison and its significance. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 108-113.	1.8	40
65	Perovskite Photovoltaic Integrated CdS/TiO ₂ Photoanode for Unbiased Photoelectrochemical Hydrogen Generation. ACS Applied Materials & Interfaces, 2018, 10, 23766-23773.	8.0	38
66	Nanoimprinted TiO ₂ sol-gel passivating diffraction gratings for solar cell applications. Progress in Photovoltaics: Research and Applications, 2012, 20, 143-148.	8.1	37
67	Combined Bulk and Surface Passivation in Dimensionally Engineered 2D-3D Perovskite Films via Chlorine Diffusion. Advanced Functional Materials, 2021, 31, 2104251.	14.9	37
68	The analytical basis for the resonances and anti-resonances of loop antennas and meta-material ring resonators. Journal of Applied Physics, 2012, 112, .	2.5	36
69	Photoluminescence study of time- and spatial-dependent light induced trap de-activation in CH ₃ NH ₃ Pb ₃ perovskite films. Physical Chemistry Chemical Physics, 2016, 18, 22557-22564.	2.8	36
70	A bottom-up cost analysis of silicon-perovskite tandem photovoltaics. Progress in Photovoltaics: Research and Applications, 2021, 29, 401-413.	8.1	35
71	Direct Solar Hydrogen Generation at 20% Efficiency Using Low-Cost Materials. Advanced Energy Materials, 2021, 11, 2101053.	19.5	35
72	Combined plasmonic and dielectric rear reflectors for enhanced photocurrent in solar cells. Applied Physics Letters, 2012, 100, .	3.3	34

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73	In Situ Formation of Mixed-Dimensional Surface Passivation Layers in Perovskite Solar Cells with Dual-Isoomer Alkylammonium Cations. <i>Small</i> , 2020, 16, e2005022.	10.0	34
74	Recent Advances in Materials Design Using Atomic Layer Deposition for Energy Applications. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	34
75	Light trapping efficiency comparison of Si solar cell textures using spectral photoluminescence. <i>Optics Express</i> , 2015, 23, A391.	3.4	33
76	Modelling the PERC structure for industrial quality silicon. <i>Solar Energy Materials and Solar Cells</i> , 2002, 73, 189-202.	6.2	32
77	A conceptual model of the diffuse transmittance of lamellar diffraction gratings on solar cells. <i>Journal of Applied Physics</i> , 2007, 102, .	2.5	32
78	Efficient and stable wide bandgap perovskite solar cells through surface passivation with long alkyl chain organic cations. <i>Journal of Materials Chemistry A</i> , 2021, 9, 18454-18465.	10.3	32
79	Earth-Abundant Amorphous Electrocatalysts for Electrochemical Hydrogen Production: A Review. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2000071.	5.8	30
80	Hole-Storage Enhanced α -Si Photocathodes for Efficient Hydrogen Production. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11966-11972.	13.8	29
81	Metal halide perovskite: a game-changer for photovoltaics and solar devices via a tandem design. <i>Science and Technology of Advanced Materials</i> , 2018, 19, 53-75.	6.1	28
82	Nanostructures in photovoltaics. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2006, 364, 3493-3503.	3.4	27
83	Comparing nanowire, multijunction, and single junction solar cells in the presence of light trapping. <i>Journal of Applied Physics</i> , 2011, 109, .	2.5	27
84	Superior Self-Charged and α -Powered Chemical Sensing with High Performance for NO_2 Detection at Room Temperature. <i>Advanced Optical Materials</i> , 2020, 8, 1901863.	7.3	27
85	Theory of the circular closed loop antenna in the terahertz, infrared, and optical regions. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	26
86	Epitaxial lateral overgrowth of Si on (100)Si substrates by liquid-phase epitaxy. <i>Journal of Crystal Growth</i> , 1998, 186, 369-374.	1.5	23
87	The Epilift technique for Si solar cells. <i>Applied Physics A: Materials Science and Processing</i> , 1999, 69, 195-199.	2.3	23
88	Light-activated inorganic CsPbBr_2I perovskite for room-temperature self-powered chemical sensing. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 24187-24193.	2.8	23
89	Reduction kinetics for large spherical 2:1 iron-manganese oxide redox materials for thermochemical energy storage. <i>Chemical Engineering Science</i> , 2019, 201, 74-81.	3.8	22
90	Above 23% Efficiency by Binary Surface Passivation of Perovskite Solar Cells Using Guanidinium and Octylammonium Spacer Cations. <i>Solar Rrl</i> , 2022, 6, .	5.8	22

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91	27.6% Perovskite/câ€Si Tandem Solar Cells Using Industrial Fabricated TOPCon Device. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	22
92	Resonant enhancement of dielectric and metal nanoparticle arrays for light trapping in solar cells. <i>Optics Express</i> , 2012, 20, 13226.	3.4	21
93	Probing a doubly driven two-level atom. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 1999, 1, 240-244.	1.4	20
94	Evaluating Plasmonic Light Trapping With Photoluminescence. <i>IEEE Journal of Photovoltaics</i> , 2013, 3, 1292-1297.	2.5	20
95	Reduction of ironâ€™manganese oxide particles in a lab-scale packed-bed reactor for thermochemical energy storage. <i>Chemical Engineering Science</i> , 2020, 221, 115700.	3.8	19
96	Enhanced light trapping in solar cells using snow globe coating. <i>Progress in Photovoltaics: Research and Applications</i> , 2012, 20, 837-842.	8.1	18
97	Plasmonic Near-Field Enhancement for Planar Ultra-Thin Photovoltaics. <i>IEEE Photonics Journal</i> , 2013, 5, 8400608-8400608.	2.0	18
98	Imaging Spatial Variations of Optical Bandgaps in Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1802790.	19.5	18
99	Effect of Nanoparticle Size Distribution on the Performance of Plasmonic Thin-Film Solar Cells: Monodisperse Versus Multidisperse Arrays. <i>IEEE Journal of Photovoltaics</i> , 2013, 3, 267-270.	2.5	17
100	Filterless Spectral Splitting Perovskiteâ€™Silicon Tandem System With >23% Calculated Efficiency. <i>IEEE Journal of Photovoltaics</i> , 2016, 6, 1432-1439.	2.5	15
101	High external quantum efficiency of planar semiconductor structures. <i>Semiconductor Science and Technology</i> , 2004, 19, 1232-1235.	2.0	14
102	Light trapping with titanium dioxide diffraction gratings fabricated by nanoimprinting. <i>Progress in Photovoltaics: Research and Applications</i> , 2014, 22, 587-592.	8.1	14
103	Effective thermal conductivity of a bed packed with granular ironâ€™manganese oxide for thermochemical energy storage. <i>Chemical Engineering Science</i> , 2019, 207, 490-494.	3.8	14
104	High external quantum efficiency from double heterostructure InGaP/GaAs layers as selective emitters for thermophotonic systems. <i>Semiconductor Science and Technology</i> , 2004, 19, 1268-1272.	2.0	13
105	Transparent Long-Pass Filter with Short-Wavelength Scattering Based on <i>Morpho</i> Butterfly Nanostructures. <i>ACS Photonics</i> , 2017, 4, 741-745.	6.6	13
106	Diffuse reflectors for improving light management in solar cells: a review and outlook. <i>Journal of Optics (United Kingdom)</i> , 2017, 19, 014001.	2.2	13
107	Investigation of the mechanisms of plasmon-mediated photocatalysis: synergistic contribution of near-field and charge transfer effects. <i>Journal of Materials Chemistry C</i> , 2022, 10, 7511-7524.	5.5	13
108	Defect engineering for creating and enhancing bulk photovoltaic effect in centrosymmetric materials. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13182-13191.	10.3	12

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109	Mixed-dimensional organic-inorganic metal halide perovskite (OIMHP) based gas sensors with superior stability for NO ₂ detection. <i>Materials Advances</i> , 2022, 3, 1263-1271.	5.4	12
110	Analytical approach for design of blazed dielectric gratings for light trapping in solar cells. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 055103.	2.8	11
111	Flame-made ultra-porous TiO ₂ layers for perovskite solar cells. <i>Nanotechnology</i> , 2016, 27, 505403.	2.6	11
112	Thin semiconducting layers and nanostructures as active and passive emitters for thermophotonics and thermophotovoltaics. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 14, 91-95.	2.7	10
113	Spatially and Spectrally Resolved Absorptivity: New Approach for Degradation Studies in Perovskite and Perovskite/Silicon Tandem Solar Cells. <i>Advanced Energy Materials</i> , 2020, 10, 1902901.	19.5	9
114	Highly Reflective Dielectric Back Reflector for Improved Efficiency of Tandem Thin-Film Solar Cells. <i>International Journal of Photoenergy</i> , 2016, 2016, 1-7.	2.5	8
115	Unraveling the Role of Energy Band Alignment and Mobile Ions on Interfacial Recombination in Perovskite Solar Cells. <i>Solar Rrl</i> , 2022, 6, .	5.8	8
116	Contactless and Spatially Resolved Determination of Current-Voltage Curves in Perovskite Solar Cells via Photoluminescence. <i>Solar Rrl</i> , 2021, 5, 2100348.	5.8	7
117	Electrical properties of perovskite solar cells by illumination intensity and temperature-dependent photoluminescence imaging. <i>Progress in Photovoltaics: Research and Applications</i> , 2022, 30, 1038-1044.	8.1	7
118	Modelling a monolithically integrated vertical junction cell in low and high injection. <i>Progress in Photovoltaics: Research and Applications</i> , 2003, 11, 113-124.	8.1	6
119	High performance bulk photovoltaics in narrow-bandgap centrosymmetric ultrathin films. <i>Materials Horizons</i> , 2020, 7, 898-904.	12.2	6
120	Anion Exchange-Induced Crystal Engineering via Hot-Pressing Sublimation Affording Highly Efficient and Stable Perovskite Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2000729.	5.8	6
121	Thin semiconducting layers as active and passive emitters for thermophotonics and thermophotovoltaics. <i>Solar Energy</i> , 2004, 76, 251-254.	6.1	5
122	Designing Nano-loop antenna arrays for light-trapping in solar cells. , 2013, , .		5
123	Perovskite Solar Cells: Imaging Spatial Variations of Optical Bandgaps in Perovskite Solar Cells (Adv.) <i>Tj ETQq1 1 0.784314 rgBT /Over</i>	19.5	5
124	Efficient Passivation and Low Resistivity for p ⁺ -Si/TiO ₂ Contact by Atomic Layer Deposition. <i>ACS Applied Energy Materials</i> , 2020, 3, 6291-6301.	5.1	5
125	Ultrathin HfO ₂ passivated silicon photocathodes for efficient alkaline water splitting. <i>Applied Physics Letters</i> , 2021, 119, .	3.3	5
126	Photoluminescence enhancement towards high efficiency plasmonic solar cells. , 2013, , .		4

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127	Solar Water Splitting: Over 17% Efficiency Standalone Solar Water Splitting Enabled by Perovskite-Silicon Tandem Absorbers (Adv. Energy Mater. 28/2020). Advanced Energy Materials, 2020, 10, 2070122.	19.5	4
128	Wafer Surface Charge Reversal as a Method of Simplifying Nanosphere Lithography for Reactive Ion Etch Texturing of Solar Cells. Advances in OptoElectronics, 2007, 2007, 1-4.	0.6	3
129	Red-shifting the surface plasmon resonance of silver nanoparticles for light trapping in solar cells. Materials Research Society Symposia Proceedings, 2008, 1101, 1.	0.1	3
130	Direct solar to hydrogen conversion enabled by silicon photocathodes with carrier selective passivated contacts. Sustainable Energy and Fuels, 2022, 6, 349-360.	4.9	3
131	Plasmons for enhancing solar cells. , 2010, , .		2
132	Three-dimensional nanotub submicrometer diffraction gratings for solar cells. Applied Optics, 2014, 53, 6840.	1.8	2
133	Impact of Light on the Thermal Stability of Perovskite Solar Cells and Development of Stable Semi-transparent Cells. , 2018, , .		2
134	Hole-Storage Enhanced Si Photocathodes for Efficient Hydrogen Production. Angewandte Chemie, 2021, 133, 12073-12079.	2.0	2
135	Surface morphology of silicon layers grown on patterned silicon substrates by liquid-phase epitaxy. Journal of Crystal Growth, 1999, 204, 453-461.	1.5	1
136	Silicon photoluminescence external quantum efficiency determined by combined thermal/photoluminescence measurements. Semiconductor Science and Technology, 2004, 19, 1411-1415.	2.0	1
137	Enhancement of scattering and light-extraction by metal particles on silicon waveguides. , 2005, 6037, 57.		1
138	Optical and electrical modelling for high efficiency perovskite/silicon tandem solar cells. , 2016, , .		1
139	Notice of Removal High efficiency perovskite/silicon tandem cells with low parasitic absorption. , 2017, , .		1
140	High efficiency perovskite/silicon tandems for electricity and hydrogen. , 2021, , .		1
141	Contactless and Spatially Resolved Determination of Current-Voltage Curves in Perovskite Solar Cells via Photoluminescence. Solar Rrl, 2021, 5, 2170083.	5.8	1
142	Third generation photovoltaics. , 0, , .		0
143	Effects of dielectric overcoating on the absorption enhancement of SOI LEDs with metal island films. , 2005, , .		0
144	Photovoltaic effect in Si/SiO ₂ /Si heterostructures. , 2008, , .		0

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145	Plasmonic Circuits: Manipulating Light on the Nanoscale. , 2011, , 17-56.		0
146	Plasmonic near-field enhancement for planar ultra-thin absorber solar cells. , 2012, , .		0
147	Wavelength selective light trapping for tandem solar cells on silicon. , 2014, , .		0
148	Modelling of slow transient processes in organo-metal halide perovskites. , 2016, , .		0
149	Extracting optical bandgaps from luminescence images of perovskite solar cells. , 2019, , .		0
150	Tandem Solar Cells: Spatially and Spectrally Resolved Absorptivity: New Approach for Degradation Studies in Perovskite and Perovskite/Silicon Tandem Solar Cells (Adv. Energy Mater. 4/2020). Advanced Energy Materials, 2020, 10, 2070016.	19.5	0
151	Photovoltaic Plasmonics. , 2008, , .		0
152	Localized surface plasmons for high efficiency solar cells. , 2010, , .		0
153	Optical Properties of Nanostructures. , 2010, , 49-71.		0
154	Thin-film Inorganic Top Cells in Tandem with c-Si: Targeting 30% Efficiency. , 2013, , .		0
155	High-resolution photocurrent imaging of light trapping by plasmonic nanoparticles on thin film Si solar cells. , 2014, , .		0
156	Metal Nanoparticle Arrays as Wavelength-Selective Rear Reflectors. , 2015, , .		0
157	Total absorption in Structured Ultrathin Semiconductor Layers. , 2016, , .		0
158	Understanding the impact of carrier mobility and mobile ions on perovskite cell performance. , 2018, , .		0