

Anita W Y Ho-Baillie

List of Publications by Citations

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157 papers	16,702 citations	56 h-index	129 g-index
185 ext. papers	19,299 ext. citations	11 avg, IF	7.4 L-index

#	Paper	IF	Citations
157	The emergence of perovskite solar cells. <i>Nature Photonics</i> , 2014 , 8, 506-514	33.9	453 ⁸
156	Solar cell efficiency tables (version 50). <i>Progress in Photovoltaics: Research and Applications</i> , 2017 , 25, 668-676	6.8	663
155	Solar cell efficiency tables (version 51). <i>Progress in Photovoltaics: Research and Applications</i> , 2018 , 26, 3-12	6.8	622
154	Solar cell efficiency tables (Version 53). <i>Progress in Photovoltaics: Research and Applications</i> , 2019 , 27, 3-12	6.8	540
153	Solar cell efficiency tables (Version 55). <i>Progress in Photovoltaics: Research and Applications</i> , 2020 , 28, 3-15	6.8	533
152	Solar cell efficiency tables (version 54). <i>Progress in Photovoltaics: Research and Applications</i> , 2019 , 27, 565-575	6.8	516
151	Solar cell efficiency tables (version 49). <i>Progress in Photovoltaics: Research and Applications</i> , 2017 , 25, 3-13	6.8	514
150	Solar cell efficiency tables (version 52). <i>Progress in Photovoltaics: Research and Applications</i> , 2018 , 26, 427-436	6.8	491
149	Benefit of Grain Boundaries in Organic-Inorganic Halide Planar Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 875-80	6.4	367
148	Beneficial Effects of PbI ₂ Incorporated in Organo-Lead Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2016 , 6, 1502104	21.8	335
147	Hole Transport Layer Free Inorganic CsPbI ₂ Br ₂ Perovskite Solar Cell by Dual Source Thermal Evaporation. <i>Advanced Energy Materials</i> , 2016 , 6, 1502202	21.8	317
146	Critical Role of Grain Boundaries for Ion Migration in Formamidinium and Methylammonium Lead Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2016 , 6, 1600330	21.8	281
145	Perovskite Solar Cells: The Birth of a New Era in Photovoltaics. <i>ACS Energy Letters</i> , 2017 , 2, 822-830	20.1	259
144	Strontium-Doped Low-Temperature-Processed CsPbI ₂ Br Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2017 , 2, 2319-2325	20.1	258
143	Acoustic-optical phonon up-conversion and hot-phonon bottleneck in lead-halide perovskites. <i>Nature Communications</i> , 2017 , 8, 14120	17.4	245
142	Mixed 3D/2D Passivation Treatment for Mixed-Cation Lead Mixed-Halide Perovskite Solar Cells for Higher Efficiency and Better Stability. <i>Advanced Energy Materials</i> , 2018 , 8, 1703392	21.8	226
141	Passivation of Grain Boundaries by Phenethylammonium in Formamidinium-Methylammonium Lead Halide Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2018 , 3, 647-654	20.1	220

140	High-Efficiency Rubidium-Incorporated Perovskite Solar Cells by Gas Quenching. <i>ACS Energy Letters</i> , 2017 , 2, 438-444	20.1	200
139	Optical Properties of Photovoltaic Organic-Inorganic Lead Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 4774-85	6.4	199
138	CsPbI ₂ Br Perovskite Solar Cell by Spray-Assisted Deposition. <i>ACS Energy Letters</i> , 2016 , 1, 573-577	20.1	196
137	Methylammonium Lead Bromide Perovskite-Based Solar Cells by Vapor-Assisted Deposition. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 3545-3549	3.8	195
136	Humidity-Induced Degradation via Grain Boundaries of HC(NH ₂) ₂ PbI ₃ Planar Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2018 , 28, 1705363	15.6	172
135	Gas chromatography-mass spectrometry analyses of encapsulated stable perovskite solar cells. <i>Science</i> , 2020 , 368,	33.3	167
134	Enhanced performance via partial lead replacement with calcium for a CsPbI ₃ perovskite solar cell exceeding 13% power conversion efficiency. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 5580-5586	13	162
133	Defect trapping states and charge carrier recombination in organic/inorganic halide perovskites. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 793-800	7.1	136
132	Untapped Potentials of Inorganic Metal Halide Perovskite Solar Cells. <i>Joule</i> , 2019 , 3, 938-955	27.8	131
131	A manufacturing cost estimation method with uncertainty analysis and its application to perovskite on glass photovoltaic modules. <i>Progress in Photovoltaics: Research and Applications</i> , 2017 , 25, 390-405	6.8	124
130	Large area efficient interface layer free monolithic perovskite/homo-junction-silicon tandem solar cell with over 20% efficiency. <i>Energy and Environmental Science</i> , 2018 , 11, 2432-2443	35.4	122
129	Accelerated Lifetime Testing of Organic-Inorganic Perovskite Solar Cells Encapsulated by Polyisobutylene. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 25073-25081	9.5	118
128	Input Parameters for the Simulation of Silicon Solar Cells in 2014. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 1250-1263	3.7	108
127	Overcoming the Challenges of Large-Area High-Efficiency Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2017 , 2, 1978-1984	20.1	104
126	Mobile Charge-Induced Fluorescence Intermittency in Methylammonium Lead Bromide Perovskite. <i>Nano Letters</i> , 2015 , 15, 4644-9	11.5	97
125	Review of Novel Passivation Techniques for Efficient and Stable Perovskite Solar Cells. <i>Solar Rrl</i> , 2019 , 3, 1800302	7.1	94
124	Polaronic exciton binding energy in iodide and bromide organic-inorganic lead halide perovskites. <i>Applied Physics Letters</i> , 2015 , 107, 231902	3.4	90
123	Light Illumination Induced Photoluminescence Enhancement and Quenching in Lead Halide Perovskite. <i>Solar Rrl</i> , 2017 , 1, 1600001	7.1	88

122	Mobile Ion Induced Slow Carrier Dynamics in Organic-Inorganic Perovskite $\text{CH}_3\text{NH}_3\text{PbBr}_3$. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 5351-7	9.5	87
121	Optical analysis of perovskite/silicon tandem solar cells. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 5679-5689	6.8	86
120	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	3.8	83
119	Room temperature optical properties of organic-inorganic lead halide perovskites. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 137, 253-257	6.4	82
118	Manufacturing cost and market potential analysis of demonstrated roll-to-roll perovskite photovoltaic cell processes. <i>Solar Energy Materials and Solar Cells</i> , 2018 , 174, 314-324	6.4	82
117	Balancing electrical and optical losses for efficient 4-terminal Si/perovskite solar cells with solution processed percolation electrodes. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 3583-3592	13	80
116	Morphology and Carrier Extraction Study of Organic-Inorganic Metal Halide Perovskite by One- and Two-Photon Fluorescence Microscopy. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 3849-53	6.4	80
115	Nucleation and Growth Control of $\text{HC}(\text{NH}_2)_2\text{PbI}_3$ for Planar Perovskite Solar Cell. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 11262-11267	3.8	74
114	Flexible and efficient perovskite quantum dot solar cells via hybrid interfacial architecture. <i>Nature Communications</i> , 2021 , 12, 466	17.4	73
113	Solution-Processed, Silver-Doped NiO_x as Hole Transporting Layer for High-Efficiency Inverted Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2018 , 1, 561-570	6.1	69
112	21.8% Efficient Monolithic Perovskite/Homo-Junction-Silicon Tandem Solar Cell on 16 cm ² . <i>ACS Energy Letters</i> , 2018 , 3, 2299-2300	20.1	69
111	Fabrication of Efficient and Stable CsPbI_3 Perovskite Solar Cells through Cation Exchange Process. <i>Advanced Energy Materials</i> , 2019 , 9, 1901685	21.8	67
110	Four-Terminal Tandem Solar Cells Using $\text{CH}_3\text{NH}_3\text{PbBr}_3$ by Spectrum Splitting. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 3931-4	6.4	65
109	Supercharging Silicon Solar Cell Performance by Means of Multijunction Concept. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 968-976	3.7	64
108	Forty three per cent composite split-spectrum concentrator solar cell efficiency. <i>Progress in Photovoltaics: Research and Applications</i> , 2010 , 18, 42-47	6.8	62
107	An effective method of predicting perovskite solar cell lifetime: a case study on planar $\text{CH}_3\text{NH}_3\text{PbI}_3$ and $\text{HC}(\text{NH}_2)_2\text{PbI}_3$ perovskite solar cells and hole transfer materials of spiro-OMeTAD and PTAA. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 162, 41-46	6.4	61
106	Electric field induced reversible and irreversible photoluminescence responses in methylammonium lead iodide perovskite. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 9060-9068	7.1	61
105	Pushing to the Limit: Radiative Efficiencies of Recent Mainstream and Emerging Solar Cells. <i>ACS Energy Letters</i> , 2019 , 4, 1639-1644	20.1	57

104	Unveiling the Relationship between the Perovskite Precursor Solution and the Resulting Device Performance. <i>Journal of the American Chemical Society</i> , 2020 , 142, 6251-6260	16.4	57
103	Large-Area 23%-Efficient Monolithic Perovskite/Homojunction-Silicon Tandem Solar Cell with Enhanced UV Stability Using Down-Shifting Material. <i>ACS Energy Letters</i> , 2019 , 4, 2623-2631	20.1	57
102	Device Performance of Emerging Photovoltaic Materials (Version 1). <i>Advanced Energy Materials</i> , 2021 , 11, 2002774	21.8	56
101	A life cycle assessment of perovskite/silicon tandem solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2017 , 25, 679-695	6.8	55
100	How reliable are efficiency measurements of perovskite solar cells? The first inter-comparison, between two accredited and eight non-accredited laboratories. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 22542-22558	13	55
99	Superior Self-Powered Room-Temperature Chemical Sensing with Light-Activated Inorganic Halides Perovskites. <i>Small</i> , 2018 , 14, 1702571	11	54
98	Enhanced light trapping for high efficiency crystalline solar cells by the application of rear surface plasmons. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 101, 217-226	6.4	54
97	Temperature dependent optical properties of CH ₃ NH ₃ PbI ₃ perovskite by spectroscopic ellipsometry. <i>Applied Physics Letters</i> , 2016 , 108, 061905	3.4	54
96	Spin-coating free fabrication for highly efficient perovskite solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 168, 165-171	6.4	53
95	Acetic Acid Assisted Crystallization Strategy for High Efficiency and Long-Term Stable Perovskite Solar Cell. <i>Advanced Science</i> , 2020 , 7, 1903368	13.6	53
94	Light- and bias-induced structural variations in metal halide perovskites. <i>Nature Communications</i> , 2019 , 10, 444	17.4	51
93	Spatial Distribution of Lead Iodide and Local Passivation on Organo-Lead Halide Perovskite. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 6072-6078	9.5	50
92	High-performance solar flow battery powered by a perovskite/silicon tandem solar cell. <i>Nature Materials</i> , 2020 , 19, 1326-1331	27	50
91	Enhancing stability for organic-inorganic perovskite solar cells by atomic layer deposited Al ₂ O ₃ encapsulation. <i>Solar Energy Materials and Solar Cells</i> , 2018 , 188, 37-45	6.4	50
90	Mutual Insight on Ferroelectrics and Hybrid Halide Perovskites: A Platform for Future Multifunctional Energy Conversion. <i>Advanced Materials</i> , 2019 , 31, e1807376	24	48
89	Photoluminescence characterisations of a dynamic aging process of organic-inorganic CH ₃ NH ₃ PbBr ₃ perovskite. <i>Nanoscale</i> , 2016 , 8, 1926-31	7.7	47
88	Utilization of Direct and Diffuse Sunlight in a Dye-Sensitized Solar Cell/Silicon Photovoltaic Hybrid Concentrator System. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 581-585	6.4	44
87	Ultrafast Carrier Dynamics in Methylammonium Lead Bromide Perovskite. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 2542-2547	3.8	42

86	Dynamic study of the light soaking effect on perovskite solar cells by in-situ photoluminescence microscopy. <i>Nano Energy</i> , 2018 , 46, 356-364	17.1	37
85	Emerging inorganic compound thin film photovoltaic materials: Progress, challenges and strategies. <i>Materials Today</i> , 2020 , 41, 120-142	21.8	37
84	Lessons Learnt from Spatially Resolved Electro- and Photoluminescence Imaging: Interfacial Delamination in CH ₃ NH ₃ PbI ₃ Planar Perovskite Solar Cells upon Illumination. <i>Advanced Energy Materials</i> , 2017 , 7, 1602111	21.8	36
83	Ultimate efficiency limit of single-junction perovskite and dual-junction perovskite/silicon two-terminal devices. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 08KD04	1.4	36
82	Monolithic Wide Band Gap Perovskite/Perovskite Tandem Solar Cells with Organic Recombination Layers. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 27256-27262	3.8	35
81	Hue tunable, high color saturation and high-efficiency graphene/silicon heterojunction solar cells with MgF ₂ /ZnS double anti-reflection layer. <i>Nano Energy</i> , 2018 , 46, 257-265	17.1	33
80	Impact of microstructure on the electron-hole interaction in lead halide perovskites. <i>Energy and Environmental Science</i> , 2017 , 10, 1358-1366	35.4	31
79	The Impact of a Dynamic Two-Step Solution Process on Film Formation of Cs (MA FA) PbI Perovskite and Solar Cell Performance. <i>Small</i> , 2019 , 15, e1804858	11	31
78	Optimum band gap combinations to make best use of new photovoltaic materials. <i>Solar Energy</i> , 2016 , 135, 750-757	6.8	30
77	Direct patterned etching of silicon dioxide and silicon nitride dielectric layers by inkjet printing. <i>Solar Energy Materials and Solar Cells</i> , 2009 , 93, 1865-1874	6.4	28
76	Forming openings to semiconductor layers of silicon solar cells by inkjet printing. <i>Solar Energy Materials and Solar Cells</i> , 2008 , 92, 1410-1415	6.4	28
75	Synergistic effect of potassium and iodine from potassium triiodide complex additive on gas-quenched perovskite solar cells. <i>Nano Energy</i> , 2019 , 63, 103853	17.1	27
74	Transparent Electrodes Consisting of a Surface-Treated Buffer Layer Based on Tungsten Oxide for Semitransparent Perovskite Solar Cells and Four-Terminal Tandem Applications. <i>Small Methods</i> , 2020 , 4, 2000074	12.8	27
73	Electrode Design to Overcome Substrate Transparency Limitations for Highly Efficient 1 cm ² Mesoscopic Perovskite Solar Cells. <i>Joule</i> , 2018 , 2, 2694-2705	27.8	26
72	Elucidating Mechanisms behind Ambient Storage-Induced Efficiency Improvements in Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2021 , 6, 925-933	20.1	23
71	Scaling limits to large area perovskite solar cell efficiency. <i>Progress in Photovoltaics: Research and Applications</i> , 2018 , 26, 659-674	6.8	21
70	A bottom-up cost analysis of silicon-perovskite tandem photovoltaics. <i>Progress in Photovoltaics: Research and Applications</i> , 2021 , 29, 401-413	6.8	21
69	A Review on Halide Perovskite Film Formation by Sequential Solution Processing for Solar Cell Applications. <i>Energy Technology</i> , 2020 , 8, 1901114	3.5	20

68	Characterization of 2-D reflection pattern from textured front surfaces of silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 115, 42-51	6.4	19
67	Progress and Opportunities for Cs Incorporated Perovskite Photovoltaics. <i>Trends in Chemistry</i> , 2020 , 2, 638-653	14.8	19
66	Electro- and photoluminescence imaging as fast screening technique of the layer uniformity and device degradation in planar perovskite solar cells. <i>Journal of Applied Physics</i> , 2016 , 120, 035702	2.5	19
65	Designing Bottom Silicon Solar Cells for Multijunction Devices. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 683-690	3.7	18
64	Cyclic thermal annealing on Ge/Si(100) epitaxial films grown by magnetron sputtering. <i>Thin Solid Films</i> , 2015 , 574, 99-102	2.2	18
63	Optical Probe Ion and Carrier Dynamics at the CH ₃ NH ₃ PbI ₃ Interface with Electron and Hole Transport Materials. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600467	4.6	18
62	Device Performance of Emerging Photovoltaic Materials (Version 2). <i>Advanced Energy Materials</i> , 2015 , 5, 2102526	21.8	17
61	Integrating Low-Cost Earth-Abundant Co-Catalysts with Encapsulated Perovskite Solar Cells for Efficient and Stable Overall Solar Water Splitting. <i>Advanced Functional Materials</i> , 2021 , 31, 2008245	15.6	17
60	A techno-economic analysis method for guiding research and investment directions for c-Si photovoltaics and its application to Al-BSF, PERC, LDSE and advanced hydrogenation. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 1007-1019	5.8	15
59	Perovskites cover silicon textures. <i>Nature Materials</i> , 2018 , 17, 751-752	27	15
58	Recent progress and future prospects of perovskite tandem solar cells. <i>Applied Physics Reviews</i> , 2021 , 8, 041307	17.3	15
57	Spectral dependence of direct and trap-mediated recombination processes in lead halide perovskites using time resolved microwave conductivity. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 12043-9	3.6	15
56	Superior Self-Charged and -Powered Chemical Sensing with High Performance for NO ₂ Detection at Room Temperature. <i>Advanced Optical Materials</i> , 2020 , 8, 1901863	8.1	14
55	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. <i>Joule</i> , 2022 , 6, 8-15	27.8	14
54	Luminescence Imaging Characterization of Perovskite Solar Cells: A Note on the Analysis and Reporting the Results. <i>Advanced Energy Materials</i> , 2018 , 8, 1702256	21.8	13
53	Results from coupled optical and electrical sentaurus TCAD models of a gallium phosphide on silicon electron carrier selective contact solar cell 2014 ,		13
52	Light-activated inorganic CsPbBr ₃ perovskite for room-temperature self-powered chemical sensing. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 24187-24193	3.6	13
51	Time-resolved fluorescence anisotropy study of organic lead halide perovskite. <i>Solar Energy Materials and Solar Cells</i> , 2016 , 151, 102-112	6.4	12

50	Epitaxial growth of single-crystalline silicon/germanium on silicon by aluminium-assisted crystallization. <i>Scripta Materialia</i> , 2014 , 71, 25-28	5.6	12
49	Optical modelling data for room temperature optical properties of organic-inorganic lead halide perovskites. <i>Data in Brief</i> , 2015 , 3, 201-8	1.2	12
48	Diode laser annealing on Ge/Si (100) epitaxial films grown by magnetron sputtering. <i>Thin Solid Films</i> , 2016 , 609, 49-52	2.2	12
47	Visualizing the Impact of Light Soaking on Morphological Domains in an Operational Cesium Lead Halide Perovskite Solar Cell. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 136-143	6.4	10
46	Complementary bulk and surface passivations for highly efficient perovskite solar cells by gas quenching. <i>Cell Reports Physical Science</i> , 2021 , 2, 100511	6.1	10
45	Deconstruction-assisted perovskite formation for sequential solution processing of Cs _{0.15} (MA _{0.7} FA _{0.3}) _{0.85} PbI ₃ solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2019 , 203, 110200	6.4	8
44	Effect of Pressing Pressure on the Performance of Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2019 , 2, 2358-2363	6.1	8
43	2013 ,		8
42	Effect of electroless nickel on the series resistance of high-efficiency inkjet printed passivated emitter rear contacted solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2010 , 94, 2102-2107	6.4	8
41	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	13	8
40	Toward >25% Efficient Monolithic Epitaxial GaAsP/Si Tandem Solar Cells 2019 ,		7
39	Solution-Processed Faraday Rotators Using Single Crystal Lead Halide Perovskites. <i>Advanced Science</i> , 2020 , 7, 1902950	13.6	6
38	Advanced interface modelling of n-Si/HNO ₃ doped graphene solar cells to identify pathways to high efficiency. <i>Applied Surface Science</i> , 2018 , 434, 102-111	6.7	6
37	One-step aluminium-assisted crystallization of Ge epitaxy on Si by magnetron sputtering. <i>Applied Physics Letters</i> , 2014 , 104, 052107	3.4	6
36	Homologous Bromides Treatment for Improving the Open-circuit Voltage of Perovskite Solar Cells. <i>Advanced Materials</i> , 2021 , e2106280	24	6
35	Grain Quality Engineering for Organic Metal Halide Perovskites Using Mixed Antisolvent Spraying Treatment. <i>Solar Rrl</i> , 2020 , 4, 1900397	7.1	6
34	23.4% monolithic epitaxial GaAsP/Si tandem solar cells and quantification of losses from threading dislocations. <i>Solar Energy Materials and Solar Cells</i> , 2021 , 230, 111299	6.4	6
33	Inorganic-Cation Pseudo-Halide Two-dimensional Cs Pb(SCN) Br Perovskite Single Crystal. <i>Advanced Materials</i> , 2021 , e2104782	24	6

32	Maskless patterned etching of silicon dioxide by inkjet printing. <i>Optoelectronic and Microelectronic Materials and Devices (COMMAD), Conference on</i> , 2008 ,		5
31	Application of polydimethylsiloxane surface texturing on III-V//Si tandem achieving more than 2 % absolute efficiency improvement. <i>Optics Express</i> , 2020 , 28, 3895-3904	3.3	5
30	The importance of total hemispherical emittance in evaluating performance of building-integrated silicon and perovskite solar cells in insulated glazings. <i>Applied Energy</i> , 2020 , 276, 115490	10.7	5
29	Angular reflection study to reduce plasmonic losses in the dielectrically displaced back reflectors of silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 117, 343-349	6.4	4
28	In situ X-ray diffraction study on epitaxial growth of Si _{0.9} Ge _{0.1} on Si by aluminium-assisted crystallization. <i>Journal of Alloys and Compounds</i> , 2017 , 695, 1672-1676	5.7	3
27	Fabrication of low-defect Ge-rich SiGe-on-insulator by continuous-wave diode laser-induced recrystallization. <i>Journal of Alloys and Compounds</i> , 2018 , 744, 679-682	5.7	3
26	Reduction of Threading Dislocation Density in Sputtered Ge/Si(100) Epitaxial Films by Continuous-Wave Diode Laser-Induced Recrystallization. <i>ACS Applied Energy Materials</i> , 2018 , 1, 1893-1897	6.1	3
25	Design of bottom silicon solar cell for multijunction devices 2013 ,		3
24	The ultimate efficiency of organolead halide perovskite solar cells limited by Auger processes. <i>Journal of Materials Research</i> , 2016 , 31, 2197-2203	2.5	3
23	A smart stack triple-junction cell consisting of InGaP/GaAs and crystalline Si 2016 ,		3
22	Diode laser annealing of epitaxy Ge on sapphire (0 0 0 1) grown by magnetron sputtering. <i>Materials Letters</i> , 2017 , 208, 35-38	3.3	2
21	Direct Determination of Total Hemispherical Emittance of Perovskite and Silicon Solar Cells. <i>Cell Reports Physical Science</i> , 2020 , 1, 100008	6.1	2
20	Investigating the effect of silicon thickness on ultra-thin silicon on insulator as a compliant substrate for gallium arsenide heteroepitaxial growth. <i>Thin Solid Films</i> , 2018 , 653, 371-376	2.2	2
19	Correction to "Morphology and Carrier Extraction Study of Organic-Inorganic Metal Halide Perovskite by One- and Two-Photon Fluorescence Microscopy". <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 4038	6.4	2
18	Grain Quality Engineering for Organic Metal Halide Perovskites Using Mixed Antisolvent Spraying Treatment. <i>Solar Rrl</i> , 2020 , 4, 2070012	7.1	2
17	The Effect of 4-tert-Butylpyridine Removal on Efficiency and Thermal Stability in Perovskite Solar Cells. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2019 , 32, 715-720	0.7	2
16	A Review on Halide Perovskite Film Formation by Sequential Solution Processing for Solar Cell Applications. <i>Energy Technology</i> , 2020 , 8, 2070043	3.5	2
15	Effect of Silicon Front Surface Doping Profile on GaP/Si Heterostructure for III-V/GaP/Si Multi-junction Solar Cells 2018 ,		2

14	Silicate glass-to-glass hermetic bonding for encapsulation of next-generation optoelectronics: A review. <i>Materials Today</i> , 2021 , 47, 131-155	21.8	2
13	Immediate and Temporal Enhancement of Power Conversion Efficiency in Surface-Passivated Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 39178-39185	9.5	2
12	Laser-induced aluminium-assisted crystallization of Ge-rich SixGe1-x epitaxy on Si. <i>Thin Solid Films</i> , 2019 , 679, 55-57	2.2	1
11	Unveiling the Importance of Precursor Preparation for Highly Efficient and Stable Phenethylammonium-Based Perovskite Solar Cells. <i>Solar Rrl</i> , 2020 , 4, 1900463	7.1	1
10	Progress toward a Si-plus architecture: epitaxially-integrable Si sub-cells for III-V/Si multijunction photovoltaics 2014 ,		1
9	The design of single-junction GaAs and dual-junction GaAs/Si in the presence of threading dislocation density 2015 ,		1
8	General design considerations for making optimal use of new photovoltaic materials 2015 ,		1
7	Pulsed laser deposition nickel oxide on crystalline silicon as hole selective contacts. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2020 , 38, 014013	1.3	1
6	The Role of Grown-In Defects in Silicon Minority Carrier Lifetime Degradation During Thermal Treatment in Epitaxial Growth Chambers. <i>IEEE Journal of Photovoltaics</i> , 2020 , 10, 1299-1306	3.7	1
5	Magnetic optical rotary dispersion and magnetic circular dichroism in methylammonium lead halide perovskites. <i>Chirality</i> , 2021 , 33, 610-617	2.1	1
4	Effects of Al thickness on one-step aluminium-assisted crystallization of Ge epitaxy on Si by magnetron sputtering. <i>Materials Letters</i> , 2017 , 209, 32-35	3.3	0
3	Reconsideration of the gallium nitride: Dual functionality as an electron transporter and transparent conductor for recyclable polymer solar cell substrate applications. <i>Solar Energy Materials and Solar Cells</i> , 2019 , 200, 109971	6.4	
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