Anita W Y Ho-Baillie

List of Publications by Year
in descending order

#	Article	IF	Citations
1	The emergence of perovskite solar cells. Nature Photonics, 2014, 8, 506-514.	15.6	5,727
2	Solar cell efficiency tables (version 54). Progress in Photovoltaics: Research and Applications, 2019, 27, 565-575.	4.4	1,096
3	Solar cell efficiency tables (version 50). Progress in Photovoltaics: Research and Applications, 2017, 25, 668-676.	4.4	792
4	Solar cell efficiency tables (version 51). Progress in Photovoltaics: Research and Applications, 2018, 26, 3-12.	4.4	729
5	Solar cell efficiency tables (Version 55). Progress in Photovoltaics: Research and Applications, 2020, 28, 3-15.	4.4	694
6	Solar cell efficiency tables (Version 53). Progress in Photovoltaics: Research and Applications, 2019, 27, 3-12.	4.4	655
7	Solar cell efficiency tables (version 52). Progress in Photovoltaics: Research and Applications, 2018, 26, 427-436.	4.4	592
8	Solar cell efficiency tables (version 49). Progress in Photovoltaics: Research and Applications, 2017, 25, 3-13.	4.4	582
9	Benefit of Grain Boundaries in Organicâ€“Inorganic Halide Planar Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 875-880.	2.1	422
10	Beneficial Effects of PbI₂ Incorporated in Organoâ€Lead Halide Perovskite Solar Cells. Advanced Energy Materials, 2016, 6, 1502104.	10.2	387
11	Hole Transport Layer Free Inorganic CsPbIBr₂ Perovskite Solar Cell by Dual Source Thermal Evaporation. Advanced Energy Materials, 2016, 6, 1502202.	10.2	373
12	Critical Role of Grain Boundaries for Ion Migration in Formamidinium and Methylammonium Lead Halide Perovskite Solar Cells. Advanced Energy Materials, 2016, 6, 1600330.	10.2	360
13	Acoustic-optical phonon up-conversion and hot-phonon bottleneck in lead-halide perovskites. Nature Communications, 2017, 8, 14120.	5.8	330
14	Strontium-Doped Low-Temperature-Processed CsPbI₂Br Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 2319-2325.	8.8	314
15	Gas chromatographyâ€“mass spectrometry analyses of encapsulated stable perovskite solar cells. Science, 2020, 368, .	6.0	306
16	Perovskite Solar Cells: The Birth of a New Era in Photovoltaics. ACS Energy Letters, 2017, 2, 822-830.	8.8	305
17	Mixed 3Dâ€“2D Passivation Treatment for Mixedâ€Cation Lead Mixedâ€Halide Perovskite Solar Cells for Higher Efficiency and Better Stability. Advanced Energy Materials, 2018, 8, 1703392.	10.2	289
18	Passivation of Grain Boundaries by Phenethylammonium in Formamidinium-Methylammonium Lead Halide Perovskite Solar Cells. ACS Energy Letters, 2018, 3, 647-654.	8.8	283

#	ARTICLE	IF	CITATIONS
19	Optical Properties of Photovoltaic Organicâ€“Inorganic Lead Halide Perovskites. Journal of Physical Chemistry Letters, 2015, 6, 4774-4785.	2.1	280
20	Humidityâ€Induced Degradation via Grain Boundaries of HC(NH₂)₂PbI₃ Planar Perovskite Solar Cells. Advanced Functional Materials, 2018, 28, 1705363.	7.8	260
21	High-Efficiency Rubidium-Incorporated Perovskite Solar Cells by Gas Quenching. ACS Energy Letters, 2017, 2, 438-444.	8.8	247
22	CsPbIBr₂ Perovskite Solar Cell by Spray-Assisted Deposition. ACS Energy Letters, 2016, 1, 573-577.	8.8	230
23	Methylammonium Lead Bromide Perovskite-Based Solar Cells by Vapor-Assisted Deposition. Journal of Physical Chemistry C, 2015, 119, 3545-3549.	1.5	223
24	Enhanced performance <i>via</i> partial lead replacement with calcium for a CsPbI₃ perovskite solar cell exceeding 13% power conversion efficiency. Journal of Materials Chemistry A, 2018, 6, 5580-5586.	5.2	202
25	Untapped Potentials of Inorganic Metal Halide Perovskite Solar Cells. Joule, 2019, 3, 938-955.	11.7	196
26	Flexible and efficient perovskite quantum dot solar cells via hybrid interfacial architecture. Nature Communications, 2021, 12, 466.	5.8	176
27	Large area efficient interface layer free monolithic perovskite/homo-junction-silicon tandem solar cell with over 20% efficiency. Energy and Environmental Science, 2018, 11, 2432-2443.	15.6	172
28	Defect trapping states and charge carrier recombination in organicâ€“inorganic halide perovskites. Journal of Materials Chemistry C, 2016, 4, 793-800.	2.7	171
29	A manufacturing cost estimation method with uncertainty analysis and its application to perovskite on glass photovoltaic modules. Progress in Photovoltaics: Research and Applications, 2017, 25, 390-405.	4.4	171
30	Accelerated Lifetime Testing of Organicâ€“Inorganic Perovskite Solar Cells Encapsulated by Polyisobutylene. ACS Applied Materials & Interfaces, 2017, 9, 25073-25081.	4.0	165
31	Input Parameters for the Simulation of Silicon Solar Cells in 2014. IEEE Journal of Photovoltaics, 2015, 5, 1250-1263.	1.5	141
32	Review of Novel Passivation Techniques for Efficient and Stable Perovskite Solar Cells. Solar Rrl, 2019, 3, 1800302.	3.1	139
33	Overcoming the Challenges of Large-Area High-Efficiency Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 1978-1984.	8.8	130
34	Manufacturing cost and market potential analysis of demonstrated roll-to-roll perovskite photovoltaic cell processes. Solar Energy Materials and Solar Cells, 2018, 174, 314-324.	3.0	113
35	Optical analysis of perovskite/silicon tandem solar cells. Journal of Materials Chemistry C, 2016, 4, 5679-5689.	2.7	112
36	Light Illumination Induced Photoluminescence Enhancement and Quenching in Lead Halide Perovskite. Solar Rrl, 2017, 1, 1600001.	3.1	109

#	Article	IF	Citations
37	Mobile Charge-Induced Fluorescence Intermittency in Methylammonium Lead Bromide Perovskite. Nano Letters, 2015, 15, 4644-4649.	4.5	108
38	Unveiling the Relationship between the Perovskite Precursor Solution and the Resulting Device Performance. Journal of the American Chemical Society, 2020, 142, 6251-6260.	6.6	103
39	Polaronic exciton binding energy in iodide and bromide organic-inorganic lead halide perovskites. Applied Physics Letters, 2015, 107, .	1.5	102
40	Balancing electrical and optical losses for efficient 4-terminal Siâ€“perovskite solar cells with solution processed percolation electrodes. Journal of Materials Chemistry A, 2018, 6, 3583-3592.	5.2	102
41	The Effect of Stoichiometry on the Stability of Inorganic Cesium Lead Mixed-Halide Perovskites Solar Cells. Journal of Physical Chemistry C, 2017, 121, 19642-19649.	1.5	101
42	Fabrication of Efficient and Stable CsPbI₃ Perovskite Solar Cells through Cation Exchange Process. Advanced Energy Materials, 2019, 9, 1901685.	10.2	101
43	Mobile Ion Induced Slow Carrier Dynamics in Organicâ€“Inorganic Perovskite CH₃NH₃PbBr₃. ACS Applied Materials & Interfaces, 2016, 8, 5351-5357.	4.0	100
44	Room temperature optical properties of organicâ€“inorganic lead halide perovskites. Solar Energy Materials and Solar Cells, 2015, 137, 253-257.	3.0	96
45	Supercharging Silicon Solar Cell Performance by Means of Multijunction Concept. IEEE Journal of Photovoltaics, 2015, 5, 968-976.	1.5	96
46	21.8% Efficient Monolithic Perovskite/Homo-Junction-Silicon Tandem Solar Cell on 16 cm². ACS Energy Letters, 2018, 3, 2299-2300.	8.8	96
47	Solution-Processed, Silver-Doped NiO_{<i>x</i>} as Hole Transporting Layer for High-Efficiency Inverted Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 561-570.	2.5	95
48	Pushing to the Limit: Radiative Efficiencies of Recent Mainstream and Emerging Solar Cells. ACS Energy Letters, 2019, 4, 1639-1644.	8.8	93
49	Device Performance of Emerging Photovoltaic Materials (Version 1). Advanced Energy Materials, 2021, 11, 2002774.	10.2	93
50	Mutual Insight on Ferroelectrics and Hybrid Halide Perovskites: A Platform for Future Multifunctional Energy Conversion. Advanced Materials, 2019, 31, e1807376.	11.1	91
51	High-performance solar flow battery powered by a perovskite/silicon tandem solar cell. Nature Materials, 2020, 19, 1326-1331.	13.3	90
52	Large-Area 23%-Efficient Monolithic Perovskite/Homojunction-Silicon Tandem Solar Cell with Enhanced UV Stability Using Down-Shifting Material. ACS Energy Letters, 2019, 4, 2623-2631.	8.8	88
53	Acetic Acid Assisted Crystallization Strategy for High Efficiency and Longâ€Term Stable Perovskite Solar Cell. Advanced Science, 2020, 7, 1903368.	5.6	85
54	Morphology and Carrier Extraction Study of Organicâ€“Inorganic Metal Halide Perovskite by One- and Two-Photon Fluorescence Microscopy. Journal of Physical Chemistry Letters, 2014, 5, 3849-3853.	2.1	84

#	Article	IF	Citations
55	Forty three per cent composite splitâ€spectrum concentrator solar cell efficiency. Progress in Photovoltaics: Research and Applications, 2010, 18, 42-47.	4.4	82
56	Superior Selfâ€Powered Roomâ€Temperature Chemical Sensing with Lightâ€Activated Inorganic Halides Perovskites. Small, 2018, 14, 1702571.	5.2	82
57	Light- and bias-induced structural variations in metal halide perovskites. Nature Communications, 2019, 10, 444.	5.8	81
58	Emerging inorganic compound thin film photovoltaic materials: Progress, challenges and strategies. Materials Today, 2020, 41, 120-142.	8.3	81
59	Nucleation and Growth Control of HC(NH2)2PbI3 for Planar Perovskite Solar Cell. Journal of Physical Chemistry C, 2016, 120, 11262-11267.	1.5	80
60	Four-Terminal Tandem Solar Cells Using CH₃NH₃PbBr₃ by Spectrum Splitting. Journal of Physical Chemistry Letters, 2015, 6, 3931-3934.	2.1	77
61	Electric field induced reversible and irreversible photoluminescence responses in methylammonium lead iodide perovskite. Journal of Materials Chemistry C, 2016, 4, 9060-9068.	2.7	77
62	An effective method of predicting perovskite solar cell lifetimeâ€“Case study on planar CH 3 NH 3 PbI 3 and HC(NH 2) 2 PbI 3 perovskite solar cells and hole transfer materials of spiro-OMeTAD and PTAA. Solar Energy Materials and Solar Cells, 2017, 162, 41-46.	3.0	77
63	A life cycle assessment of perovskite/silicon tandem solar cells. Progress in Photovoltaics: Research and Applications, 2017, 25, 679-695.	4.4	74
64	Recent progress and future prospects of perovskite tandem solar cells. Applied Physics Reviews, 2021, 8, .	5.5	71
65	Spin-coating free fabrication for highly efficient perovskite solar cells. Solar Energy Materials and Solar Cells, 2017, 168, 165-171.	3.0	70
66	How reliable are efficiency measurements of perovskite solar cells? The first inter-comparison, between two accredited and eight non-accredited laboratories. Journal of Materials Chemistry A, 2017, 5, 22542-22558.	5.2	70
67	Temperature dependent optical properties of CH3NH3PbI3 perovskite by spectroscopic ellipsometry. Applied Physics Letters, 2016, 108, .	1.5	68
68	Dynamic study of the light soaking effect on perovskite solar cells by in-situ photoluminescence microscopy. Nano Energy, 2018, 46, 356-364.	8.2	67
69	Enhancing stability for organic-inorganic perovskite solar cells by atomic layer deposited Al2O3 encapsulation. Solar Energy Materials and Solar Cells, 2018, 188, 37-45.	3.0	67
70	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials, 2021, 11, .	10.2	66
71	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. Joule, 2022, 6, 8-15.	11.7	66
72	Enhanced light trapping for high efficiency crystalline solar cells by the application of rear surface plasmons. Solar Energy Materials and Solar Cells, 2012, 101, 217-226.	3.0	64

#	Article	IF	Citations
73	Spatial Distribution of Lead Iodide and Local Passivation on Organo-Lead Halide Perovskite. ACS Applied Materials & Interfaces, 2017, 9, 6072-6078.	4.0	62
74	Photoluminescence characterisations of a dynamic aging process of organicâ€“inorganic CH₃NH₃PbBr₃perovskite. Nanoscale, 2016, 8, 1926-1931.	2.8	61
75	Ultrafast Carrier Dynamics in Methylammonium Lead Bromide Perovskite. Journal of Physical Chemistry C, 2016, 120, 2542-2547.	1.5	54
76	Elucidating Mechanisms behind Ambient Storage-Induced Efficiency Improvements in Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 925-933.	8.8	52
77	Hue tunable, high color saturation and high-efficiency graphene/silicon heterojunction solar cells with MgF2/ZnS double anti-reflection layer. Nano Energy, 2018, 46, 257-265.	8.2	51
78	Lessons Learnt from Spatially Resolved Electroâ€•and Photoluminescence Imaging: Interfacial Delamination in CH₃NH₃PbI₃ Planar Perovskite Solar Cells upon Illumination. Advanced Energy Materials, 2017, 7, 1602111.	10.2	50
79	Utilization of Direct and Diffuse Sunlight in a Dye-Sensitized Solar Cell â€” Silicon Photovoltaic Hybrid Concentrator System. Journal of Physical Chemistry Letters, 2011, 2, 581-585.	2.1	49
80	Optimum band gap combinations to make best use of new photovoltaic materials. Solar Energy, 2016, 135, 750-757.	2.9	46
81	The Impact of a Dynamic Twoâ€Step Solution Process on Film Formation of Cs_{0.15}(MA_{0.7}FA_{0.3})_{0.85}PbI₃ Perovskite and Solar Cell Performance. Small, 2019, 15, e1804858.	5.2	46
82	Ultimate efficiency limit of single-junction perovskite and dual-junction perovskite/silicon two-terminal devices. Japanese Journal of Applied Physics, 2015, 54, 08KD04.	0.8	45
83	Integrating Lowâ€Cost Earthâ€Abundant Coâ€Catalysts with Encapsulated Perovskite Solar Cells for Efficient and Stable Overall Solar Water Splitting. Advanced Functional Materials, 2021, 31, 2008245.	7.8	43
84	Transparent Electrodes Consisting of a Surfaceâ€Treated Buffer Layer Based on Tungsten Oxide for Semitransparent Perovskite Solar Cells and Fourâ€Terminal Tandem Applications. Small Methods, 2020, 4, 2000074.	4.6	41
85	Monolithic Wide Band Gap Perovskite/Perovskite Tandem Solar Cells with Organic Recombination Layers. Journal of Physical Chemistry C, 2017, 121, 27256-27262.	1.5	40
86	Perovskite solar cells for building integrated photovoltaicsâ€”glazing applications. Joule, 2022, 6, 1446-1474.	11.7	39
87	Direct patterned etching of silicon dioxide and silicon nitride dielectric layers by inkjet printing. Solar Energy Materials and Solar Cells, 2009, 93, 1865-1874.	3.0	37
88	Synergistic effect of potassium and iodine from potassium triiodide complex additive on gas-quenched perovskite solar cells. Nano Energy, 2019, 63, 103853.	8.2	37
89	Impact of microstructure on the electronâ€“hole interaction in lead halide perovskites. Energy and Environmental Science, 2017, 10, 1358-1366.	15.6	36
90	A bottomâ€up cost analysis of siliconâ€“perovskite tandem photovoltaics. Progress in Photovoltaics: Research and Applications, 2021, 29, 401-413.	4.4	35

#	Article	IF	Citations
91	Progress and Opportunities for Cs Incorporated Perovskite Photovoltaics. Trends in Chemistry, 2020, 2, 638-653.	4.4	35
92	Electrode Design to Overcome Substrate Transparency Limitations for Highly Efficient 1 cm2 Mesoscopic Perovskite Solar Cells. Joule, 2018, 2, 2694-2705.	11.7	34
93	Forming openings to semiconductor layers of silicon solar cells by inkjet printing. Solar Energy Materials and Solar Cells, 2008, 92, 1410-1415.	3.0	33
94	Efficient and stable wide bandgap perovskite solar cells through surface passivation with long alkyl chain organic cations. Journal of Materials Chemistry A, 2021, 9, 18454-18465.	5.2	32
95	Scaling limits to large area perovskite solar cell efficiency. Progress in Photovoltaics: Research and Applications, 2018, 26, 659-674.	4.4	31
96	A Review on Halide Perovskite Film Formation by Sequential Solution Processing for Solar Cell Applications. Energy Technology, 2020, 8, 1901114.	1.8	31
97	Electro- and photoluminescence imaging as fast screening technique of the layer uniformity and device degradation in planar perovskite solar cells. Journal of Applied Physics, 2016, 120, .	1.1	27
98	Superior Selfâ€Charged and â€Powered Chemical Sensing with High Performance for NO₂ Detection at Room Temperature. Advanced Optical Materials, 2020, 8, 1901863.	3.6	27
99	Homologous Bromides Treatment for Improving the Openâ€Circuit Voltage of Perovskite Solar Cells. Advanced Materials, 2022, 34, e2106280.	11.1	26
100	Optical Probe Ion and Carrier Dynamics at the CH₃NH₃PbI₃ Interface with Electron and Hole Transport Materials. Advanced Materials Interfaces, 2016, 3, 1600467.	1.9	23
101	Light-activated inorganic CsPbBr₂I perovskite for room-temperature self-powered chemical sensing. Physical Chemistry Chemical Physics, 2019, 21, 24187-24193.	1.3	23
102	Cyclic thermal annealing on Ge/Si(100) epitaxial films grown by magnetron sputtering. Thin Solid Films, 2015, 574, 99-102.	0.8	22
103	Spectral dependence of direct and trap-mediated recombination processes in lead halide perovskites using time resolved microwave conductivity. Physical Chemistry Chemical Physics, 2016, 18, 12043-12049.	1.3	21
104	Complementary bulk and surface passivations for highly efficient perovskite solar cells by gas quenching. Cell Reports Physical Science, 2021, 2, 100511.	2.8	21
105	Characterization of 2-D reflection pattern from textured front surfaces of silicon solar cells. Solar Energy Materials and Solar Cells, 2013, 115, 42-51.	3.0	20
106	Inorganicâ€Cation Pseudohalide 2D Cs₂Pb(SCN)₂Br₂ Perovskite Single Crystal. Advanced Materials, 2022, 34, e2104782.	11.1	20
107	Designing Bottom Silicon Solar Cells for Multijunction Devices. IEEE Journal of Photovoltaics, 2015, 5, 683-690.	1.5	19
108	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. Sustainable Energy and Fuels, 2018, 2, 1007-1019.	2.5	19

#	ARTICLE	IF	CITATIONS
109	Perovskites cover silicon textures. Nature Materials, 2018, 17, 751-752.	13.3	19
110	Silicate glass-to-glass hermetic bonding for encapsulation of next-generation optoelectronics: A review. Materials Today, 2021, 47, 131-155.	8.3	18
111	Visualizing the Impact of Light Soaking on Morphological Domains in an Operational Cesium Lead Halide Perovskite Solar Cell. Journal of Physical Chemistry Letters, 2020, 11, 136-143.	2.1	17
112	Solutionâ€Processed Faraday Rotators Using Single Crystal Lead Halide Perovskites. Advanced Science, 2020, 7, 1902950.	5.6	17
113	Results from coupled optical and electrical sentaurus TCAD models of a gallium phosphide on silicon electron carrier selective contact solar cell. , 2014, , .		16
114	Luminescence Imaging Characterization of Perovskite Solar Cells: A Note on the Analysis and Reporting the Results. Advanced Energy Materials, 2018, 8, 1702256.	10.2	16
115	Epitaxial growth of single-crystalline siliconâ€"germanium on silicon by aluminium-assisted crystallization. Scripta Materialia, 2014, 71, 25-28.	2.6	15
116	Time-resolved fluorescence anisotropy study of organic lead halide perovskite. Solar Energy Materials and Solar Cells, 2016, 151, 102-112.	3.0	14
117	23.4% monolithic epitaxial GaAsP/Si tandem solar cells and quantification of losses from threading dislocations. Solar Energy Materials and Solar Cells, 2021, 230, 111299.	3.0	14
118	Optical modelling data for room temperature optical properties of organicâ€"inorganic lead halide perovskites. Data in Brief, 2015, 3, 201-208.	0.5	13
119	Diode laser annealing on Ge/Si (100) epitaxial films grown by magnetron sputtering. Thin Solid Films, 2016, 609, 49-52.	0.8	13
120	Toward >25% Efficient Monolithic Epitaxial GaAsP/Si Tandem Solar Cells. , 2019, , .		13
121	Effect of Pressing Pressure on the Performance of Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 2358-2363.	2.5	11
122	The importance of total hemispherical emittance in evaluating performance of building-integrated silicon and perovskite solar cells in insulated glazings. Applied Energy, 2020, 276, 115490.	5.1	11
123	Ideal GaP/Si heterostructures grown by MOCVD: III-V/active-Si subcells, multijuntions, and MBE-to-MOCVD III-V/Si interface science. , 2013, , .		10
124	One-step aluminium-assisted crystallization of Ge epitaxy on Si by magnetron sputtering. Applied Physics Letters, 2014, 104, 052107.	1.5	10
125	Advanced interface modelling of n-Si/HNO3 doped graphene solar cells to identify pathways to high efficiency. Applied Surface Science, 2018, 434, 102-111.	3.1	10
126	Immediate and Temporal Enhancement of Power Conversion Efficiency in Surface-Passivated Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 39178-39185.	4.0	10

#	ARTICLE	IF	CITATIONS
127	Effect of electroless nickel on the series resistance of high-efficiency inkjet printed passivated emitter rear contacted solar cells. Solar Energy Materials and Solar Cells, 2010, 94, 2102-2107.	3.0	9
128	Grain Quality Engineering for Organic Metal Halide Perovskites Using Mixed Antisolvent Spraying Treatment. Solar Rrl, 2020, 4, 1900397.	3.1	9
129	A Review on Halide Perovskite Film Formation by Sequential Solution Processing for Solar Cell Applications. Energy Technology, 2020, 8, 2070043.	1.8	9
130	Deconstruction-assisted perovskite formation for sequential solution processing of Cs0.15(MA0.7FA0.3)0.85PbI3 solar cells. Solar Energy Materials and Solar Cells, 2019, 203, 110200.	3.0	8
131	Magnetic optical rotary dispersion and magnetic circular dichroism in methylammonium lead halide perovskites. Chirality, 2021, 33, 610-617.	1.3	8
132	Application of polydimethylsiloxane surface texturing on III-V//Si tandem achieving more than 2 % absolute efficiency improvement. Optics Express, 2020, 28, 3895.	1.7	8
133	Maskless patterned etching of silicon dioxide by inkjet printing. Optoelectronic and Microelectronic Materials and Devices (COMMAD), Conference on, 2008, , .	0.0	6
134	The ultimate efficiency of organolead halide perovskite solar cells limited by Auger processes. Journal of Materials Research, 2016, 31, 2197-2203.	1.2	6
135	A â€œsmart stackâ€•triple-junction cell consisting of InGaP/GaAs and crystalline Si. , 2016, , .		6
136	The Effect of 4-<i>tert</i>-Butylpyridine Removal on Efficiency and Thermal Stability in Perovskite Solar Cells. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2019, 32, 715-720.	0.1	5
137	Angular reflection study to reduce plasmonic losses in the dielectrically displaced back reflectors of silicon solar cells. Solar Energy Materials and Solar Cells, 2013, 117, 343-349.	3.0	4
138	Progress toward a Si-plus architecture: epitaxially-integrable Si sub-cells for III-V/Si multijunction photovoltaics. , 2014, , .		4
139	In situ X-ray diffraction study on epitaxial growth of SixGe1â˜’x on Si by aluminium-assisted crystallization. Journal of Alloys and Compounds, 2017, 695, 1672-1676.	2.8	4
140	Diode laser annealing of epitaxy Ge on sapphire (0 0 0 1) grown by magnetron sputtering. Materials Letters, 2017, 208, 35-38.	1.3	4
141	Scalable ways to break the efficiency limit of single-junction solar cells. Applied Physics Letters, 2022, 120, .	1.5	4
142	Design of bottom silicon solar cell for multijunction devices. , 2013, , .		3
143	Fabrication of low-defect Ge-rich SiGe-on-insulator by continuous-wave diode laser-induced recrystallization. Journal of Alloys and Compounds, 2018, 744, 679-682.	2.8	3
144	Reduction of Threading Dislocation Density in Sputtered Ge/Si(100) Epitaxial Films by Continuous-Wave Diode Laser-Induced Recrystallization. ACS Applied Energy Materials, 2018, 1, 1893-1897.	2.5	3

#	Article	IF	Citations
145	Investigating the effect of silicon thickness on ultra-thin silicon on insulator as a compliant substrate for gallium arsenide heteroepitaxial growth. Thin Solid Films, 2018, 653, 371-376.	0.8	3
146	Direct Determination of Total Hemispherical Emittance of Perovskite and Silicon Solar Cells. Cell Reports Physical Science, 2020, 1, 100008.	2.8	3
147	Correction to â€œMorphology and Carrier Extraction Study of Organicâ€“Inorganic Metal Halide Perovskite by One- and Two-Photon Fluorescence Microscopyâ€• Journal of Physical Chemistry Letters, 2014, 5, 4038-4038.	2.1	2
148	Simulation of Solar Cells Employing 2 Dimensional Transition Metal Dichalcogenide â€“ Silicon Front Surfaces. , 2018, , .		2
149	Effect of Silicon Front Surface Doping Profile on GaP/Si Heterostructure for III-V/GaP/Si Multi-junction Solar Cells. , 2018, , .		2
150	On the Origin of Silicon Lifetime Degradation During Anneal in III-V Material Growth Chambers. , 2019, , .		2
151	Grain Quality Engineering for Organic Metal Halide Perovskites Using Mixed Antisolvent Spraying Treatment. Solar Rrl, 2020, 4, 2070012.	3.1	2
152	Pulsed laser deposition nickel oxide on crystalline silicon as hole selective contacts. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 014013.	0.6	2
153	Unveiling the Importance of Precursor Preparation for Highly Efficient and Stable Phenethylammoniumâ€Based Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900463.	3.1	2
154	Potential performance of â€œout-of-sequenceâ€•multi-junction solar cells: iii-v on virtual ge substrates with active si bottom sub-cell. , 2015, , .		1
155	The design of single-junction GaAs and dual-junction GaAs/Si in the presence of threading dislocation density. , 2015, , .		1
156	General design considerations for making optimal use of new photovoltaic materials. , 2015, , .		1
157	Illumination dependent carrier dynamics of CH₃NH₃PbBr₃perovskite. Proceedings of SPIE, 2015, , .	0.8	1
158	Unravelling the mechanism of photo-activated ion dynamics in organic-inorganic perovskites. , 2016, , .		1
159	Effects of Al thickness on one-step aluminium-assisted crystallization of Ge epitaxy on Si by magnetron sputtering. Materials Letters, 2017, 209, 32-35.	1.3	1
160	Pulsed Laser Deposition Nickel Oxide on crystalline Silicon as hole selective contacts. , 2018, , .		1
161	The Role of Grown-In Defects in Silicon Minority Carrier Lifetime Degradation During Thermal Treatment in Epitaxial Growth Chambers. IEEE Journal of Photovoltaics, 2020, 10, 1299-1306.	1.5	1
162	New education opportunities and research activities at UNSW. Proceedings of SPIE, 2007, , .	0.8	0

#	Article	IF	Citations
163	The effect of rear surface passivation layer thickness on high efficiency solar cells with planar and scattering metal reflectors. , 2012, , .		0
164	Ultrafast charge generation and relaxation dynamics in methylammonium lead bromide perovskites. , 2015, , .		0
165	Dislocation density reduction of virtual Ge substrates by CW diode laser treatment. , 2016, , .		0
166	Numerical Simulation of p-type front junction PERL Silicon cell for III-V lSi Tandem Devices. , 2017, , .		0
167	Broadband Reflectance Reduction for Wafer Bonded III-V//Si tandem Cell Using Polydimethylsiloxane -Replicated Surface Texturing. , 2018, , .		0
168	Low-temperature epitaxial growth of Ge on Si, towards a cost-effective substrate for III-V solar cells. , 2018, , .		0
169	Epitaxial Growth of Ge on Si by Magnetron Sputtering. , 2018, , .		0
170	Reconsideration of the gallium nitride: Dual functionality as an electron transporter and transparent conductor for recyclable polymer solar cell substrate applications. Solar Energy Materials and Solar Cells, 2019, 200, 109971.	3.0	0
171	Unveiling the Importance of Precursor Preparation for Highly Efficient and Stable Phenethylammoniumâ€Based Perovskite Solar Cells. Solar Rrl, 2020, 4, 2070043.	3.1	0
172	Strategies for improving performance, reducing toxicity and improving stability for perovskite solar cells. , 0, , .		0
173	Inorganicâ€Cation Pseudohalide 2D Cs₂Pb(SCN)₂Br₂ Perovskite Single Crystal (Adv. Mater. 7/2022). Advanced Materials, 2022, 34, .	11.1	0
174	Intrinsic stability of perovskites and meta-stability of perovskite solar cells. , 0, , .		0