Ulrich W Paetzold

List of Publications by Year
in descending order

202 papers	6,904 citations	50276 46 h-index	74163 75 g-index
205 all docs	205 docs citations	205 times ranked	6925 citing authors

#	Article	IF	Citations
1	Record Openâ€Circuit Voltage Wideâ€Bandgap Perovskite Solar Cells Utilizing 2D/3D Perovskite Heterostructure. Advanced Energy Materials, 2019, 9, 1803699.	19.5	325
2	Pinhole-free perovskite films for efficient solar modules. Energy and Environmental Science, 2016, 9, 484-489.	30.8	252
3	Beyond Bulk Lifetimes: Insights into Lead Halide Perovskite Films from Time-Resolved Photoluminescence. Physical Review Applied, 2016, 6, .	3.8	194
4	Two birds with one stone: dual grain-boundary and interface passivation enables >22% efficient inverted methylammonium-free perovskite solar cells. Energy and Environmental Science, 2021, 14, 5875-5893.	30.8	180
5	Efficient bifacial monolithic perovskite/silicon tandem solar cells via bandgap engineering. Nature Energy, 2021, 6, 167-175.	39.5	164
6	Thermodynamics of light management in photovoltaic devices. Physical Review B, 2014, 90, .	3.2	163
7	Nonhazardous Solvent Systems for Processing Perovskite Photovoltaics. Advanced Energy Materials, 2016, 6, 1600386.	19.5	158
8	Inkjet-Printed Triple Cation Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 1834-1839.	5.1	156
9	Coated and Printed Perovskites for Photovoltaic Applications. Advanced Materials, 2019, 31, e1806702.	21.0	146
10	Inkjetâ€Printed Micrometerâ€Thick Perovskite Solar Cells with Large Columnar Grains. Advanced Energy Materials, 2020, 10, 1903184.	19.5	142
11	An open-access database and analysis tool for perovskite solar cells based on the FAIR data principles. Nature Energy, 2022, 7, 107-115.	39.5	136
12	Rapid composition screening for perovskite photovoltaics via concurrently pumped ultrasonic spray coating. Journal of Materials Chemistry A, 2016, 4, 3792-3797.	10.3	130
13	2D/3D Heterostructure for Semitransparent Perovskite Solar Cells with Engineered Bandgap Enables Efficiencies Exceeding 25% in Fourâ€Terminal Tandems with Silicon and CIGS. Advanced Functional Materials, 2020, 30, 1909919.	14.9	123
14	Plasmonic reflection grating back contacts for microcrystalline silicon solar cells. Applied Physics Letters, 2011, 99, .	3.3	122
15	Electronâ€Beamâ€Evaporated Nickel Oxide Hole Transport Layers for Perovskiteâ€Based Photovoltaics. Advanced Energy Materials, 2019, 9, 1802995.	19.5	122
16	An electron beam evaporated TiO₂layer for high efficiency planar perovskite solar cells on flexible polyethylene terephthalate substrates. Journal of Materials Chemistry A, 2015, 3, 22824-22829.	10.3	116
17	Multipass inkjet printed planar methylammonium lead iodide perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 19207-19213.	10.3	112
18	High Efficiency Perovskiteâ€Silicon Tandem Solar Cells: Effect of Surface Coating versus Bulk Incorporation of 2D Perovskite. Advanced Energy Materials, 2020, 10, 1903553.	19.5	110

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19	Continuous wave amplified spontaneous emission in phase-stable lead halide perovskites. Nature Communications, 2019, 10, 988.	12.8	107
20	Perovskiteâ€“silicon tandem solar modules with optimised light harvesting. Energy and Environmental Science, 2018, 11, 1489-1498.	30.8	104
21	Design of nanostructured plasmonic back contacts for thin-film silicon solar cells. Optics Express, 2011, 19, A1219.	3.4	93
22	Device Performance of Emerging Photovoltaic Materials (Version 1). Advanced Energy Materials, 2021, 11, 2002774.	19.5	93
23	High efficiency perovskite solar cells using a PCBM/ZnO double electron transport layer and a short air-aging step. Organic Electronics, 2015, 26, 30-35.	2.6	92
24	Temperature Variation-Induced Performance Decline of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 16390-16399.	8.0	89
25	Interconnection Optimization for Highly Efficient Perovskite Modules. IEEE Journal of Photovoltaics, 2017, 7, 404-408.	2.5	86
26	Flexible Inkjet-Printed Triple Cation Perovskite X-ray Detectors. ACS Applied Materials & Interfaces, 2020, 12, 15774-15784.	8.0	86
27	Highly stable solution processed metal-halide perovskite lasers on nanoimprinted distributed feedback structures. Applied Physics Letters, 2016, 109, .	3.3	82
28	Light Management: A Key Concept in High-Efficiency Perovskite/Silicon Tandem Photovoltaics. Journal of Physical Chemistry Letters, 2019, 10, 3159-3170.	4.6	81
29	Fourâ€Terminal Perovskite/Silicon Multijunction Solar Modules. Advanced Energy Materials, 2017, 7, 1602807.	19.5	75
30	Perovskite Solar Cells with Allâ€Inkjetâ€Printed Absorber and Charge Transport Layers. Advanced Materials Technologies, 2021, 6, 2000271.	5.8	72
31	Spectral Dependence of Degradation under Ultraviolet Light in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 21985-21990.	8.0	71
32	Inkjet-printed perovskite distributed feedback lasers. Optics Express, 2018, 26, A144.	3.4	68
33	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials, 2021, 11, .	19.5	66
34	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. Joule, 2022, 6, 8-15.	24.0	66
35	Exposure-dependent refractive index of Nanoscribe IP-Dip photoresist layers. Optics Letters, 2019, 44, 29.	3.3	63
36	Lightâ€Induced Degradation of Perovskite Solar Cells: The Influence of 4â€Tertâ€Butyl Pyridine and Gold. Advanced Energy Materials, 2018, 8, 1800554.	19.5	62

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37	Energy yield modelling of perovskite/silicon two-terminal tandem PV modules with flat and textured interfaces. Sustainable Energy and Fuels, 2018, 2, 2754-2761.	4.9	61
38	Vacuumâ€Assisted Growth of Lowâ€Bandgap Thin Films (FA_{0.8}MA_{0.2}Sn_{0.5}Pb_{0.5}I₃) for Allâ€Perovskite Tandem Solar Cells. Advanced Energy Materials, 2020, 10, 1902583.	19.5	60
39	Self-cleaning performance of superhydrophobic hot-embossed fluoropolymer films for photovoltaic modules. Solar Energy Materials and Solar Cells, 2019, 189, 188-196.	6.2	59
40	Scalable two-terminal all-perovskite tandem solar modules with a 19.1% efficiency. Nature Energy, 2022, 7, 620-630.	39.5	58
41	Methodology of energy yield modelling of perovskite-based multi-junction photovoltaics. Optics Express, 2019, 27, A507.	3.4	55
42	Disorder improves nanophotonic light trapping in thin-film solar cells. Applied Physics Letters, 2014, 104, .	3.3	52
43	Nanophotonic front electrodes for perovskite solar cells. Applied Physics Letters, 2015, 106, .	3.3	52
44	Optical Analysis of Planar Multicrystalline Perovskite Solar Cells. Advanced Optical Materials, 2017, 5, 1700151.	7.3	51
45	From Groundwork to Efficient Solar Cells: On the Importance of the Substrate Material in Coâ€Evaporated Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2104482.	14.9	51
46	Cloaked contact grids on solar cells by coordinate transformations: designs and prototypes. Optica, 2015, 2, 850.	9.3	50
47	Nanophotonic perovskite layers for enhanced current generation and mitigation of lead in perovskite solar cells. Solar Energy Materials and Solar Cells, 2019, 192, 65-71.	6.2	50
48	Scalable perovskite/CIGS thin-film solar module with power conversion efficiency of 17.8%. Journal of Materials Chemistry A, 2017, 5, 9897-9906.	10.3	47
49	Spontaneous enhancement of the stable power conversion efficiency in perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 670-682.	10.3	47
50	Energy yield of bifacial textured perovskite/silicon tandem photovoltaic modules. Solar Energy Materials and Solar Cells, 2020, 208, 110367.	6.2	45
51	Texture of the Viola Flower for Light Harvesting in Photovoltaics. ACS Photonics, 2017, 4, 2687-2692.	6.6	43
52	Drying Dynamics of Solutionâ€Processed Perovskite Thinâ€Film Photovoltaics: In Situ Characterization, Modeling, and Process Control. Advanced Energy Materials, 2019, 9, 1901581.	19.5	42
53	Thermal Stability and Cation Composition of Hybrid Organicâ€“Inorganic Perovskites. ACS Applied Materials & Interfaces, 2021, 13, 15292-15304.	8.0	41
54	Monolithic Two-Terminal Perovskite/CIS Tandem Solar Cells with Efficiency Approaching 25%. ACS Energy Letters, 2022, 7, 2273-2281.	17.4	40

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55	Energy Yield Advantages of Three-Terminal Perovskite-Silicon Tandem Photovoltaics. Joule, 2020, 4, 2387-2403.	24.0	39
56	UV nanoimprint for the replication of etched ZnO:Al textures applied in thinâ€film silicon solar cells. Progress in Photovoltaics: Research and Applications, 2014, 22, 1226-1236.	8.1	36
57	Sputtered Transparent Electrodes (IO:H and IZO) with Low Parasitic Near-Infrared Absorption for Perovskiteâ€“Cu(In,Ga)Se₂ Tandem Solar Cells. ACS Applied Energy Materials, 2019, 2, 7823-7831.	5.1	35
58	Revealing the internal luminescence quantum efficiency of perovskite films via accurate quantification of photon recycling. Matter, 2021, 4, 1391-1412.	10.0	35
59	Upscaling of perovskite solar modules: The synergy of fully evaporated layer fabrication and allâ€laserâ€scribed interconnections. Progress in Photovoltaics: Research and Applications, 2022, 30, 360-373.	8.1	35
60	Nanoscale Observation of Waveguide Modes Enhancing the Efficiency of Solar Cells. Nano Letters, 2014, 14, 6599-6605.	9.1	34
61	Efficient All-Evaporated <i>pin</i>-Perovskite Solar Cells: A Promising Approach Toward Industrial Large-Scale Fabrication. IEEE Journal of Photovoltaics, 2019, 9, 1249-1257.	2.5	33
62	Scalable Processing of Low-Temperature TiO₂ Nanoparticles for High-Efficiency Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 47-58.	5.1	33
63	Laminated Perovskite Photovoltaics: Enabling Novel Layer Combinations and Device Architectures. Advanced Functional Materials, 2020, 30, 1907481.	14.9	33
64	The Electronic Structure of MAPIâ€Based Perovskite Solar Cells: Detailed Band Diagram Determination by Photoemission Spectroscopy Comparing Classical and Inverted Device Stacks. Advanced Energy Materials, 2020, 10, 2002129.	19.5	33
65	Design and Color Flexibility for Inkjet-Printed Perovskite Photovoltaics. ACS Applied Energy Materials, 2019, 2, 764-769.	5.1	32
66	Solutionâ€Based Silicon in Thinâ€Film Solar Cells. Advanced Energy Materials, 2014, 4, 1301871.	19.5	31
67	Rigorous wave-optical treatment of photon recycling in thermodynamics of photovoltaics: Perovskite thin-film solar cells. Physical Review B, 2018, 98, .	3.2	31
68	Energy yield of all thinâ€film perovskite/CIGS tandem solar modules. Progress in Photovoltaics: Research and Applications, 2019, 27, 290-298.	8.1	31
69	Triple cation mixed-halide perovskites for tunable lasers. Optical Materials Express, 2017, 7, 4082.	3.0	30
70	Snâ€Pb Mixed Perovskites with Fullereneâ€Derivative Interlayers for Efficient Fourâ€Terminal Allâ€Perovskite Tandem Solar Cells. Advanced Functional Materials, 2022, 32, 2107650.	14.9	30
71	Crystallisation dynamics in wide-bandgap perovskite films. Journal of Materials Chemistry A, 2016, 4, 10524-10531.	10.3	29
72	Light coupling to quasi-guided modes in nanoimprinted perovskite solar cells. Solar Energy Materials and Solar Cells, 2019, 201, 110080.	6.2	29

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73	Allâ€Angle Invisibility Cloaking of Contact Fingers on Solar Cells by Refractive Freeâ€Form Surfaces. Advanced Optical Materials, 2017, 5, 1700164.	7.3	28
74	Perovskite/Hole Transport Layer Interface Improvement by Solvent Engineering of Spiro-OMeTAD Precursor Solution. ACS Applied Materials & Interfaces, 2019, 11, 44802-44810.	8.0	28
75	Chemical vapor deposited polymer layer for efficient passivation of planar perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 20122-20132.	10.3	27
76	Thin-film silicon solar cell development on imprint-textured glass substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 617-622.	3.5	26
77	Advancing tandem solar cells by spectrally selective multilayer intermediate reflectors. Optics Express, 2014, 22, A1270.	3.4	26
78	3Dâ€printed external light trap for solar cells. Progress in Photovoltaics: Research and Applications, 2016, 24, 623-633.	8.1	26
79	Triple-cation low-bandgap perovskite thin-films for high-efficiency four-terminal all-perovskite tandem solar cells. Journal of Materials Chemistry A, 2020, 8, 24608-24619.	10.3	26
80	Photodegradation of Triple-Cation Perovskite Solar Cells: The Role of Spectrum and Bias Conditions. ACS Applied Energy Materials, 2021, 4, 3083-3092.	5.1	26
81	Disordered diffraction gratings tailored by shape-memory based wrinkling and their application to photovoltaics. Optical Materials Express, 2018, 8, 184.	3.0	24
82	Harvesting Sub-bandgap Photons via Upconversion for Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 54874-54883.	8.0	24
83	Interfacial Depletion Regions: Beyond the Space Charge Limit in Thick Bulk Heterojunctions. ACS Applied Materials & Interfaces, 2016, 8, 2211-2219.	8.0	23
84	View Factor Model and Validation for Bifacial PV and Diffuse Shade on Single-Axis Trackers. , 2017, , .		22
85	Exciton versus free carrier emission: Implications for photoluminescence efficiency and amplified spontaneous emission thresholds in quasi-2D and 3D perovskites. Materials Today, 2021, 49, 35-47.	14.2	22
86	Photon recycling in nanopatterned perovskite thin-films for photovoltaic applications. APL Photonics, 2019, 4, 076104.	5.7	21
87	Thin-film Silicon Solar Cells on Dry Etched Textured Glass. Energy Procedia, 2014, 44, 151-159.	1.8	20
88	Additiveâ€Assisted Crystallization Dynamics in Twoâ€Step Fabrication of Perovskite Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700509.	1.8	20
89	In₂O₃:H-Based Hole-Transport-Layer-Free Tin/Lead Perovskite Solar Cells for Efficient Four-Terminal All-Perovskite Tandem Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 46488-46498.	8.0	20
90	Optimization of SnO₂ electron transport layer for efficient planar perovskite solar cells with very low hysteresis. Materials Advances, 2022, 3, 456-466.	5.4	20

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91	Study of thin-film silicon solar cell back reflectors and potential of detached reflectors. Energy Procedia, 2011, 10, 106-110.	1.8	19
92	Study of detached back reflector designs for thinâ€film silicon solar cells. Physica Status Solidi - Rapid Research Letters, 2012, 6, 65-67.	2.4	19
93	Investigation of the impact of the rearâ€dielectric/silver back reflector design on the optical performance of thinâ€film silicon solar cells by means of detached reflectors. Progress in Photovoltaics: Research and Applications, 2013, 21, 1236-1247.	8.1	19
94	Model for the Prediction of the Lifetime and Energy Yield of Methyl Ammonium Lead Iodide Perovskite Solar Cells at Elevated Temperatures. ACS Applied Materials & Interfaces, 2019, 11, 16517-16526.	8.0	19
95	Hot-embossed microcone-textured fluoropolymer as self-cleaning and anti-reflective photovoltaic module covers. Solar Energy Materials and Solar Cells, 2020, 214, 110582.	6.2	19
96	Localized plasmonic losses at metal back contacts of thin-film silicon solar cells. , 2010, , .		18
97	Optical simulations of microcrystalline silicon solar cells applying plasmonic reflection grating back contacts. Journal of Photonics for Energy, 2012, 2, 027002.	1.3	18
98	Plasmon-induced photoexcitation of â€œhotâ€•electrons and â€œhotâ€•holes in amorphous silicon photosensitive devices containing silver nanoparticles. Journal of Applied Physics, 2013, 113, .	2.5	17
99	Toward scalable perovskiteâ€based multijunction solar modules. Progress in Photovoltaics: Research and Applications, 2019, 27, 733-738.	8.1	17
100	Nanoimprint texturing of transparent flexible substrates for improved light management in thinâ€film solar cells. Physica Status Solidi - Rapid Research Letters, 2015, 9, 215-219.	2.4	16
101	Microâ€cone textures for improved light inâ€coupling and retroreflectionâ€inspired light trapping at the front surface of solar modules. Progress in Photovoltaics: Research and Applications, 2019, 27, 593-602.	8.1	16
102	Analytical Study of Solutionâ€Processed Tin Oxide as Electron Transport Layer in Printed Perovskite Solar Cells. Advanced Materials Technologies, 2021, 6, 2000282.	5.8	16
103	Plasmonic back contacts with non-ordered Ag nanostructures for light trapping in thin-film silicon solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 630-634.	3.5	15
104	Influence of Interface Textures on Light Management in Thin-Film Silicon Solar Cells With Intermediate Reflector. IEEE Journal of Photovoltaics, 2015, 5, 33-39.	2.5	15
105	Low-cost electrodes for stable perovskite solar cells. Applied Physics Letters, 2017, 110, .	3.3	15
106	Combination of Advanced Optical Modelling with Electrical Simulation for Performance Evaluation of Practical 4-terminal Perovskite/c-Si Tandem Modules. Energy Procedia, 2016, 92, 669-677.	1.8	14
107	Comment on â€œRoom-Temperature Continuous-Wave Operation of Organometal Halide Perovskite Lasersâ€• ACS Nano, 2019, 13, 12257-12258.	14.6	14
108	Co-evaporation of CH₃NH₃PbI₃: How Growth Conditions Impact Phase Purity, Photostriction, and Intrinsic Stability. ACS Applied Materials & Interfaces, 2021, 13, 2642-2653.	8.0	14

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109	Laminated Monolithic Perovskite/Silicon Tandem Photovoltaics. Advanced Energy Materials, 2022, 12, .	19.5	14
110	Liquid Glass for Photovoltaics: Multifunctional Front Cover Glass for Solar Modules. ACS Applied Materials & Interfaces, 2019, 11, 35015-35022.	8.0	13
111	Bimolecular and Auger Recombination in Phase-Stable Perovskite Thin Films from Cryogenic to Room Temperature and Their Effect on the Amplified Spontaneous Emission Threshold. Journal of Physical Chemistry Letters, 2021, 12, 2293-2298.	4.6	13
112	On the geometry of plasmonic reflection grating back contacts for light trapping in prototype amorphous silicon thin-film solar cells. Journal of Photonics for Energy, 2014, 5, 057004.	1.3	12
113	Fabrication of Light-Scattering Multiscale Textures by Nanoimprinting for the Application to Thin-Film Silicon Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 772-777.	2.5	12
114	Drying and Coating of Perovskite Thin Films: How to Control the Thin Film Morphology in Scalable Dynamic Coating Systems. ACS Applied Materials & Interfaces, 2022, 14, 11300-11312.	8.0	12
115	Thin-film silicon solar cells applying optically decoupled back reflectors. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 645-650.	3.5	11
116	High-Brightness Perovskite Light-Emitting Diodes Using a Printable Silver Microflake Contact. ACS Applied Materials & Interfaces, 2020, 12, 11428-11437.	8.0	11
117	How free excitonâ€“exciton annihilation lets bound exciton emission dominate the photoluminescence of 2D-perovskites under high-fluence pulsed excitation at cryogenic temperatures. Journal of Applied Physics, 2021, 129, .	2.5	11
118	Energy yield modelling of textured perovskite/silicon tandem photovoltaics with thick perovskite top cells. Optics Express, 2022, 30, 14172.	3.4	11
119	Angular dependence of light trapping in nanophotonic thin-film solar cells. Optics Express, 2015, 23, A1575.	3.4	10
120	Perovskite Solar Cells: Record Openâ€Circuit Voltage Wideâ€Bandgap Perovskite Solar Cells Utilizing 2D/3D Perovskite Heterostructure (Adv. Energy Mater. 21/2019). Advanced Energy Materials, 2019, 9, 1970079.	19.5	10
121	Infiltrated photonic crystals for light-trapping in CuInSe_2 nanocrystal-based solar cells. Optics Express, 2017, 25, A502.	3.4	9
122	Planarized and Compact Light Scattering Layers Based on Disordered Titania Nanopillars for Light Extraction in Organic Light Emitting Diodes. Advanced Optical Materials, 2021, 9, 2001610.	7.3	9
123	Correlative In Situ Multichannel Imaging for Largeâ€Area Monitoring of Morphology Formation in Solutionâ€Processed Perovskite Layers. Solar Rrl, 2022, 6, 2100353.	5.8	9
124	Efficient Light Harvesting in Thick Perovskite Solar Cells Processed on Industry-Applicable Random Pyramidal Textures. ACS Applied Energy Materials, 2022, 5, 6700-6708.	5.1	9
125	Light Management in Flexible Thin-Film Solar Cellsâ€”The Role of Nanoimprinted Textures and Tilted Surfaces. IEEE Journal of Photovoltaics, 2015, 5, 1646-1653.	2.5	8
126	Highly Reflective Dielectric Back Reflector for Improved Efficiency of Tandem Thin-Film Solar Cells. International Journal of Photoenergy, 2016, 2016, 1-7.	2.5	8

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127	Post passivation light trapping back contacts for silicon heterojunction solar cells. Nanoscale, 2016, 8, 18726-18733.	5.6	8
128	CZTSe solar cells prepared by co-evaporation of multilayer Cuâ€“Sn/Cu,Zn,Sn,Se/ZnSe/Cu,Zn,Sn,Se stacks. Physica Scripta, 2019, 94, 105007.	2.5	8
129	Nanostructured front electrodes for perovskite/c-Si tandem photovoltaics. Optics Express, 2020, 28, 8878.	3.4	8
130	Freeform surface invisibility cloaking of interconnection lines in thin-film photovoltaic modules. Solar Energy Materials and Solar Cells, 2018, 182, 294-301.	6.2	7
131	Solution-processed and evaporated C60 interlayers for improved charge transport in perovskite photovoltaics. Organic Electronics, 2020, 77, 105526.	2.6	7
132	Impact of silver incorporation at the back contact of Kesterite solar cells on structural and device properties. Thin Solid Films, 2020, 709, 138223.	1.8	7
133	Impact of <i>n</i>-Butylammonium Bromide on the Chemical and Electronic Structure of Double-Cation Perovskite Thin Films. ACS Applied Materials & Interfaces, 2021, 13, 53202-53210.	8.0	7
134	Interpreting the Timeâ€Resolved Photoluminescence of Quasiâ€2D Perovskites. Advanced Materials Interfaces, 2021, 8, 2101326.	3.7	7
135	Periodic nano-textures enhance efficiency in multi-junction silicon thin-film solar cells. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 30-35.	1.8	6
136	Toward Stable Perovskite Solar Cell Architectures: Robustness Against Temperature Variations of Real-World Conditions. IEEE Journal of Photovoltaics, 2020, 10, 777-784.	2.5	6
137	Towards mass fabrication of hot embossed plant surface texture replicas as photovoltaic cover layers. , 2018, , .		6
138	Perovskite Solar Cells with Vivid, Angleâ€Invariant, and Customizable Inkjetâ€Printed Colorization for Buildingâ€Integrated Photovoltaics. Solar Rrl, 2022, 6, .	5.8	6
139	Emergence of Deep Traps in Long-Term Thermally Stressed CH3NH3PbI3 Perovskite Revealed by Thermally Stimulated Currents. Journal of Physical Chemistry Letters, 2022, 13, 552-558.	4.6	6
140	Lasing from Laminated Quasiâ€2D/3D Perovskite Planar Heterostructures. Advanced Functional Materials, 2022, 32, .	14.9	6
141	Simulation of tandem thin-film silicon solar cells. Proceedings of SPIE, 2010, , .	0.8	5
142	Spectrally selective intermediate reflectors for tandem thin-film silicon solar cells. , 2013, , .		5
143	Optical loss analyses and energy yield modelling of perovskite/silicon multijunction solar cells. , 2016, , .		5
144	A Selfâ€Assembly Method for Tunable and Scalable Nanoâ€Stamps: A Versatile Approach for Imprinting Nanostructures. Advanced Materials Technologies, 2022, 7, 2101008.	5.8	5

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145	Analysis of light propagation in thin-film solar cells by dual-probe scanning near-field optical microscopy. , 2014, , .		4
146	Light management in flexible thinâ€film solar cells on transparent plastic substrates. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1955-1963.	1.8	4
147	Highly transparent front electrodes with metal fingers for p-i-n thin-film silicon solar cells. EPJ Photovoltaics, 2015, 6, 60501.	1.6	3
148	Nanoscale Investigation of Polarization-Dependent Light Coupling to Individual Waveguide Modes in Nanophotonic Thin-Film Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 1523-1527.	2.5	3
149	Prototyping of nanophotonic grating back contacts for light trapping in planar silicon solar cells. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1949-1954.	1.8	3
150	Analysis of parasitic losses due to intermediate reflectors in silicon tandem solar cells. Solar Energy Materials and Solar Cells, 2017, 163, 185-190.	6.2	3
151	Broadening of Light Coupling to Waveguide Modes in Solar Cells by Disordered Grating Textures. Applied Sciences (Switzerland), 2017, 7, 725.	2.5	3
152	Continuous Wave Amplified Spontaneous Emission in Phase-Stable Triple Cation Lead Halide Perovskite Thin Films. , 2019, , .		3
153	Phase evolution during annealing of low-temperature co-evaporated precursors for CZTSe solar cell absorbers. Journal of Applied Physics, 2021, 129, .	2.5	3
154	Perovskite Solar Modules. Solar Rrl, 2022, 6, .	5.8	3
155	Nano-imprint lithography for advanced light management concepts in multi-junction solar cells. , 2014, , .		2
156	Improved flexible thin-film solar cells with nanoimprinted light management textures. , 2015, , .		2
157	Cloaking of Metal Contacts on Solar Cells. , 2015, , .		2
158	Photovoltaics: Nonhazardous Solvent Systems for Processing Perovskite Photovoltaics (Adv. Energy) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	19.5	2
159	Charge Carrier and Exciton Dynamics in Perovskites Revealed by Timeâ€Integrated Photoluminescence after Doubleâ€Pulse Excitation. Advanced Materials Technologies, 0, , 2200152.	5.8	2
160	In Situ Current Determination of a-Si/Î¼c-Si Tandem Solar Cells via Transmission Measurements During Silicon PECVD. IEEE Journal of Photovoltaics, 2012, 2, 77-82.	2.5	1
161	Simulation-based analysis of plasmonic light trapping in thin-film silicon solar cells. , 2013, , .		1
162	In-situ determination of the effective absorbance of thin<i>Î¼</i>c-Si:H layers growing on rough ZnO:Al. EPJ Photovoltaics, 2013, 4, 40602.	1.6	1

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163	Development of perovskite solar cells with nanophotonic front electrodes for improved light incoupling. , 2015, , .		1
164	Stable Perovskite Solar Cell Architectures: Robustness against Temperature Variations Under Real World Conditions. , 2018, , .		1
165	Towards Inexpensive and Stable All-Evaporated Perovskite Solar Cells for Industrial Large-Scale Fabrication. , 2018, , .		1
166	Annual energy yield of mono- and bifacial silicon heterojunction solar modules with high-index dielectric nanodisk arrays as anti-reflective and light trapping structures. Optics Express, 2021, 29, 34494.	3.4	1
167	Developing Efficient Upconverter Silicon Solar Cell Devices. , 2013, , .		1
168	Optical simulations and prototyping of microcrystalline silicon solar cells with integrated plasmonic reflection grating back contacts. Proceedings of SPIE, 2011, , .	0.8	1
169	Performance of Silicon Solar Cells with Cloaked Contact Fingers under Realistic Conditions. , 2017, , .		1
170	Realization of Colors and Patterns for Inkjet-Printed Perovskite Solar Cells. , 2018, , .		1
171	Numerical study on the angular light trapping of the energy yield of organic solar cells with an optical cavity. Optics Express, 2020, 28, 37986.	3.4	1
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