Ulrich W Paetzold

List of Publications by Year
in descending order

202	6,904	50276	74163
papers	citations	46 h-index	75 g-index

205	205	205	6925
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	Snâ€Pb Mixed Perovskites with Fulleneâ€Derivative Interlayers for Efficient Fourâ€Terminal Allâ€Perovskite Tandem Solar Cells. Advanced Functional Materials, 2022, 32, 2107650.	14.9	30
5	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
6	Influence of Wind Speed on Volcano Ash Removal From Self-Cleaning Cover Films Dedicated for Photovoltaics. IEEE Journal of Photovoltaics, 2022, 12, 453-460.	2.5	1
7	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. Joule, 2022, 6, 8-15.	24.0	66
8	Perovskite Solar Cells with Vivid, Angleâ€Invariant, and Customizable Inkjetâ€Printed Colorization for Buildingâ€Integrated Photovoltaics. Solar Rrl, 2022, 6, .	5.8	6
9	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
10	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
11	Energy yield modelling of textured perovskite/silicon tandem photovoltaics with thick perovskite top cells. Optics Express, 2022, 30, 14172.	3.4	11
12	Perovskite Solar Modules. Solar Rrl, 2022, 6, .	5.8	3
13	Lasing from Laminated Quasiâ€2D/3D Perovskite Planar Heterostructures. Advanced Functional Materials, 2022, 32, .	14.9	6
14	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
15	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
16	Monolithic Two-Terminal Perovskite/CIS Tandem Solar Cells with Efficiency Approaching 25%. ACS Energy Letters, 2022, 7, 2273-2281.	17.4	40
17	Laminated Monolithic Perovskite/Silicon Tandem Photovoltaics. Advanced Energy Materials, 2022, 12, .	19.5	14
18	Scalable two-terminal all-perovskite tandem solar modules with a 19.1% efficiency. Nature Energy, 2022, 7, 620-630.	39.5	58

#	Article	IF	Citations
19	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
20	Perovskite Solar Cells with Allâ€Inkjetâ€Printed Absorber and Charge Transport Layers. Advanced Materials Technologies, 2021, 6, 2000271.	5.8	72
21	Device Performance of Emerging Photovoltaic Materials (Version 1). Advanced Energy Materials, 2021, 11, 2002774.	19.5	93
22	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
23	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
24	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
25	Efficient bifacial monolithic perovskite/silicon tandem solar cells via bandgap engineering. Nature Energy, 2021, 6, 167-175.	39.5	164
26	Thermal Stability and Cation Composition of Hybrid Organicâ€“Inorganic Perovskites. ACS Applied Materials & Interfaces, 2021, 13, 15292-15304.	8.0	41
27	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
28	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
29	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
30	Phase evolution during annealing of low-temperature co-evaporated precursors for CZTSe solar cell absorbers. Journal of Applied Physics, 2021, 129, .	2.5	3
31	Revealing the internal luminescence quantum efficiency of perovskite films via accurate quantification of photon recycling. Matter, 2021, 4, 1391-1412.	10.0	35
32	In situ reflectance- photoluminescence imaging on solution-processed perovskite thin-films. , 2021, , .		0
33	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
34	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
35	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
36	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

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37	Impact of n-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
38	Harvesting Sub-bandgap Photons via Upconversion for Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 54874-54883.	8.0	24
39	Interpreting the Timeâ€Resolved Photoluminescence of Quasiâ€2D Perovskites. Advanced Materials Interfaces, 2021, 8, 2101326.	3.7	7
40	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials, 2021, 11, .	19.5	66
41	Solution-processed and evaporated C60 interlayers for improved charge transport in perovskite photovoltaics. Organic Electronics, 2020, 77, 105526.	2.6	7
42	Laminated Perovskite Photovoltaics: Enabling Novel Layer Combinations and Device Architectures. Advanced Functional Materials, 2020, 30, 1907481.	14.9	33
43	Energy yield of bifacial textured perovskite/silicon tandem photovoltaic modules. Solar Energy Materials and Solar Cells, 2020, 208, 110367.	6.2	45
44	Inkjetâ€Printed Micrometerâ€Thick Perovskite Solar Cells with Large Columnar Grains. Advanced Energy Materials, 2020, 10, 1903184.	19.5	142
45	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
46	Spontaneous enhancement of the stable power conversion efficiency in perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 670-682.	10.3	47
47	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
48	Energy Yield Advantages of Three-Terminal Perovskite-Silicon Tandem Photovoltaics. Joule, 2020, 4, 2387-2403.	24.0	39
49	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
50	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
51	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
52	Flexible Inkjet-Printed Triple Cation Perovskite X-ray Detectors. ACS Applied Materials & Interfaces, 2020, 12, 15774-15784.	8.0	86
53	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
54	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

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55	High-Brightness Perovskite Light-Emitting Diodes Using a Printable Silver Microflake Contact. ACS Applied Materials & Interfaces, 2020, 12, 11428-11437.	8.0	11
56	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
57	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
58	Nanostructured front electrodes for perovskite/c-Si tandem photovoltaics. Optics Express, 2020, 28, 8878.	3.4	8
59	2D Surface Passivation in Semi-transparent Perovskite Top Solar Cells with Engineered Bandgap for Tandem Photovoltaics. , 2020, , .		0
60	Spontaneous Enhancement of the Power Output in Surface-Passivated Triple-Cation Perovskite Solar Cells. , 2020, , .		0
61	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
62	Progress on Perovskite Solar Cells with All-Inkjet-Printed Absorber and Extraction Layers. , 2020, , .		1
63	Photon recycling in nanopatterned perovskite thin-films for photovoltaic applications. APL Photonics, 2019, 4, 076104.	5.7	21
64	Light coupling to quasi-guided modes in nanoimprinted perovskite solar cells. Solar Energy Materials and Solar Cells, 2019, 201, 110080.	6.2	29
65	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
66	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
67	Liquid Glass for Photovoltaics: Multifunctional Front Cover Glass for Solar Modules. ACS Applied Materials & Interfaces, 2019, 11, 35015-35022.	8.0	13
68	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
69	Light Management: A Key Concept in High-Efficiency Perovskite/Silicon Tandem Photovoltaics. Journal of Physical Chemistry Letters, 2019, 10, 3159-3170.	4.6	81
70	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
71	Efficient All-Evaporated pin-Perovskite Solar Cells: A Promising Approach Toward Industrial Large-Scale Fabrication. IEEE Journal of Photovoltaics, 2019, 9, 1249-1257.	2.5	33
72	Toward scalable perovskiteâ€based multijunction solar modules. Progress in Photovoltaics: Research and Applications, 2019, 27, 733-738.	8.1	17

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73	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
74	Record Openâ€Circuit Voltage Wideâ€Bandgap Perovskite Solar Cells Utilizing 2D/3D Perovskite Heterostructure. Advanced Energy Materials, 2019, 9, 1803699.	19.5	325
75	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
76	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
77	Coated and Printed Perovskites for Photovoltaic Applications. Advanced Materials, 2019, 31, e1806702.	21.0	146
78	Continuous wave amplified spontaneous emission in phase-stable lead halide perovskites. Nature Communications, 2019, 10, 988.	12.8	107
79	High Open-Circuit Voltage in Wide-Bandgap Perovskite Photovoltaics with Passivation Layers Based on Large Cations. , 2019, , .		0
80	Continuous Wave Amplified Spontaneous Emission in Phase-Stable Triple Cation Lead Halide Perovskite Thin Films. , 2019, , .		3
81	Comment on â€œRoom-Temperature Continuous-Wave Operation of Organometal Halide Perovskite Lasersâ€. ACS Nano, 2019, 13, 12257-12258.	14.6	14
82	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
83	Scalable Processing of Low-Temperature TiO₂ Nanoparticles for High-Efficiency Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 47-58.	5.1	33
84	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
85	Energy yield of all thinâ€film perovskite/CIGS tandem solar modules. Progress in Photovoltaics: Research and Applications, 2019, 27, 290-298.	8.1	31
86	Design and Color Flexibility for Inkjet-Printed Perovskite Photovoltaics. ACS Applied Energy Materials, 2019, 2, 764-769.	5.1	32
87	Electronâ€Beamâ€Evaporated Nickel Oxide Hole Transport Layers for Perovskiteâ€Based Photovoltaics. Advanced Energy Materials, 2019, 9, 1802995.	19.5	122
88	Methodology of energy yield modelling of perovskite-based multi-junction photovoltaics. Optics Express, 2019, 27, A507.	3.4	55
89	Exposure-dependent refractive index of Nanoscribe IP-Dip photoresist layers. Optics Letters, 2019, 44, 29.	3.3	63
90	Low- and high-index self-assembled nanopillars as light outcoupling elements in organic light emitting diodes. , 2019, , .		0

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91	Nanophotonic perovskite thin-film solar cells by thermal nano-imprint lithography. , 2019, , .		0
92	Superhydrophobic self-cleaning cover sheets for photovoltaic modules. , 2019, , .		0
93	Continuous Wave Amplified Spontaneous Emission from Mixed Cation Perovskite devices. , 2019, , .		0
94	Temperature Variation-Induced Performance Decline of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 16390-16399.	8.0	89
95	Inkjet-Printed Triple Cation Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 1834-1839.	5.1	156
96	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
97	Perovskiteâ€“silicon tandem solar modules with optimised light harvesting. Energy and Environmental Science, 2018, 11, 1489-1498.	30.8	104
98	Stable Perovskite Solar Cell Architectures: Robustness against Temperature Variations Under Real World Conditions. , 2018, , .		1
99	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
100	Inkjet Printed Perovskite Photovoltaics. , 2018, , .		0
101	Towards Inexpensive and Stable All-Evaporated Perovskite Solar Cells for Industrial Large-Scale Fabrication. , 2018, , .		1
102	Towards nano-patterned perovskite layers for enhanced absorption in solar cells. , 2018, , .		0
103	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
104	Disordered diffraction gratings tailored by shape-memory based wrinkling and their application to photovoltaics. Optical Materials Express, 2018, 8, 184.	3.0	24
105	Inkjet-printed perovskite distributed feedback lasers. Optics Express, 2018, 26, A144.	3.4	68
106	Rigorous wave-optical treatment of photon recycling in thermodynamics of photovoltaics: Perovskite thin-film solar cells. Physical Review B, 2018, 98, .	3.2	31
107	Spectral Dependence of Degradation under Ultraviolet Light in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 21985-21990.	8.0	71
108	Towards mass fabrication of hot embossed plant surface texture replicas as photovoltaic cover layers. , 2018, , .		6

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109	Impact of Fabrication Parameters on the Self-cleaning Performance of Hot-embossed Fluoropolymer Films for Photovoltaic Modules. , 2018, , .		0
110	Energy Yield Modelling of Wide Bandgap Perovskite-Based Tandem Solar Modules. , 2018, , .		0
111	Rigorous Wave-Optical Simulation of Photon Recycling in Nanostructured Perovskite Solar Cells. , 2018, , .		0
112	Realization of Colors and Patterns for Inkjet-Printed Perovskite Solar Cells. , 2018, , .		1
113	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
114	Fourâ€Terminal Perovskite/Silicon Multijunction Solar Modules. Advanced Energy Materials, 2017, 7, 1602807.	19.5	75
115	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
116	Low-cost electrodes for stable perovskite solar cells. Applied Physics Letters, 2017, 110, .	3.3	15
117	Interconnection Optimization for Highly Efficient Perovskite Modules. IEEE Journal of Photovoltaics, 2017, 7, 404-408.	2.5	86
118	Texture of the Viola Flower for Light Harvesting in Photovoltaics. ACS Photonics, 2017, 4, 2687-2692.	6.6	43
119	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
120	Allâ€Angle Invisibility Cloaking of Contact Fingers on Solar Cells by Refractive Freeâ€Form Surfaces. Advanced Optical Materials, 2017, 5, 1700164.	7.3	28
121	Optical Analysis of Planar Multicrystalline Perovskite Solar Cells. Advanced Optical Materials, 2017, 5, 1700151.	7.3	51
122	Infiltrated photonic crystals for light-trapping in CuInSe_2 nanocrystal-based solar cells. Optics Express, 2017, 25, A502.	3.4	9
123	Triple cation mixed-halide perovskites for tunable lasers. Optical Materials Express, 2017, 7, 4082.	3.0	30
124	Broadening of Light Coupling to Waveguide Modes in Solar Cells by Disordered Grating Textures. Applied Sciences (Switzerland), 2017, 7, 725.	2.5	3
125	View Factor Model and Validation for Bifacial PV and Diffuse Shade on Single-Axis Trackers. , 2017, , .		22
126	Notice of Removal High efficiency blade coated perovskite photovoltaic modules by subcell interconnection optimization. , 2017, , .		0

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127	Performance of Silicon Solar Cells with Cloaked Contact Fingers under Realistic Conditions. , 2017, , .		1
128	Thermodynamics of photon recycling in four terminal perovskite/Si tandem solar cells. , 2017, , .		0
129	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
130	Nonhazardous Solvent Systems for Processing Perovskite Photovoltaics. Advanced Energy Materials, 2016, 6, 1600386.	19.5	158
131	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
132	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
133	Efficient post passivation light-management concepts for silicon heterojunction solar cells. , 2016, , .		0
134	Highly stable solution processed metal-halide perovskite lasers on nanoimprinted distributed feedback structures. Applied Physics Letters, 2016, 109, .	3.3	82
135	3Dâ€printed external light trap for solar cells. Progress in Photovoltaics: Research and Applications, 2016, 24, 623-633.	8.1	26
136	Optical simulation of tailored disorder for nanophotonic thin-film solar cells. , 2016, , .		0
137	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
138	Photovoltaics: Nonhazardous Solvent Systems for Processing Perovskite Photovoltaics (Adv. Energy) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	19.5	2
139	Post passivation light trapping back contacts for silicon heterojunction solar cells. Nanoscale, 2016, 8, 18726-18733.	5.6	8
140	Multipass inkjet printed planar methylammonium lead iodide perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 19207-19213.	10.3	112
141	Beyond Bulk Lifetimes: Insights into Lead Halide Perovskite Films from Time-Resolved Photoluminescence. Physical Review Applied, 2016, 6, .	3.8	194
142	Crystallisation dynamics in wide-bandgap perovskite films. Journal of Materials Chemistry A, 2016, 4, 10524-10531.	10.3	29
143	Rapid composition screening for perovskite photovoltaics via concurrently pumped ultrasonic spray coating. Journal of Materials Chemistry A, 2016, 4, 3792-3797.	10.3	130
144	Interfacial Depletion Regions: Beyond the Space Charge Limit in Thick Bulk Heterojunctions. ACS Applied Materials & Interfaces, 2016, 8, 2211-2219.	8.0	23

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145	Pinhole-free perovskite films for efficient solar modules. Energy and Environmental Science, 2016, 9, 484-489.	30.8	252
146	Optical loss analyses and energy yield modelling of perovskite/silicon multijunction solar cells. , 2016, , .		5
147	Progress on nanopatterned front electrodes for perovskite thin-film solar cells. , 2016, , .		0
148	Nanophotonic light management for silicon heterojunction solar cells with planar passivation layers â€“ Implementation and material perspective. , 2016, , .		0
149	Broadening of Light Coupling to Waveguide Modes in Solar Cells by Disordered Grating Textures. , 2016, , .		0
150	Simulation of Absorption Enhancement and Optical Modes in CIS Nanocrystal Embedded Photonic Crystal Designs. , 2016, , .		0
151	Direct Laser Written Nanophotonics for Embedded CIS Nanocrystal Solar Cells. , 2016, , .		0
152	Angular dependence of light trapping in nanophotonic thin-film solar cells. Optics Express, 2015, 23, A1575.	3.4	10
153	Highly transparent front electrodes with metal fingers for p-i-n thin-film silicon solar cells. EPJ Photovoltaics, 2015, 6, 60501.	1.6	3
154	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
155	Improved flexible thin-film solar cells with nanoimprinted light management textures. , 2015, , .		2
156	Nanoscale investigation of polarization-dependent light coupling to individual waveguide modes of nanophotonic thin-film solar cells. , 2015, , .		0
157	3D-printed external light traps for solar cells. , 2015, , .		0
158	Cloaked contact grids on solar cells by coordinate transformations: designs and prototypes. Optica, 2015, 2, 850.	9.3	50
159	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
160	Development of perovskite solar cells with nanophotonic front electrodes for improved light incoupling. , 2015, , .		1
161	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
162	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

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163	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
164	Nanophotonic front electrodes for perovskite solar cells. Applied Physics Letters, 2015, 106, .	3.3	52
165	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
166	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
167	Cloaking of Metal Contacts on Solar Cells. , 2015, , .		2
168	Analysis of light propagation in thin-film solar cells by dual-probe scanning near-field optical microscopy. , 2014, , .		4
169	Progress on nanopatterned front electrodes for organic solar cells. , 2014, , .		0
170	Optimizing the geometry of plasmonic reflection grating back contacts for improved light trapping in prototype amorphous silicon thin-film solar cells. Proceedings of SPIE, 2014, , .	0.8	0
171	Disordered nanophotonic light management in thin-film photovoltaics. , 2014, , .		0
172	Advancing tandem solar cells by spectrally selective multilayer intermediate reflectors. Optics Express, 2014, 22, A1270.	3.4	26
173	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
174	Nano-imprint lithography for advanced light management concepts in multi-junction solar cells. , 2014, , .		2
175	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
176	Thin-film Silicon Solar Cells on Dry Etched Textured Glass. Energy Procedia, 2014, 44, 151-159.	1.8	20
177	Solutionâ€Based Silicon in Thinâ€Film Solar Cells. Advanced Energy Materials, 2014, 4, 1301871.	19.5	31
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