Joseph Berry

List of Publications by Year
in descending order

166 papers	20,679 citations	12303 69 h-index	9839 141 g-index
167 all docs	167 docs citations	167 times ranked	16554 citing authors

#	Article	IF	Citations
1	Stabilizing Perovskite Structures by Tuning Tolerance Factor: Formation of Formamidinium and Cesium Lead Iodide Solid-State Alloys. Chemistry of Materials, 2016, 28, 284-292.	3.2	1,606
2	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. Nature Energy, 2020, 5, 35-49.	19.8	797
3	Carrier lifetimes of >1 Î¼s in Sn-Pb perovskites enable efficient all-perovskite tandem solar cells. Science, 2019, 364, 475-479.	6.0	781
4	Scalable fabrication of perovskite solar cells. Nature Reviews Materials, 2018, 3, .	23.3	764
5	Tailored interfaces of unencapsulated perovskite solar cells for >1,000 hour operational stability. Nature Energy, 2018, 3, 68-74.	19.8	722
6	Triple-halide wideâ€"band gap perovskites with suppressed phase segregation for efficient tandems. Science, 2020, 367, 1097-1104.	6.0	669
7	Defect Tolerance in Methylammonium Lead Triiodide Perovskite. ACS Energy Letters, 2016, 1, 360-366.	8.8	500
8	Perovskite ink with wide processing window for scalable high-efficiency solar cells. Nature Energy, 2017, 2, .	19.8	499
9	Extrinsic ion migration in perovskite solar cells. Energy and Environmental Science, 2017, 10, 1234-1242.	15.6	458
10	Facile fabrication of large-grain CH3NH3PbI3â^'xBrx films for high-efficiency solar cells via CH3NH3Br-selective Ostwald ripening. Nature Communications, 2016, 7, 12305.	5.8	444
11	Efficient, stable silicon tandem cells enabled by anion-engineered wide-bandgap perovskites. Science, 2020, 368, 155-160.	6.0	420
12	Advances in two-dimensional organicâ€"inorganic hybrid perovskites. Energy and Environmental Science, 2020, 13, 1154-1186.	15.6	420
13	Hybrid Organicâ€"Inorganic Perovskites (HOIPs): Opportunities and Challenges. Advanced Materials, 2015, 27, 5102-5112.	11.1	372
14	Evidence for near-Surface NiOOH Species in Solution-Processed NiO_{<i>x</i>} Selective Interlayer Materials: Impact on Energetics and the Performance of Polymer Bulk Heterojunction Photovoltaics. Chemistry of Materials, 2011, 23, 4988-5000.	3.2	343
15	Chiral-induced spin selectivity enables a room-temperature spin light-emitting diode. Science, 2021, 371, 1129-1133.	6.0	340
16	Enabling Flexible All-Perovskite Tandem Solar Cells. Joule, 2019, 3, 2193-2204.	11.7	331
17	Targeted Ligand-Exchange Chemistry on Cesium Lead Halide Perovskite Quantum Dots for High-Efficiency Photovoltaics. Journal of the American Chemical Society, 2018, 140, 10504-10513.	6.6	303
18	Enhanced Efficiency in Plastic Solar Cells via Energy Matched Solution Processed NiO_x Interlayers. Advanced Energy Materials, 2011, 1, 813-820.	10.2	299

#	ARTICLE	IF	CITATIONS
19	Overcoming Redox Reactions at Perovskite-Nickel Oxide Interfaces to Boost Voltages in Perovskite Solar Cells. Joule, 2020, 4, 1759-1775.	11.7	284
20	On-device lead sequestration for perovskite solar cells. Nature, 2020, 578, 555-558.	13.7	284
21	Solution deposited NiO thin-films as hole transport layers in organic photovoltaics. Organic Electronics, 2010, 11, 1414-1418.	1.4	282
22	Spin-dependent charge transport through 2D chiral hybrid lead-iodide perovskites. Science Advances, 2019, 5, eaay0571.	4.7	275
23	Suppressing defects through the synergistic effect of a Lewis base and a Lewis acid for highly efficient and stable perovskite solar cells. Energy and Environmental Science, 2018, 11, 3480-3490.	15.6	274
24	Enhanced Charge Transport in 2D Perovskites via Fluorination of Organic Cation. Journal of the American Chemical Society, 2019, 141, 5972-5979.	6.6	274
25	The 2020 photovoltaic technologies roadmap. Journal Physics D: Applied Physics, 2020, 53, 493001.	1.3	274
26	From Defects to Degradation: A Mechanistic Understanding of Degradation in Perovskite Solar Cell Devices and Modules. Advanced Energy Materials, 2020, 10, 1904054.	10.2	256
27	Influence of Electrode Interfaces on the Stability of Perovskite Solar Cells: Reduced Degradation Using MoO_{<i>x</i>}/Al for Hole Collection. ACS Energy Letters, 2016, 1, 38-45.	8.8	237
28	Design of low bandgap tinâ€“lead halide perovskite solar cells to achieve thermal, atmospheric and operational stability. Nature Energy, 2019, 4, 939-947.	19.8	235
29	Enhancing electron diffusion length in narrow-bandgap perovskites for efficient monolithic perovskite tandem solar cells. Nature Communications, 2019, 10, 4498.	5.8	234
30	Bimolecular Additives Improve Wide-Band-Gap Perovskites for Efficient Tandem Solar Cells with CIGS. Joule, 2019, 3, 1734-1745.	11.7	227
31	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. Science, 2022, 375, 71-76.	6.0	216
32	General mobility and carrier concentration relationship in transparent amorphous indium zinc oxide films. Physical Review B, 2008, 77, .	1.1	208
33	Carrier separation and transport in perovskite solar cells studied by nanometre-scale profiling of electrical potential. Nature Communications, 2015, 6, 8397.	5.8	205
34	Roll-to-Roll Printing of Perovskite Solar Cells. ACS Energy Letters, 2018, 3, 2558-2565.	8.8	199
35	Highly Distorted Chiral Two-Dimensional Tin Iodide Perovskites for Spin Polarized Charge Transport. Journal of the American Chemical Society, 2020, 142, 13030-13040.	6.6	198
36	Structural and chemical evolution of methylammonium lead halide perovskites during thermal processing from solution. Energy and Environmental Science, 2016, 9, 2072-2082.	15.6	188

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37	Perovskite Quantum Dot Photovoltaic Materials beyond the Reach of Thin Films: Full-Range Tuning of A-Site Cation Composition. ACS Nano, 2018, 12, 10327-10337.	7.3	186
38	Direct Spectroscopic Characterization of a Transitory Dirhodium Donor-Acceptor Carbene Complex. Science, 2013, 342, 351-354.	6.0	165
39	Scalable slot-die coating of high performance perovskite solar cells. Sustainable Energy and Fuels, 2018, 2, 2442-2449.	2.5	155
40	Mechanisms of Electron-Beam-Induced Damage in Perovskite Thin Films Revealed by Cathodoluminescence Spectroscopy. Journal of Physical Chemistry C, 2015, 119, 26904-26911.	1.5	153
41	Strontium Insertion in Methylammonium Lead Iodide: Long Charge Carrier Lifetime and High Fillâ€Factor Solar Cells. Advanced Materials, 2016, 28, 9839-9845.	11.1	150
42	Low-temperature, solution-processed molybdenum oxide hole-collection layer for organic photovoltaics. Journal of Materials Chemistry, 2012, 22, 3249.	6.7	147
43	Highly Efficient Perovskite Solar Modules by Scalable Fabrication and Interconnection Optimization. ACS Energy Letters, 2018, 3, 322-328.	8.8	143
44	Efficient charge extraction and slow recombination in organicâ€"inorganic perovskites capped with semiconducting single-walled carbon nanotubes. Energy and Environmental Science, 2016, 9, 1439-1449.	15.6	126
45	Impact of Layer Thickness on the Charge Carrier and Spin Coherence Lifetime in Two-Dimensional Layered Perovskite Single Crystals. ACS Energy Letters, 2018, 3, 2273-2279.	8.8	126
46	Insights into operational stability and processing of halide perovskite active layers. Energy and Environmental Science, 2019, 12, 1341-1348.	15.6	125
47	Acid Additives Enhancing the Conductivity of Spiroâ€OMeTAD Toward Highâ€Efficiency and Hysteresisâ€Less Planar Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1601451.	10.2	123
48	Investigating the Influence of Interfacial Contact Properties on Open Circuit Voltages in Organic Photovoltaic Performance: Work Function Versus Selectivity. Advanced Energy Materials, 2013, 3, 647-656.	10.2	122
49	Carrier control in Snâ€"Pb perovskites via 2D cation engineering for all-perovskite tandem solar cells with improved efficiency and stability. Nature Energy, 2022, 7, 642-651.	19.8	121
50	300% Enhancement of Carrier Mobility in Uniaxialâ€Oriented Perovskite Films Formed by Topotacticâ€Oriented Attachment. Advanced Materials, 2017, 29, 1606831.	11.1	120
51	Self-Seeding Growth for Perovskite Solar Cells with Enhanced Stability. Joule, 2019, 3, 1452-1463.	11.7	120
52	Assessing health and environmental impacts of solvents for producing perovskite solar cells. Nature Sustainability, 2021, 4, 277-285.	11.5	117
53	The role of three-center/four-electron bonds in superelectrophilic dirhodium carbene and nitrene catalytic intermediates. Dalton Transactions, 2012, 41, 700-713.	1.6	116
54	Perovskite-Inspired Photovoltaic Materials: Toward Best Practices in Materials Characterization and Calculations. Chemistry of Materials, 2017, 29, 1964-1988.	3.2	116

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55	Stability in Perovskite Photovoltaics: A Paradigm for Newfangled Technologies. ACS Energy Letters, 2018, 3, 2136-2143.	8.8	113
56	Control of the Electrical Properties in Spinel Oxides by Manipulating the Cation Disorder. Advanced Functional Materials, 2014, 24, 610-618.	7.8	109
57	Stability of inverted organic solar cells with ZnO contact layers deposited from precursor solutions. Energy and Environmental Science, 2015, 8, 592-601.	15.6	103
58	Improving Charge Transport via Intermediateâ€Controlled Crystal Growth in 2D Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1901652.	7.8	103
59	Ultrasonically sprayed and inkjet printed thin film electrodes for organic solar cells. Thin Solid Films, 2009, 517, 2781-2786.	0.8	99
60	Large polarization-dependent exciton optical Stark effect in lead iodide perovskites. Nature Communications, 2016, 7, 12613.	5.8	98
61	Rh₂(II,III) Catalysts with Chelating Carboxylate and Carboxamidate Supports: Electronic Structure and Nitrene Transfer Reactivity. Journal of the American Chemical Society, 2016, 138, 2327-2341.	6.6	95
62	Strategies to Achieve High Circularly Polarized Luminescence from Colloidal Organicâ€"Inorganic Hybrid Perovskite Nanocrystals. ACS Nano, 2020, 14, 8816-8825.	7.3	94
63	Degradation of Highly Alloyed Metal Halide Perovskite Precursor Inks: Mechanism and Storage Solutions. ACS Energy Letters, 2018, 3, 979-985.	8.8	84
64	Charge Transfer Dynamics between Carbon Nanotubes and Hybrid Organic Metal Halide Perovskite Films. Journal of Physical Chemistry Letters, 2016, 7, 418-425.	2.1	83
65	Efficient and Stable Graded CsPbI3âˆ'xBrx Perovskite Solar Cells and Submodules by Orthogonal Processable Spray Coating. Joule, 2021, 5, 481-494.	11.7	81
66	In situ investigation of the formation and metastability of formamidinium lead tri-iodide perovskite solar cells. Energy and Environmental Science, 2016, 9, 2372-2382.	15.6	79
67	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wideâ€Bandgap Perovskite Solar Cells Beyond 21%. Solar Rrl, 2020, 4, 2000082.	3.1	79
68	Improving Low-Bandgap Tinâ€"Lead Perovskite Solar Cells via Contact Engineering and Gas Quench Processing. ACS Energy Letters, 2020, 5, 1215-1223.	8.8	78
69	Reactions at noble metal contacts with methylammonium lead triiodide perovskites: Role of underpotential deposition and electrochemistry. APL Materials, 2019, 7, .	2.2	74
70	Probing Perovskite Inhomogeneity beyond the Surface: TOF-SIMS Analysis of Halide Perovskite Photovoltaic Devices. ACS Applied Materials & Interfaces, 2018, 10, 28541-28552.	4.0	72
71	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Twoâ€Dimensional Perovskite Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 11737-11741.	7.2	67
72	Thermally Stable Perovskite Solar Cells by Systematic Molecular Design of the Hole-Transport Layer. ACS Energy Letters, 2019, 4, 473-482.	8.8	66

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73	The Role of Dimethylammonium in Bandgap Modulation for Stable Halide Perovskites. ACS Energy Letters, 2020, 5, 1856-1864.	8.8	65
74	Perovskite Photovoltaics: The Path to a Printable Terawatt-Scale Technology. ACS Energy Letters, 2017, 2, 2540-2544.	8.8	64
75	Gradient Doping in Snâ€"Pb Perovskites by Barium Ions for Efficient Singleâ€Junction and Tandem Solar Cells. Advanced Materials, 2022, 34, e2110351.	11.1	62
76	Defect Engineering in Ï€-Conjugated Polymers. Chemistry of Materials, 2009, 21, 4914-4919.	3.2	59
77	Integer Charge Transfer and Hybridization at an Organic Semiconductor/Conductive Oxide Interface. Journal of Physical Chemistry C, 2015, 119, 4865-4873.	1.5	59
78	Amine additive reactions induced by the soft Lewis acidity of Pb²⁺ in halide perovskites. Part I: evidence for Pbâ€"alkylamide formation. Journal of Materials Chemistry C, 2019, 7, 5251-5259.	2.7	56
79	Efficient Modification of Metal Oxide Surfaces with Phosphonic Acids by Spray Coating. Langmuir, 2013, 29, 3935-3942.	1.6	55
80	Surface-Activated Corrosion in Tinâ€"Lead Halide Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 3344-3351.	8.8	55
81	Tailoring Electronâ€Transfer Barriers for Zinc Oxide/C₆₀ Fullerene Interfaces. Advanced Functional Materials, 2014, 24, 7381-7389.	7.8	54
82	Monitoring a Silent Phase Transition in CH₃NH₃PbI₃ Solar Cells via <i>Operando</i> X-ray Diffraction. ACS Energy Letters, 2016, 1, 1007-1012.	8.8	52
83	Investigating the Effects of Chemical Gradients on Performance and Reliability within Perovskite Solar Cells with TOFâ€SIMS. Advanced Energy Materials, 2020, 10, 1903674.	10.2	52
84	High-performance methylammonium-free ideal-band-gap perovskite solar cells. Matter, 2021, 4, 1365-1376.	5.0	51
85	Enhanced Electron Mobility Due to Dopantâ€Defect Pairing in Conductive ZnMgO. Advanced Functional Materials, 2014, 24, 2875-2882.	7.8	49
86	The Molybdenum Oxide Interface Limits the High-Temperature Operational Stability of Unencapsulated Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2349-2360.	8.8	49
87	3D/2D passivation as a secret to success for polycrystalline thin-film solar cells. Joule, 2021, 5, 1057-1073.	11.7	48
88	Oriented Growth of Al₂O₃:ZnO Nanolaminates for Use as Electronâ€Selective Electrodes in Inverted Polymer Solar Cells. Advanced Functional Materials, 2012, 22, 1531-1538.	7.8	47
89	Methylammonium lead iodide grain boundaries exhibit depth-dependent electrical properties. Energy and Environmental Science, 2016, 9, 3642-3649.	15.6	47
90	Enhanced Nucleation of Atomic Layer Deposited Contacts Improves Operational Stability of Perovskite Solar Cells in Air. Advanced Energy Materials, 2019, 9, 1902353.	10.2	47

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91	Surface engineering with oxidized Ti3C2Tx MXene enables efficient and stable p-i-n-structured CsPbI3 perovskite solar cells. Joule, 2022, 6, 1672-1688.	11.7	45
92	Mitigating Measurement Artifacts in TOF-SIMS Analysis of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 30911-30918.	4.0	44
93	Low Threshold Voltages Electrochemically Drive Gold Migration in Halide Perovskite Devices. ACS Energy Letters, 2020, 5, 3352-3356.	8.8	43
94	Learning from existing photovoltaic technologies to identify alternative perovskite module designs. Energy and Environmental Science, 2020, 13, 3393-3403.	15.6	43
95	The Structural Origin of Chiroptical Properties in Perovskite Nanocrystals with Chiral Organic Ligands. Advanced Functional Materials, 2022, 32, .	7.8	43
96	Sputtered nickel oxide thin film for efficient hole transport layer in polymerâ€“fullerene bulk-heterojunction organic solar cell. Thin Solid Films, 2012, 520, 3813-3818.	0.8	40
97	Choose Your Own Adventure: Fabrication of Monolithic Allâ€Perovskite Tandem Photovoltaics. Advanced Materials, 2020, 32, e2003312.	11.1	39
98	Spontaneous N2 formation by a diruthenium complex enables electrocatalytic and aerobic oxidation of ammonia. Nature Chemistry, 2021, 13, 1221-1227.	6.6	39
99	Highlyâ€Tunable Nickel Cobalt Oxide as a Lowâ€Temperature Pâ€Type Contact in Organic Photovoltaic Devices. Advanced Energy Materials, 2013, 3, 524-531.	10.2	38
100	Comment on â€œLight-induced lattice expansion leads to high-efficiency perovskite solar cellsâ€• Science, 2020, 368, .	6.0	38
101	A Multi-Dimensional Perspective on Electronic Doping in Metal Halide Perovskites. ACS Energy Letters, 2021, 6, 1104-1123.	8.8	38
102	Surface lattice engineering through three-dimensional lead iodide perovskitoid for high-performance perovskite solar cells. CheM, 2021, 7, 774-785.	5.8	37
103	Atomically Resolved Electrically Active Intragrain Interfaces in Perovskite Semiconductors. Journal of the American Chemical Society, 2022, 144, 1910-1920.	6.6	37
104	Surface Treatment of NiO Hole Transport Layers for Organic Solar Cells. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1649-1655.	1.9	34
105	PM-IRRAS Determination of Molecular Orientation of Phosphonic Acid Self-Assembled Monolayers on Indium Zinc Oxide. Langmuir, 2015, 31, 5603-5613.	1.6	33
106	Curtailing Perovskite Processing Limitations via Lamination at the Perovskite/Perovskite Interface. ACS Energy Letters, 2018, 3, 1192-1197.	8.8	33
107	Reducing Surface Recombination Velocity of Methylammonium-Free Mixed-Cation Mixed-Halide Perovskites via Surface Passivation. Chemistry of Materials, 2021, 33, 5035-5044.	3.2	33
108	Modification of the Galliumâ€Doped Zinc Oxide Surface with Selfâ€Assembled Monolayers of Phosphonic Acids: A Joint Theoretical and Experimental Study. Advanced Functional Materials, 2014, 24, 3593-3603.	7.8	31

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109	Stability at Scale: Challenges of Module Interconnects for Perovskite Photovoltaics. ACS Energy Letters, 2018, 3, 2502-2503.	8.8	31
110	Designing Modules to Prevent Reverse Bias Degradation in Perovskite Solar Cells when Partial Shading Occurs. Solar Rrl, 2022, 6, 2100239.	3.1	31
111	Amine additive reactions induced by the soft Lewis acidity of Pb²⁺ in halide perovskites. Part II: impacts of amido Pb impurities in methylammonium lead triiodide thin films. Journal of Materials Chemistry C, 2019, 7, 5244-5250.	2.7	30
112	A Synthetic Oxygen Atom Transfer Photocycle from a Diruthenium Oxyanion Complex. Journal of the American Chemical Society, 2016, 138, 10032-10040.	6.6	29
113	Impact of Hole Transport Layer Surface Properties on the Morphology of a Polymerâ€Fullerene Bulk Heterojunction. Advanced Energy Materials, 2014, 4, 1301879.	10.2	28
114	Effect of Water Vapor, Temperature, and Rapid Annealing on Formamidinium Lead Triiodide Perovskite Crystallization. ACS Energy Letters, 2016, 1, 155-161.	8.8	27
115	Tandem Mass Spectrometry in Combination with Product Ion Mobility for the Identification of Phospholipids. Analytical Chemistry, 2017, 89, 916-921.	3.2	26
116	Electronic and Morphological Inhomogeneities in Pristine and Deteriorated Perovskite Photovoltaic Films. Nano Letters, 2017, 17, 1796-1801.	4.5	25
117	Iodine Electrochemistry Dictates Voltageâ€Induced Halide Segregation Thresholds in Mixedâ€Halide Perovskite Devices. Advanced Functional Materials, 2022, 32, .	7.8	25
118	Mixing Matters: Nanoscale Heterogeneity and Stability in Metal Halide Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 471-480.	8.8	23
119	A Synthetic Cycle for Nitrogen Atom Transfer Featuring a Diruthenium Nitride Intermediate. European Journal of Inorganic Chemistry, 2013, 2013, 3808-3811.	1.0	22
120	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Twoâ€Dimensional Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 11863-11867.	1.6	22
121	Improving Photostability of Cesium-Doped Formamidinium Lead Triiodide Perovskite. ACS Energy Letters, 2021, 6, 574-580.	8.8	22
122	Fabrication, electrical and optical properties of silver, indium tin oxide (<scp>ITO</scp>), and indium zinc oxide (<scp>IZO</scp>) nanostructure arrays. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 831-838.	0.8	20
123	Highly efficient blue organic light emitting device using indium-free transparent anode Ga:ZnO with scalability for large area coating. Journal of Applied Physics, 2010, 107, 043103.	1.1	19
124	Electronic Structure of Ru₂(II,II) Oxypyridinates: Synthetic, Structural, and Theoretical Insights into Axial Ligand Binding. Inorganic Chemistry, 2015, 54, 8571-8589.	1.9	17
125	Complementary interface formation toward high-efficiency all-back-contact perovskite solar cells. Cell Reports Physical Science, 2021, 2, 100363.	2.8	17
126	Disrupted Attosecond Charge Carrier Delocalization at a Hybrid Organic/Inorganic Semiconductor Interface. Journal of Physical Chemistry Letters, 2015, 6, 1935-1941.	2.1	16

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127	SMART Perovskite Growth: Enabling a Larger Range of Process Conditions. ACS Energy Letters, 2021, 6, 650-658.	8.8	14
128	Control of charge separation by electric field manipulation in polymerâ€oxide hybrid organic photovoltaic bilayer devices. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1257-1265.	0.8	13
129	Radio-frequency superimposed direct current magnetron sputtered Ga:ZnO transparent conducting thin films. Journal of Applied Physics, 2012, 111, .	1.1	13
130	Hybridizationâ€Induced Carrier Localization at the C₆₀/ZnO Interface. Advanced Materials, 2016, 28, 3960-3965.	11.1	13
131	The Role of Nanoscale Seed Layers on the Enhanced Performance of Niobium doped TiO2 Thin Films on Glass. Scientific Reports, 2016, 6, 32830.	1.6	12
132	Carrier gradients and the role of charge selective contacts in lateral heterojunction all back contact perovskite solar cells. Cell Reports Physical Science, 2021, 2, 100520.	2.8	12
133	The Complicated Morality of Named Inventions. ACS Energy Letters, 2021, 6, 565-567.	8.8	9
134	Formation of the Nâ‰¡N Triple Bond from Reductive Coupling of a Paramagnetic Diruthenium Nitrido Compound. Journal of the American Chemical Society, 2022, 144, 3259-3268.	6.6	9
135	Anilinopyridinate-supported Ru₂^{x+} (x = 5 or 6) paddlewheel complexes with labile axial ligands. Dalton Transactions, 2017, 46, 5532-5539.	1.6	8
136	In situ investigation of halide incorporation into perovskite solar cells. MRS Communications, 2017, 7, 575-582.	0.8	7
137	Metal Halide Perovskites Demonstrate Radiation Hardness and Defect Healing in Vacuum. ACS Applied Materials & Interfaces, 2022, 14, 9352-9362.	4.0	7
138	Enhanced lifetime in unencapsulated organic photovoltaics with air stable electrodes. , 2010, , .		6
139	Conduction and rectification in NbOx- and NiO-based metal-insulator-metal diodes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	0.9	5
140	Electrochemical Screening of Contact Layers for Metal Halide Perovskites. ACS Energy Letters, 2022, 7, 683-689.	8.8	5
141	A novel way to characterize Metal-Insulator-Metal devices via nanoindentation. , 2011, , .		4
142	Electromechanical tuning of nanoscale MIM diodes by nanoindentation. Journal of Materials Research, 2013, 28, 1912-1919.	1.2	4
143	The Promise of Perovskite Solar Cells. , 2022, , 388-404.		3
144	Nanoscale Photoexcited Carrier Dynamics in Perovskites. Journal of Physical Chemistry Letters, 2022, 13, 2388-2395.	2.1	3

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145	Solution deposition of amorphous IZO films by ultrasonic spray pyrolysis. , 2009, , .		2
146	Optimization of organic photovoltaic devices using tuned mixed metal oxide contact layers. , 2010, , .		2
147	Novel transparent conducting barriers for photovoltaics. , 2010, , .		2
148	Overcoming degradation in organic photovoltaics: Illuminating the role of fullerene functionalization. , 2011, , .		2
149	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wideâ€Bandgap Perovskite Solar Cells Beyond 21%. Solar Rrl, 2020, 4, 2070065.	3.1	2
150	Getting their days in the sun. Nature Energy, 2021, 6, 15-16.	19.8	2
151	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. Science, 2021, , eabj2637.	6.0	2
152	On the equilibrium electrostatic potential and lightâ€induced charge redistribution in halide perovskite structures. Progress in Photovoltaics: Research and Applications, 2022, 30, 994-1002.	4.4	2
153	Nanoscale engineering of solution-processed CdTe solar cells using nanocrystalline precursors. , 2014, , .		1
154	Transparent conducting contacts based on zinc oxide substitutionally doped with gallium. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	0
155	Optimization of conductivity and transparency in amorphous In-ZN-O transparent conductors. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	0
156	Superimposed RF/DC magnetron sputtering of transparent Ga:ZnO with high conductivity for photovoltaic contacts applications. , 2010, , .		0
157	Using amorphous zinc-tin oxide alloys in the emitter structure of CIGS PV devices. , 2012, , .		0
158	Operando X-Ray Diffraction for Characterization of Photovoltaic Materials. , 2017, , .		0
159	Stability of Tin-Lead Halide Perovskite Solar Cells. , 2019, , .		0
160	Digital alloy contact layers for perovskite solar cells. Synthetic Metals, 2020, 266, 116412.	2.1	0
161	A Dimethylammonium-Induced Intermediate Phase Approach Towards Stable Formamidinium-Caesium-based Perovskite Solar Cells. , 0, , .		0
162	Making metal halide perovskite photovoltaics a reality: an update on state-of-the-art.. , 0, , .		0

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163	Substrate-Controlled Electronic Properties of Perovskite Layer in Lateral Heterojunction Configuration. , 2021, , .		0
164	Energy Spotlight. ACS Energy Letters, 2021, 6, 2359-2361.	8.8	0
165	Structural Stability of Tin-Lead Halide Perovskite Solar Cells. , 2020, , .		0
166	Halide Organic Photovoltaics for Energy: Hybrid Perovskites for Solar Cells. , 2022, , 1-59.		0