Joseph Berry

List of Publications by Year
in descending order

166 papers	20,679 citations	12330 69 h-index	9861 141 g-index
167 all docs	167 docs citations	167 times ranked	16554 citing authors

#	Article	IF	Citations
1	Designing Modules to Prevent Reverse Bias Degradation in Perovskite Solar Cells when Partial Shading Occurs. Solar Rrl, 2022, 6, 2100239.	5.8	31
2	The Promise of Perovskite Solar Cells. , 2022, , 388-404.		3
3	Electrochemical Screening of Contact Layers for Metal Halide Perovskites. ACS Energy Letters, 2022, 7, 683-689.	17.4	5
4	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. Science, 2022, 375, 71-76.	12.6	216
5	Atomically Resolved Electrically Active Intragrain Interfaces in Perovskite Semiconductors. Journal of the American Chemical Society, 2022, 144, 1910-1920.	13.7	37
6	Metal Halide Perovskites Demonstrate Radiation Hardness and Defect Healing in Vacuum. ACS Applied Materials & Interfaces, 2022, 14, 9352-9362.	8.0	7
7	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.	13.7	9
8	Halide Organic Photovoltaics for Energy: Hybrid Perovskites for Solar Cells. , 2022, , 1-59.		0
9	Gradient Doping in Snâ€“Pb Perovskites by Barium Ions for Efficient Singleâ€Junction and Tandem Solar Cells. Advanced Materials, 2022, 34, e2110351.	21.0	62
10	Nanoscale Photoexcited Carrier Dynamics in Perovskites. Journal of Physical Chemistry Letters, 2022, 13, 2388-2395.	4.6	3
11	The Structural Origin of Chiroptical Properties in Perovskite Nanocrystals with Chiral Organic Ligands. Advanced Functional Materials, 2022, 32, .	14.9	43
12	Mixing Matters: Nanoscale Heterogeneity and Stability in Metal Halide Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 471-480.	17.4	23
13	On the equilibrium electrostatic potential and lightâ€induced charge redistribution in halide perovskite structures. Progress in Photovoltaics: Research and Applications, 2022, 30, 994-1002.	8.1	2
14	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.	39.5	121
15	Surface engineering with oxidized Ti3C2Tx MXene enables efficient and stable p-i-n-structured CsPbI3 perovskite solar cells. Joule, 2022, 6, 1672-1688.	24.0	45
16	Iodine Electrochemistry Dictates Voltageâ€Induced Halide Segregation Thresholds in Mixedâ€Halide Perovskite Devices. Advanced Functional Materials, 2022, 32, .	14.9	25
17	Assessing health and environmental impacts of solvents for producing perovskite solar cells. Nature Sustainability, 2021, 4, 277-285.	23.7	117
18	Efficient and Stable Graded CsPbI3â^'xBrx Perovskite Solar Cells and Submodules by Orthogonal Processable Spray Coating. Joule, 2021, 5, 481-494.	24.0	81

#	Article	IF	Citations
19	SMART Perovskite Growth: Enabling a Larger Range of Process Conditions. ACS Energy Letters, 2021, 6, 650-658.	17.4	14
20	The Complicated Morality of Named Inventions. ACS Energy Letters, 2021, 6, 565-567.	17.4	9
21	Improving Photostability of Cesium-Doped Formamidinium Lead Triiodide Perovskite. ACS Energy Letters, 2021, 6, 574-580.	17.4	22
22	Complementary interface formation toward high-efficiency all-back-contact perovskite solar cells. Cell Reports Physical Science, 2021, 2, 100363.	5.6	17
23	A Multi-Dimensional Perspective on Electronic Doping in Metal Halide Perovskites. ACS Energy Letters, 2021, 6, 1104-1123.	17.4	38
24	Chiral-induced spin selectivity enables a room-temperature spin light-emitting diode. Science, 2021, 371, 1129-1133.	12.6	340
25	Surface lattice engineering through three-dimensional lead iodide perovskitoid for high-performance perovskite solar cells. CheM, 2021, 7, 774-785.	11.7	37
26	High-performance methylammonium-free ideal-band-gap perovskite solar cells. Matter, 2021, 4, 1365-1376.	10.0	51
27	3D/2D passivation as a secret to success for polycrystalline thin-film solar cells. Joule, 2021, 5, 1057-1073.	24.0	48
28	Substrate-Controlled Electronic Properties of Perovskite Layer in Lateral Heterojunction Configuration. , 2021, , .		0
29	Reducing Surface Recombination Velocity of Methylammonium-Free Mixed-Cation Mixed-Halide Perovskites via Surface Passivation. Chemistry of Materials, 2021, 33, 5035-5044.	6.7	33
30	Energy Spotlight. ACS Energy Letters, 2021, 6, 2359-2361.	17.4	0
31	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.	5.6	12
32	Getting their days in the sun. Nature Energy, 2021, 6, 15-16.	39.5	2
33	Spontaneous N2 formation by a diruthenium complex enables electrocatalytic and aerobic oxidation of ammonia. Nature Chemistry, 2021, 13, 1221-1227.	13.6	39
34	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. Science, 2021, , eabj2637.	12.6	2
35	Low Threshold Voltages Electrochemically Drive Gold Migration in Halide Perovskite Devices. ACS Energy Letters, 2020, 5, 3352-3356.	17.4	43
36	Learning from existing photovoltaic technologies to identify alternative perovskite module designs. Energy and Environmental Science, 2020, 13, 3393-3403.	30.8	43

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37	Choose Your Own Adventure: Fabrication of Monolithic Allâ€Perovskite Tandem Photovoltaics. Advanced Materials, 2020, 32, e2003312.	21.0	39
38	The Role of Dimethylammonium in Bandgap Modulation for Stable Halide Perovskites. ACS Energy Letters, 2020, 5, 1856-1864.	17.4	65
39	The 2020 photovoltaic technologies roadmap. Journal Physics D: Applied Physics, 2020, 53, 493001.	2.8	274
40	The Molybdenum Oxide Interface Limits the High-Temperature Operational Stability of Unencapsulated Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2349-2360.	17.4	49
41	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wideâ€Bandgap Perovskite Solar Cells Beyond 21%. Solar Rrl, 2020, 4, 2070065.	5.8	2
42	Improving Low-Bandgap Tinâ€"Lead Perovskite Solar Cells via Contact Engineering and Gas Quench Processing. ACS Energy Letters, 2020, 5, 1215-1223.	17.4	78
43	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wideâ€Bandgap Perovskite Solar Cells Beyond 21%. Solar Rrl, 2020, 4, 2000082.	5.8	79
44	Efficient, stable silicon tandem cells enabled by anion-engineered wide-bandgap perovskites. Science, 2020, 368, 155-160.	12.6	420
45	Triple-halide wideâ€"band gap perovskites with suppressed phase segregation for efficient tandems. Science, 2020, 367, 1097-1104.	12.6	669
46	Highly Distorted Chiral Two-Dimensional Tin Iodide Perovskites for Spin Polarized Charge Transport. Journal of the American Chemical Society, 2020, 142, 13030-13040.	13.7	198
47	Digital alloy contact layers for perovskite solar cells. Synthetic Metals, 2020, 266, 116412.	3.9	0
48	Overcoming Redox Reactions at Perovskite-Nickel Oxide Interfaces to Boost Voltages in Perovskite Solar Cells. Joule, 2020, 4, 1759-1775.	24.0	284
49	Strategies to Achieve High Circularly Polarized Luminescence from Colloidal Organicâ€"Inorganic Hybrid Perovskite Nanocrystals. ACS Nano, 2020, 14, 8816-8825.	14.6	94
50	Advances in two-dimensional organicâ€"inorganic hybrid perovskites. Energy and Environmental Science, 2020, 13, 1154-1186.	30.8	420
51	Investigating the Effects of Chemical Gradients on Performance and Reliability within Perovskite Solar Cells with TOFâ€SIMS. Advanced Energy Materials, 2020, 10, 1903674.	19.5	52
52	From Defects to Degradation: A Mechanistic Understanding of Degradation in Perovskite Solar Cell Devices and Modules. Advanced Energy Materials, 2020, 10, 1904054.	19.5	256
53	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. Nature Energy, 2020, 5, 35-49.	39.5	797
54	Comment on â€œLight-induced lattice expansion leads to high-efficiency perovskite solar cellsâ€. Science, 2020, 368, .	12.6	38

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55	Surface-Activated Corrosion in Tinâ€"Lead Halide Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 3344-3351.	17.4	55
56	On-device lead sequestration for perovskite solar cells. Nature, 2020, 578, 555-558.	27.8	284
57	Structural Stability of Tin-Lead Halide Perovskite Solar Cells. , 2020, , .		0
58	Mitigating Measurement Artifacts in TOF-SIMS Analysis of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 30911-30918.	8.0	44
59	Bimolecular Additives Improve Wide-Band-Gap Perovskites for Efficient Tandem Solar Cells with CIGS. Joule, 2019, 3, 1734-1745.	24.0	227
60	Enhanced Nucleation of Atomic Layer Deposited Contacts Improves Operational Stability of Perovskite Solar Cells in Air. Advanced Energy Materials, 2019, 9, 1902353.	19.5	47
61	Thermally Stable Perovskite Solar Cells by Systematic Molecular Design of the Hole-Transport Layer. ACS Energy Letters, 2019, 4, 473-482.	17.4	66
62	Enhancing electron diffusion length in narrow-bandgap perovskites for efficient monolithic perovskite tandem solar cells. Nature Communications, 2019, 10, 4498.	12.8	234
63	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.	5.5	56
64	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.	5.5	30
65	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Twoâ€Dimensional Perovskite Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 11737-11741.	13.8	67
66	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Twoâ€Dimensional Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 11863-11867.	2.0	22
67	Enabling Flexible All-Perovskite Tandem Solar Cells. Joule, 2019, 3, 2193-2204.	24.0	331
68	Carrier lifetimes of >1 Î¼s in Sn-Pb perovskites enable efficient all-perovskite tandem solar cells. Science, 2019, 364, 475-479.	12.6	781
69	Self-Seeding Growth for Perovskite Solar Cells with Enhanced Stability. Joule, 2019, 3, 1452-1463.	24.0	120
70	Reactions at noble metal contacts with methylammonium lead triiodide perovskites: Role of underpotential deposition and electrochemistry. APL Materials, 2019, 7, .	5.1	74
71	Enhanced Charge Transport in 2D Perovskites via Fluorination of Organic Cation. Journal of the American Chemical Society, 2019, 141, 5972-5979.	13.7	274
72	Insights into operational stability and processing of halide perovskite active layers. Energy and Environmental Science, 2019, 12, 1341-1348.	30.8	125

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73	Improving Charge Transport via Intermediateâ€Controlled Crystal Growth in 2D Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1901652.	14.9	103
74	Stability of Tin-Lead Halide Perovskite Solar Cells. , 2019, , .		0
75	Spin-dependent charge transport through 2D chiral hybrid lead-iodide perovskites. Science Advances, 2019, 5, eaay0571.	10.3	275
76	Design of low bandgap tinâ€"lead halide perovskite solar cells to achieve thermal, atmospheric and operational stability. Nature Energy, 2019, 4, 939-947.	39.5	235
77	Curtailing Perovskite Processing Limitations via Lamination at the Perovskite/Perovskite Interface. ACS Energy Letters, 2018, 3, 1192-1197.	17.4	33
78	Tailored interfaces of unencapsulated perovskite solar cells for >1,000 hour operational stability. Nature Energy, 2018, 3, 68-74.	39.5	722
79	Highly Efficient Perovskite Solar Modules by Scalable Fabrication and Interconnection Optimization. ACS Energy Letters, 2018, 3, 322-328.	17.4	143
80	Scalable fabrication of perovskite solar cells. Nature Reviews Materials, 2018, 3, .	48.7	764
81	Degradation of Highly Alloyed Metal Halide Perovskite Precursor Inks: Mechanism and Storage Solutions. ACS Energy Letters, 2018, 3, 979-985.	17.4	84
82	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.	30.8	274
83	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.	14.6	186
84	Roll-to-Roll Printing of Perovskite Solar Cells. ACS Energy Letters, 2018, 3, 2558-2565.	17.4	199
85	Stability at Scale: Challenges of Module Interconnects for Perovskite Photovoltaics. ACS Energy Letters, 2018, 3, 2502-2503.	17.4	31
86	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.	13.7	303
87	Stability in Perovskite Photovoltaics: A Paradigm for Newfangled Technologies. ACS Energy Letters, 2018, 3, 2136-2143.	17.4	113
88	Scalable slot-die coating of high performance perovskite solar cells. Sustainable Energy and Fuels, 2018, 2, 2442-2449.	4.9	155
89	Probing Perovskite Inhomogeneity beyond the Surface: TOF-SIMS Analysis of Halide Perovskite Photovoltaic Devices. ACS Applied Materials & Interfaces, 2018, 10, 28541-28552.	8.0	72
90	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.	17.4	126

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91	Perovskite-Inspired Photovoltaic Materials: Toward Best Practices in Materials Characterization and Calculations. Chemistry of Materials, 2017, 29, 1964-1988.	6.7	116
92	Electronic and Morphological Inhomogeneities in Pristine and Deteriorated Perovskite Photovoltaic Films. Nano Letters, 2017, 17, 1796-1801.	9.1	25
93	Extrinsic ion migration in perovskite solar cells. Energy and Environmental Science, 2017, 10, 1234-1242.	30.8	458
94	300% Enhancement of Carrier Mobility in Uniaxialâ€Oriented Perovskite Films Formed by Topotacticâ€Oriented Attachment. Advanced Materials, 2017, 29, 1606831.	21.0	120
95	Tandem Mass Spectrometry in Combination with Product Ion Mobility for the Identification of Phospholipids. Analytical Chemistry, 2017, 89, 916-921.	6.5	26
96	Perovskite ink with wide processing window for scalable high-efficiency solar cells. Nature Energy, 2017, 2, .	39.5	499
97	Anilinopyridinate-supported Ru₂^{x+} (x = 5 or 6) paddlewheel complexes with labile axial ligands. Dalton Transactions, 2017, 46, 5532-5539.	3.3	8
98	Perovskite Photovoltaics: The Path to a Printable Terawatt-Scale Technology. ACS Energy Letters, 2017, 2, 2540-2544.	17.4	64
99	In situ investigation of halide incorporation into perovskite solar cells. MRS Communications, 2017, 7, 575-582.	1.8	7
100	Acid Additives Enhancing the Conductivity of Spiroâ€OMeTAD Toward Highâ€Efficiency and Hysteresisâ€Less Planar Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1601451.	19.5	123
101	Operando X-Ray Diffraction for Characterization of Photovoltaic Materials. , 2017, , .		0
102	Hybridizationâ€Induced Carrier Localization at the C₆₀/ZnO Interface. Advanced Materials, 2016, 28, 3960-3965.	21.0	13
103	Defect Tolerance in Methylammonium Lead Triiodide Perovskite. ACS Energy Letters, 2016, 1, 360-366.	17.4	500
104	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, .	2.1	5
105	In situ investigation of the formation and metastability of formamidinium lead tri-iodide perovskite solar cells. Energy and Environmental Science, 2016, 9, 2372-2382.	30.8	79
106	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.	17.4	237
107	Structural and chemical evolution of methylammonium lead halide perovskites during thermal processing from solution. Energy and Environmental Science, 2016, 9, 2072-2082.	30.8	188
108	Effect of Water Vapor, Temperature, and Rapid Annealing on Formamidinium Lead Triiodide Perovskite Crystallization. ACS Energy Letters, 2016, 1, 155-161.	17.4	27

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109	Methylammonium lead iodide grain boundaries exhibit depth-dependent electrical properties. Energy and Environmental Science, 2016, 9, 3642-3649.	30.8	47
110	Large polarization-dependent exciton optical Stark effect in lead iodide perovskites. Nature Communications, 2016, 7, 12613.	12.8	98
111	Strontium Insertion in Methylammonium Lead Iodide: Long Charge Carrier Lifetime and High Fillâ€Factor Solar Cells. Advanced Materials, 2016, 28, 9839-9845.	21.0	150
112	A Synthetic Oxygen Atom Transfer Photocycle from a Diruthenium Oxyanion Complex. Journal of the American Chemical Society, 2016, 138, 10032-10040.	13.7	29
113	Monitoring a Silent Phase Transition in CH₃NH₃PbI₃ Solar Cells via <i>Operando</i> X-ray Diffraction. ACS Energy Letters, 2016, 1, 1007-1012.	17.4	52
114	Facile fabrication of large-grain CH3NH3PbI3âˆ'xBrx films for high-efficiency solar cells via CH3NH3Br-selective Ostwald ripening. Nature Communications, 2016, 7, 12305.	12.8	444
115	The Role of Nanoscale Seed Layers on the Enhanced Performance of Niobium doped TiO2 Thin Films on Glass. Scientific Reports, 2016, 6, 32830.	3.3	12
116	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.	13.7	95
117	Charge Transfer Dynamics between Carbon Nanotubes and Hybrid Organic Metal Halide Perovskite Films. Journal of Physical Chemistry Letters, 2016, 7, 418-425.	4.6	83
118	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.	30.8	126
119	Stabilizing Perovskite Structures by Tuning Tolerance Factor: Formation of Formamidinium and Cesium Lead Iodide Solid-State Alloys. Chemistry of Materials, 2016, 28, 284-292.	6.7	1,606
120	Hybrid Organicâ€"Inorganic Perovskites (HOIPs): Opportunities and Challenges. Advanced Materials, 2015, 27, 5102-5112.	21.0	372
121	Integer Charge Transfer and Hybridization at an Organic Semiconductor/Conductive Oxide Interface. Journal of Physical Chemistry C, 2015, 119, 4865-4873.	3.1	59
122	PM-IRRAS Determination of Molecular Orientation of Phosphonic Acid Self-Assembled Monolayers on Indium Zinc Oxide. Langmuir, 2015, 31, 5603-5613.	3.5	33
123	Disrupted Attosecond Charge Carrier Delocalization at a Hybrid Organic/Inorganic Semiconductor Interface. Journal of Physical Chemistry Letters, 2015, 6, 1935-1941.	4.6	16
124	Carrier separation and transport in perovskite solar cells studied by nanometre-scale profiling of electrical potential. Nature Communications, 2015, 6, 8397.	12.8	205
125	Mechanisms of Electron-Beam-Induced Damage in Perovskite Thin Films Revealed by Cathodoluminescence Spectroscopy. Journal of Physical Chemistry C, 2015, 119, 26904-26911.	3.1	153
126	Electronic Structure of Ru₂(II,II) Oxypyridinates: Synthetic, Structural, and Theoretical Insights into Axial Ligand Binding. Inorganic Chemistry, 2015, 54, 8571-8589.	4.0	17

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127	Stability of inverted organic solar cells with ZnO contact layers deposited from precursor solutions. Energy and Environmental Science, 2015, 8, 592-601.	30.8	103
128	Impact of Hole Transport Layer Surface Properties on the Morphology of a Polymerâ€Fullerene Bulk Heterojunction. Advanced Energy Materials, 2014, 4, 1301879.	19.5	28
129	Control of the Electrical Properties in Spinel Oxides by Manipulating the Cation Disorder. Advanced Functional Materials, 2014, 24, 610-618.	14.9	109
130	Enhanced Electron Mobility Due to Dopantâ€Defect Pairing in Conductive ZnMgO. Advanced Functional Materials, 2014, 24, 2875-2882.	14.9	49
131	Nanoscale engineering of solution-processed CdTe solar cells using nanocrystalline precursors. , 2014, , .		1
132	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.	14.9	31
133	Tailoring Electronâ€Transfer Barriers for Zinc Oxide/C₆₀ Fullerene Interfaces. Advanced Functional Materials, 2014, 24, 7381-7389.	14.9	54
134	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.	1.8	20
135	Efficient Modification of Metal Oxide Surfaces with Phosphonic Acids by Spray Coating. Langmuir, 2013, 29, 3935-3942.	3.5	55
136	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.	19.5	122
137	Highlyâ€Tunable Nickel Cobalt Oxide as a Lowâ€Temperature Pâ€Type Contact in Organic Photovoltaic Devices. Advanced Energy Materials, 2013, 3, 524-531.	19.5	38
138	Direct Spectroscopic Characterization of a Transitory Dirhodium Donor-Acceptor Carbene Complex. Science, 2013, 342, 351-354.	12.6	165
139	A Synthetic Cycle for Nitrogen Atom Transfer Featuring a Diruthenium Nitride Intermediate. European Journal of Inorganic Chemistry, 2013, 2013, 3808-3811.	2.0	22
140	Electromechanical tuning of nanoscale MIM diodes by nanoindentation. Journal of Materials Research, 2013, 28, 1912-1919.	2.6	4
141	Using amorphous zinc-tin oxide alloys in the emitter structure of CIGS PV devices. , 2012, , .		0
142	Radio-frequency superimposed direct current magnetron sputtered Ga:ZnO transparent conducting thin films. Journal of Applied Physics, 2012, 111, .	2.5	13
143	Low-temperature, solution-processed molybdenum oxide hole-collection layer for organic photovoltaics. Journal of Materials Chemistry, 2012, 22, 3249.	6.7	147
144	The role of three-center/four-electron bonds in superelectrophilic dirhodium carbene and nitrene catalytic intermediates. Dalton Transactions, 2012, 41, 700-713.	3.3	116

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145	Oriented Growth of Al₂O₃:ZnO Nanolaminates for Use as Electronâ€Selective Electrodes in Inverted Polymer Solar Cells. Advanced Functional Materials, 2012, 22, 1531-1538.	14.9	47
146	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.	1.8	40
147	A novel way to characterize Metal-Insulator-Metal devices via nanoindentation. , 2011, , .		4
148	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.	6.7	343
149	Enhanced Efficiency in Plastic Solar Cells via Energy Matched Solution Processed NiO_x Interlayers. Advanced Energy Materials, 2011, 1, 813-820.	19.5	299
150	Overcoming degradation in organic photovoltaics: Illuminating the role of fullerene functionalization. , 2011, , .		2
151	Surface Treatment of NiO Hole Transport Layers for Organic Solar Cells. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1649-1655.	2.9	34
152	Solution deposited NiO thin-films as hole transport layers in organic photovoltaics. Organic Electronics, 2010, 11, 1414-1418.	2.6	282
153	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.	1.8	13
154	Superimposed RF/DC magnetron sputtering of transparent Ga:ZnO with high conductivity for photovoltaic contacts applications. , 2010, , .		0
155	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.	2.5	19
156	Optimization of organic photovoltaic devices using tuned mixed metal oxide contact layers. , 2010, , .		2
157	Novel transparent conducting barriers for photovoltaics. , 2010, , .		2
158	Enhanced lifetime in unencapsulated organic photovoltaics with air stable electrodes. , 2010, , .		6
159	Solution deposition of amorphous IZO films by ultrasonic spray pyrolysis. , 2009, , .		2
160	Ultrasonically sprayed and inkjet printed thin film electrodes for organic solar cells. Thin Solid Films, 2009, 517, 2781-2786.	1.8	99
161	Defect Engineering in Ï€-Conjugated Polymers. Chemistry of Materials, 2009, 21, 4914-4919.	6.7	59
162	Transparent conducting contacts based on zinc oxide substitutionally doped with gallium. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	0

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163	Optimization of conductivity and transparency in amorphous In-ZN-O transparent conductors. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	0
164	General mobility and carrier concentration relationship in transparent amorphous indium zinc oxide films. Physical Review B, 2008, 77, .	3.2	208
165	A Dimethylammonium-Induced Intermediate Phase Approach Towards Stable Formamidinium-Caesium-based Perovskite Solar Cells. , 0, , .		0
166	Making metal halide perovskite photovoltaics a reality: an update on state-of-the-art.. , 0, , .		0