Joseph Berry

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

13,828 60 116 146 h-index g-index papers citations 6.81 16,953 167 19.1 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
146	Electrochemical Screening of Contact Layers for Metal Halide Perovskites. <i>ACS Energy Letters</i> , 2022 , 7, 683-689	20.1	1
145	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. <i>Science</i> , 2022 , 375, 71-76	33.3	51
144	Atomically Resolved Electrically Active Intragrain Interfaces in Perovskite Semiconductors <i>Journal of the American Chemical Society</i> , 2022 ,	16.4	7
143	Halide Organic Photovoltaics for Energy: Hybrid Perovskites for Solar Cells 2022 , 1-59		
142	Gradient Doping in Sn-Pb Perovskites by Barium Ions for Efficient Single-junction and Tandem Solar Cells <i>Advanced Materials</i> , 2022 , e2110351	24	19
141	Nanoscale Photoexcited Carrier Dynamics in Perovskites <i>Journal of Physical Chemistry Letters</i> , 2022 , 2388-2395	6.4	0
140	Mixing Matters: Nanoscale Heterogeneity and Stability in Metal Halide Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2022 , 7, 471-480	20.1	6
139	Spontaneous N formation by a diruthenium complex enables electrocatalytic and aerobic oxidation of ammonia. <i>Nature Chemistry</i> , 2021 , 13, 1221-1227	17.6	5
138	A Multi-Dimensional Perspective on Electronic Doping in Metal Halide Perovskites. <i>ACS Energy Letters</i> , 2021 , 6, 1104-1123	20.1	13
137	Chiral-induced spin selectivity enables a room-temperature spin light-emitting diode. <i>Science</i> , 2021 , 371, 1129-1133	33.3	86
136	Surface lattice engineering through three-dimensional lead iodide perovskitoid for high-performance perovskite solar cells. <i>CheM</i> , 2021 , 7, 774-785	16.2	18
135	High-performance methylammonium-free ideal-band-gap perovskite solar cells. <i>Matter</i> , 2021 , 4, 1365-1	3:726 ₇	23
134	3D/2D passivation as a secret to success for polycrystalline thin-film solar cells. <i>Joule</i> , 2021 , 5, 1057-107	73 7.8	19
133	Reducing Surface Recombination Velocity of Methylammonium-Free Mixed-Cation Mixed-Halide Perovskites via Surface Passivation. <i>Chemistry of Materials</i> , 2021 , 33, 5035-5044	9.6	13
132	Assessing health and environmental impacts of solvents for producing perovskite solar cells. <i>Nature Sustainability</i> , 2021 , 4, 277-285	22.1	48
131	Efficient and Stable Graded CsPbI3\(\text{BF}\)Brx Perovskite Solar Cells and Submodules by Orthogonal Processable Spray Coating. <i>Joule</i> , 2021 , 5, 481-494	27.8	34
130	SMART Perovskite Growth: Enabling a Larger Range of Process Conditions. <i>ACS Energy Letters</i> , 2021 , 6, 650-658	20.1	4

129	The Complicated Morality of Named Inventions. ACS Energy Letters, 2021, 6, 565-567	20.1	4
128	Improving Photostability of Cesium-Doped Formamidinium Lead Triiodide Perovskite. <i>ACS Energy Letters</i> , 2021 , 6, 574-580	20.1	10
127	Complementary interface formation toward high-efficiency all-back-contact perovskite solar cells. <i>Cell Reports Physical Science</i> , 2021 , 2, 100363	6.1	10
126	Carrier gradients and the role of charge selective contacts in lateral heterojunction all back contact perovskite solar cells. <i>Cell Reports Physical Science</i> , 2021 , 2, 100520	6.1	1
125	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. <i>Science</i> , 2021 , eabj2637	33.3	2
124	Choose Your Own Adventure: Fabrication of Monolithic All-Perovskite Tandem Photovoltaics. <i>Advanced Materials</i> , 2020 , 32, e2003312	24	23
123	The Role of Dimethylammonium in Bandgap Modulation for Stable Halide Perovskites. <i>ACS Energy Letters</i> , 2020 , 5, 1856-1864	20.1	39
122	The 2020 photovoltaic technologies roadmap. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 493001	3	128
121	The Molybdenum Oxide Interface Limits the High-Temperature Operational Stability of Unencapsulated Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 2349-2360	20.1	31
120	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. <i>Solar Rrl</i> , 2020 , 4, 2070065	7.1	1
119	Improving Low-Bandgap Tinlead Perovskite Solar Cells via Contact Engineering and Gas Quench Processing. <i>ACS Energy Letters</i> , 2020 , 5, 1215-1223	20.1	43
118	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. <i>Solar Rrl</i> , 2020 , 4, 2000082	7.1	46
117	Efficient, stable silicon tandem cells enabled by anion-engineered wide-bandgap perovskites. <i>Science</i> , 2020 , 368, 155-160	33.3	240
116	Triple-halide wide-band gap perovskites with suppressed phase segregation for efficient tandems. <i>Science</i> , 2020 , 367, 1097-1104	33.3	366
115	Highly Distorted Chiral Two-Dimensional Tin Iodide Perovskites for Spin Polarized Charge Transport. <i>Journal of the American Chemical Society</i> , 2020 , 142, 13030-13040	16.4	79
114	Digital alloy contact layers for perovskite solar cells. <i>Synthetic Metals</i> , 2020 , 266, 116412	3.6	
113	Overcoming Redox Reactions at Perovskite-Nickel Oxide Interfaces to Boost Voltages in Perovskite Solar Cells. <i>Joule</i> , 2020 , 4, 1759-1775	27.8	121
112	Strategies to Achieve High Circularly Polarized Luminescence from Colloidal Organic-Inorganic Hybrid Perovskite Nanocrystals. <i>ACS Nano</i> , 2020 , 14, 8816-8825	16.7	33

111	Advances in two-dimensional organic[horganic hybrid perovskites. <i>Energy and Environmental Science</i> , 2020 , 13, 1154-1186	35.4	239
110	Investigating the Effects of Chemical Gradients on Performance and Reliability within Perovskite Solar Cells with TOF-SIMS. <i>Advanced Energy Materials</i> , 2020 , 10, 1903674	21.8	29
109	From Defects to Degradation: A Mechanistic Understanding of Degradation in Perovskite Solar Cell Devices and Modules. <i>Advanced Energy Materials</i> , 2020 , 10, 1904054	21.8	119
108	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. <i>Nature Energy</i> , 2020 , 5, 35-49	62.3	369
107	Surface-Activated Corrosion in Tinllead Halide Perovskite Solar Cells. ACS Energy Letters, 2020 , 5, 3344-	335.1	31
106	On-device lead sequestration for perovskite solar cells. <i>Nature</i> , 2020 , 578, 555-558	50.4	162
105	Low Threshold Voltages Electrochemically Drive Gold Migration in Halide Perovskite Devices. <i>ACS Energy Letters</i> , 2020 , 5, 3352-3356	20.1	15
104	Learning from existing photovoltaic technologies to identify alternative perovskite module designs. <i>Energy and Environmental Science</i> , 2020 , 13, 3393-3403	35.4	18
103	Comment on "Light-induced lattice expansion leads to high-efficiency perovskite solar cells". <i>Science</i> , 2020 , 368,	33.3	26
102	Thermally Stable Perovskite Solar Cells by Systematic Molecular Design of the Hole-Transport Layer. <i>ACS Energy Letters</i> , 2019 , 4, 473-482	20.1	48
101	Enhancing electron diffusion length in narrow-bandgap perovskites for efficient monolithic perovskite tandem solar cells. <i>Nature Communications</i> , 2019 , 10, 4498	17.4	138
100	Amine additive reactions induced by the soft Lewis acidity of Pb2+ in halide perovskites. Part I: evidence for Pbalkylamide formation. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 5251-5259	7.1	41
99	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. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 5244-5250	7.1	18
98	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Two-Dimensional Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 11737-11	746.4	48
97	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Two-Dimensional Perovskite Solar Cells. <i>Angewandte Chemie</i> , 2019 , 131, 11863-11867	3.6	16
96	Enabling Flexible All-Perovskite Tandem Solar Cells. <i>Joule</i> , 2019 , 3, 2193-2204	27.8	211
95	Carrier lifetimes of >1 🛭 in Sn-Pb perovskites enable efficient all-perovskite tandem solar cells. <i>Science</i> , 2019 , 364, 475-479	33.3	496
94	Self-Seeding Growth for Perovskite Solar Cells with Enhanced Stability. <i>Joule</i> , 2019 , 3, 1452-1463	27.8	83

(2018-2019)

93	Reactions at noble metal contacts with methylammonium lead triiodide perovskites: Role of underpotential deposition and electrochemistry. <i>APL Materials</i> , 2019 , 7, 041103	5.7	47
92	Enhanced Charge Transport in 2D Perovskites via Fluorination of Organic Cation. <i>Journal of the American Chemical Society</i> , 2019 , 141, 5972-5979	16.4	170
91	Insights into operational stability and processing of halide perovskite active layers. <i>Energy and Environmental Science</i> , 2019 , 12, 1341-1348	35.4	89
90	Improving Charge Transport via Intermediate-Controlled Crystal Growth in 2D Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2019 , 29, 1901652	15.6	64
89	Mitigating Measurement Artifacts in TOF-SIMS Analysis of Perovskite Solar Cells. <i>ACS Applied Materials & ACS Applied</i> 11, 30911-30918	9.5	29
88	Bimolecular Additives Improve Wide-Band-Gap Perovskites for Efficient Tandem Solar Cells with CIGS. <i>Joule</i> , 2019 , 3, 1734-1745	27.8	131
87	Enhanced Nucleation of Atomic Layer Deposited Contacts Improves Operational Stability of Perovskite Solar Cells in Air. <i>Advanced Energy Materials</i> , 2019 , 9, 1902353	21.8	28
86	Spin-dependent charge transport through 2D chiral hybrid lead-iodide perovskites. <i>Science Advances</i> , 2019 , 5, eaay0571	14.3	118
85	Design of low bandgap tinlead halide perovskite solar cells to achieve thermal, atmospheric and operational stability. <i>Nature Energy</i> , 2019 , 4, 939-947	62.3	152
84	Curtailing Perovskite Processing Limitations via Lamination at the Perovskite/Perovskite Interface. <i>ACS Energy Letters</i> , 2018 , 3, 1192-1197	20.1	17
83	Tailored interfaces of unencapsulated perovskite solar cells for >1,000 hour operational stability. <i>Nature Energy</i> , 2018 , 3, 68-74	62.3	588
82	Highly Efficient Perovskite Solar Modules by Scalable Fabrication and Interconnection Optimization. <i>ACS Energy Letters</i> , 2018 , 3, 322-328	20.1	111
81	Scalable fabrication of perovskite solar cells. <i>Nature Reviews Materials</i> , 2018 , 3,	73.3	532
80	Degradation of Highly Alloyed Metal Halide Perovskite Precursor Inks: Mechanism and Storage Solutions. <i>ACS Energy Letters</i> , 2018 , 3, 979-985	20.1	57
79	Targeted Ligand-Exchange Chemistry on Cesium Lead Halide Perovskite Quantum Dots for High-Efficiency Photovoltaics. <i>Journal of the American Chemical Society</i> , 2018 , 140, 10504-10513	16.4	208
78	Stability in Perovskite Photovoltaics: A Paradigm for Newfangled Technologies. <i>ACS Energy Letters</i> , 2018 , 3, 2136-2143	20.1	86
77	Scalable slot-die coating of high performance perovskite solar cells. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 2442-2449	5.8	109
76	Probing Perovskite Inhomogeneity beyond the Surface: TOF-SIMS Analysis of Halide Perovskite Photovoltaic Devices. <i>ACS Applied Materials & Amp; Interfaces</i> , 2018 , 10, 28541-28552	9.5	49

75	Impact of Layer Thickness on the Charge Carrier and Spin Coherence Lifetime in Two-Dimensional Layered Perovskite Single Crystals. <i>ACS Energy Letters</i> , 2018 , 3, 2273-2279	20.1	84
74	Suppressing defects through the synergistic effect of a Lewis base and a Lewis acid for highly efficient and stable perovskite solar cells. <i>Energy and Environmental Science</i> , 2018 , 11, 3480-3490	35.4	202
73	Perovskite Quantum Dot Photovoltaic Materials beyond the Reach of Thin Films: Full-Range Tuning of A-Site Cation Composition. <i>ACS Nano</i> , 2018 , 12, 10327-10337	16.7	110
72	Roll-to-Roll Printing of Perovskite Solar Cells. ACS Energy Letters, 2018, 3, 2558-2565	20.1	137
71	Stability at Scale: Challenges of Module Interconnects for Perovskite Photovoltaics. <i>ACS Energy Letters</i> , 2018 , 3, 2502-2503	20.1	23
70	Perovskite-Inspired Photovoltaic Materials: Toward Best Practices in Materials Characterization and Calculations. <i>Chemistry of Materials</i> , 2017 , 29, 1964-1988	9.6	87
69	Electronic and Morphological Inhomogeneities in Pristine and Deteriorated Perovskite Photovoltaic Films. <i>Nano Letters</i> , 2017 , 17, 1796-1801	11.5	22
68	Extrinsic ion migration in perovskite solar cells. <i>Energy and Environmental Science</i> , 2017 , 10, 1234-1242	35.4	336
67	300% Enhancement of Carrier Mobility in Uniaxial-Oriented Perovskite Films Formed by Topotactic-Oriented Attachment. <i>Advanced Materials</i> , 2017 , 29, 1606831	24	101
66	Tandem Mass Spectrometry in Combination with Product Ion Mobility for the Identification of Phospholipids. <i>Analytical Chemistry</i> , 2017 , 89, 916-921	7.8	24
65	Perovskite ink with wide processing window for scalable high-efficiency solar cells. <i>Nature Energy</i> , 2017 , 2,	62.3	398
64	Anilinopyridinate-supported Ru ($x = 5$ or 6) paddlewheel complexes with labile axial ligands. <i>Dalton Transactions</i> , 2017 , 46, 5532-5539	4.3	6
63	Perovskite Photovoltaics: The Path to a Printable Terawatt-Scale Technology. <i>ACS Energy Letters</i> , 2017 , 2, 2540-2544	20.1	42
62	In situ investigation of halide incorporation into perovskite solar cells. <i>MRS Communications</i> , 2017 , 7, 575-582	2.7	6
61	Acid Additives Enhancing the Conductivity of Spiro-OMeTAD Toward High-Efficiency and Hysteresis-Less Planar Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2017 , 7, 1601451	21.8	90
60	Large polarization-dependent exciton optical Stark effect in lead iodide perovskites. <i>Nature Communications</i> , 2016 , 7, 12613	17.4	72
59	Strontium Insertion in Methylammonium Lead Iodide: Long Charge Carrier Lifetime and High Fill-Factor Solar Cells. <i>Advanced Materials</i> , 2016 , 28, 9839-9845	24	127
58	A Synthetic Oxygen Atom Transfer Photocycle from a Diruthenium Oxyanion Complex. <i>Journal of the American Chemical Society</i> , 2016 , 138, 10032-40	16.4	22

(2015-2016)

57	Monitoring a Silent Phase Transition in CH3NH3PbI3 Solar Cells via Operando X-ray Diffraction. <i>ACS Energy Letters</i> , 2016 , 1, 1007-1012	20.1	43
56	Facile fabrication of large-grain CH3NH3PbI3-xBrx films for high-efficiency solar cells via CH3NH3Br-selective Ostwald ripening. <i>Nature Communications</i> , 2016 , 7, 12305	17.4	358
55	The Role of Nanoscale Seed Layers on the Enhanced Performance of Niobium doped TiO2 Thin Films on Glass. <i>Scientific Reports</i> , 2016 , 6, 32830	4.9	8
54	Rh2(II,III) Catalysts with Chelating Carboxylate and Carboxamidate Supports: Electronic Structure and Nitrene Transfer Reactivity. <i>Journal of the American Chemical Society</i> , 2016 , 138, 2327-41	16.4	82
53	Charge Transfer Dynamics between Carbon Nanotubes and Hybrid Organic Metal Halide Perovskite Films. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 418-25	6.4	69
52	Efficient charge extraction and slow recombination in organicIhorganic perovskites capped with semiconducting single-walled carbon nanotubes. <i>Energy and Environmental Science</i> , 2016 , 9, 1439-1449	35.4	109
51	Stabilizing Perovskite Structures by Tuning Tolerance Factor: Formation of Formamidinium and Cesium Lead Iodide Solid-State Alloys. <i>Chemistry of Materials</i> , 2016 , 28, 284-292	9.6	1186
50	Hybridization-Induced Carrier Localization at the C60 /ZnO Interface. Advanced Materials, 2016, 28, 396	0251	11
49	Defect Tolerance in Methylammonium Lead Triiodide Perovskite. ACS Energy Letters, 2016, 1, 360-366	20.1	357
48	Conduction and rectification in NbOx- and NiO-based metal-insulator-metal diodes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016 , 34, 051514	2.9	4
48 47		2.9 35·4	64
	Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, 051514 In situ investigation of the formation and metastability of formamidinium lead tri-iodide perovskite		64
47	Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, 051514 In situ investigation of the formation and metastability of formamidinium lead tri-iodide perovskite solar cells. Energy and Environmental Science, 2016, 9, 2372-2382 Influence of Electrode Interfaces on the Stability of Perovskite Solar Cells: Reduced Degradation	35.4	64
47	Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, 051514 In situ investigation of the formation and metastability of formamidinium lead tri-iodide perovskite solar cells. Energy and Environmental Science, 2016, 9, 2372-2382 Influence of Electrode Interfaces on the Stability of Perovskite Solar Cells: Reduced Degradation Using MoOx/Al for Hole Collection. ACS Energy Letters, 2016, 1, 38-45 Structural and chemical evolution of methylammonium lead halide perovskites during thermal	35.4	64
47 46 45	In situ investigation of the formation and metastability of formamidinium lead tri-iodide perovskite solar cells. Energy and Environmental Science, 2016, 9, 2372-2382 Influence of Electrode Interfaces on the Stability of Perovskite Solar Cells: Reduced Degradation Using MoOx/Al for Hole Collection. ACS Energy Letters, 2016, 1, 38-45 Structural and chemical evolution of methylammonium lead halide perovskites during thermal processing from solution. Energy and Environmental Science, 2016, 9, 2072-2082 Effect of Water Vapor, Temperature, and Rapid Annealing on Formamidinium Lead Triiodide	35.4 20.1 35.4	64 209 153
47 46 45 44	In situ investigation of the formation and metastability of formamidinium lead tri-iodide perovskite solar cells. Energy and Environmental Science, 2016, 9, 2372-2382 Influence of Electrode Interfaces on the Stability of Perovskite Solar Cells: Reduced Degradation Using MoOx/Al for Hole Collection. ACS Energy Letters, 2016, 1, 38-45 Structural and chemical evolution of methylammonium lead halide perovskites during thermal processing from solution. Energy and Environmental Science, 2016, 9, 2072-2082 Effect of Water Vapor, Temperature, and Rapid Annealing on Formamidinium Lead Triiodide Perovskite Crystallization. ACS Energy Letters, 2016, 1, 155-161 Methylammonium lead iodide grain boundaries exhibit depth-dependent electrical properties.	35.4 20.1 35.4 20.1	64 209 153 21
47 46 45 44 43	In situ investigation of the formation and metastability of formamidinium lead tri-iodide perovskite solar cells. Energy and Environmental Science, 2016, 9, 2372-2382 Influence of Electrode Interfaces on the Stability of Perovskite Solar Cells: Reduced Degradation Using MoOx/Al for Hole Collection. ACS Energy Letters, 2016, 1, 38-45 Structural and chemical evolution of methylammonium lead halide perovskites during thermal processing from solution. Energy and Environmental Science, 2016, 9, 2072-2082 Effect of Water Vapor, Temperature, and Rapid Annealing on Formamidinium Lead Triiodide Perovskite Crystallization. ACS Energy Letters, 2016, 1, 155-161 Methylammonium lead iodide grain boundaries exhibit depth-dependent electrical properties. Energy and Environmental Science, 2016, 9, 3642-3649 PM-IRRAS Determination of Molecular Orientation of Phosphonic Acid Self-Assembled Monolayers	35.4 20.1 35.4 20.1	64 209 153 21 42

39	Mechanisms of Electron-Beam-Induced Damage in Perovskite Thin Films Revealed by Cathodoluminescence Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 26904-26911	3.8	117
38	Electronic Structure of Ru2(II,II) Oxypyridinates: Synthetic, Structural, and Theoretical Insights into Axial Ligand Binding. <i>Inorganic Chemistry</i> , 2015 , 54, 8571-89	5.1	13
37	Stability of inverted organic solar cells with ZnO contact layers deposited from precursor solutions. <i>Energy and Environmental Science</i> , 2015 , 8, 592-601	35.4	88
36	Hybrid Organic-Inorganic Perovskites (HOIPs): Opportunities and Challenges. <i>Advanced Materials</i> , 2015 , 27, 5102-12	24	325
35	Integer Charge Transfer and Hybridization at an Organic Semiconductor/Conductive Oxide Interface. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 4865-4873	3.8	50
34	Impact of Hole Transport Layer Surface Properties on the Morphology of a Polymer-Fullerene Bulk Heterojunction. <i>Advanced Energy Materials</i> , 2014 , 4, 1301879	21.8	26
33	Control of the Electrical Properties in Spinel Oxides by Manipulating the Cation Disorder. <i>Advanced Functional Materials</i> , 2014 , 24, 610-618	15.6	86
32	Enhanced Electron Mobility Due to Dopant-Defect Pairing in Conductive ZnMgO. <i>Advanced Functional Materials</i> , 2014 , 24, 2875-2882	15.6	36
31	Modification of the Gallium-Doped Zinc Oxide Surface with Self-Assembled Monolayers of Phosphonic Acids: A Joint Theoretical and Experimental Study. <i>Advanced Functional Materials</i> , 2014 , 24, 3593-3603	15.6	29
30	Tailoring Electron-Transfer Barriers for Zinc Oxide/C60 Fullerene Interfaces. <i>Advanced Functional Materials</i> , 2014 , 24, 7381-7389	15.6	47
29	Fabrication, electrical and optical properties of silver, indium tin oxide (ITO), and indium zinc oxide (IZO) nanostructure arrays. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013 , 210, 831-83	8 § .6	16
28	Efficient modification of metal oxide surfaces with phosphonic acids by spray coating. <i>Langmuir</i> , 2013 , 29, 3935-42	4	52
27	Investigating the Influence of Interfacial Contact Properties on Open Circuit Voltages in Organic Photovoltaic Performance: Work Function Versus Selectivity. <i>Advanced Energy Materials</i> , 2013 , 3, 647-6.	56 ^{1.8}	111
26	Highly-Tunable Nickel Cobalt Oxide as a Low-Temperature P-Type Contact in Organic Photovoltaic Devices. <i>Advanced Energy Materials</i> , 2013 , 3, 524-531	21.8	38
25	Direct spectroscopic characterization of a transitory dirhodium donor-acceptor carbene complex. <i>Science</i> , 2013 , 342, 351-4	33.3	146
24	A Synthetic Cycle for Nitrogen Atom Transfer Featuring a Diruthenium Nitride Intermediate. <i>European Journal of Inorganic Chemistry</i> , 2013 , 2013, 3808-3811	2.3	19
23	Electromechanical tuning of nanoscale MIM diodes by nanoindentation. <i>Journal of Materials Research</i> , 2013 , 28, 1912-1919	2.5	3
22	Sputtered nickel oxide thin film for efficient hole transport layer in polymer f ullerene bulk-heterojunction organic solar cell. <i>Thin Solid Films</i> , 2012 , 520, 3813-3818	2.2	32

(2009-2012)

21	Radio-frequency superimposed direct current magnetron sputtered Ga:ZnO transparent conducting thin films. <i>Journal of Applied Physics</i> , 2012 , 111, 093718	12
20	Low-temperature, solution-processed molybdenum oxide hole-collection layer for organic photovoltaics. <i>Journal of Materials Chemistry</i> , 2012 , 22, 3249	136
19	The role of three-center/four-electron bonds in superelectrophilic dirhodium carbene and nitrene catalytic intermediates. <i>Dalton Transactions</i> , 2012 , 41, 700-13	102
18	Oriented Growth of Al2O3:ZnO Nanolaminates for Use as Electron-Selective Electrodes in Inverted Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2012 , 22, 1531-1538	47
17	Evidence for near-Surface NiOOH Species in Solution-Processed NiOx Selective Interlayer Materials: Impact on Energetics and the Performance of Polymer Bulk Heterojunction Photovoltaics. 9.6 Chemistry of Materials, 2011 , 23, 4988-5000	283
16	Enhanced Efficiency in Plastic Solar Cells via Energy Matched Solution Processed NiOx Interlayers. Advanced Energy Materials, 2011 , 1, 813-820	273
15	A novel way to characterize Metal-Insulator-Metal devices via nanoindentation 2011,	2
14	Overcoming degradation in organic photovoltaics: Illuminating the role of fullerene functionalization 2011 ,	1
13	Highly efficient blue organic light emitting device using indium-free transparent anode Ga:ZnO with scalability for large area coating. <i>Journal of Applied Physics</i> , 2010 , 107, 043103	18
12	Optimization of organic photovoltaic devices using tuned mixed metal oxide contact layers 2010,	2
11	Novel transparent conducting barriers for photovoltaics 2010,	1
10	Enhanced lifetime in unencapsulated organic photovoltaics with air stable electrodes 2010,	6
9	Surface Treatment of NiO Hole Transport Layers for Organic Solar Cells. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010 , 16, 1649-1655	31
8	Solution deposited NiO thin-films as hole transport layers in organic photovoltaics. <i>Organic Electronics</i> , 2010 , 11, 1414-1418	248
7	Control of charge separation by electric field manipulation in polymer-oxide hybrid organic photovoltaic bilayer devices. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010 , 207, 1257-1265	12
6	Solution deposition of amorphous IZO films by ultrasonic spray pyrolysis 2009 ,	2
5	Ultrasonically sprayed and inkjet printed thin film electrodes for organic solar cells. <i>Thin Solid Films</i> , 2009 , 517, 2781-2786	93
4	Defect Engineering in Econjugated Polymers. <i>Chemistry of Materials</i> , 2009 , 21, 4914-4919 9.6	53

3	General mobility and carrier concentration relationship in transparent amorphous indium zinc oxide films. <i>Physical Review B</i> , 2008 , 77,	3.3	187
2	Designing Modules to Prevent Reverse Bias Degradation in Perovskite Solar Cells when Partial Shading Occurs. <i>Solar Rrl</i> ,2100239	7.1	9
1	The Structural Origin of Chiroptical Properties in Perovskite Nanocrystals with Chiral Organic Ligands. <i>Advanced Functional Materials</i> ,2200454	15.6	8