Joseph Berry

List of Publications by Citations

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

#	Paper	IF	Citations
146	Stabilizing Perovskite Structures by Tuning Tolerance Factor: Formation of Formamidinium and Cesium Lead Iodide Solid-State Alloys. *Chemistry of Materials*, **2016**, 28, 284-292	9.6	1186
145	Tailored interfaces of unencapsulated perovskite solar cells for >1,000 hour operational stability. *Nature Energy*, **2018**, 3, 68-74	62.3	588
144	Scalable fabrication of perovskite solar cells. *Nature Reviews Materials*, **2018**, 3,	73.3	532
143	Carrier lifetimes of >1 μs in Sn-Pb perovskites enable efficient all-perovskite tandem solar cells. *Science*, **2019**, 364, 475-479	33.3	496
142	Perovskite ink with wide processing window for scalable high-efficiency solar cells. *Nature Energy*, **2017**, 2,	62.3	398
141	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. *Nature Energy*, **2020**, 5, 35-49	62.3	369
140	Triple-halide wide-band gap perovskites with suppressed phase segregation for efficient tandems. *Science*, **2020**, 367, 1097-1104	33.3	366
139	Facile fabrication of large-grain CH3NH3PbI3-xBrx films for high-efficiency solar cells via CH3NH3Br-selective Ostwald ripening. *Nature Communications*, **2016**, 7, 12305	17.4	358
138	Defect Tolerance in Methylammonium Lead Triiodide Perovskite. *ACS Energy Letters*, **2016**, 1, 360-366	20.1	357
137	Extrinsic ion migration in perovskite solar cells. *Energy and Environmental Science*, **2017**, 10, 1234-1242	35.4	336
136	Hybrid Organic-Inorganic Perovskites (HOIPs): Opportunities and Challenges. *Advanced Materials*, **2015**, 27, 5102-12	24	325
135	Evidence for near-Surface NiOOH Species in Solution-Processed NiOx Selective Interlayer Materials: Impact on Energetics and the Performance of Polymer Bulk Heterojunction Photovoltaics. *Chemistry of Materials*, **2011**, 23, 4988-5000	9.6	283
134	Enhanced Efficiency in Plastic Solar Cells via Energy Matched Solution Processed NiOx Interlayers. *Advanced Energy Materials*, **2011**, 1, 813-820	21.8	273
133	Solution deposited NiO thin-films as hole transport layers in organic photovoltaics. *Organic Electronics*, **2010**, 11, 1414-1418	3.5	248
132	Efficient, stable silicon tandem cells enabled by anion-engineered wide-bandgap perovskites. *Science*, **2020**, 368, 155-160	33.3	240
131	Advances in two-dimensional organic–inorganic hybrid perovskites. *Energy and Environmental Science*, **2020**, 13, 1154-1186	35.4	239
130	Enabling Flexible All-Perovskite Tandem Solar Cells. *Joule*, **2019**, 3, 2193-2204	27.8	211

129	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	20.1	209
128	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	16.4	208
127	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	35.4	202
126	General mobility and carrier concentration relationship in transparent amorphous indium zinc oxide films. *Physical Review B*, **2008**, 77,	3.3	187
125	Carrier separation and transport in perovskite solar cells studied by nanometre-scale profiling of electrical potential. *Nature Communications*, **2015**, 6, 8397	17.4	172
124	Enhanced Charge Transport in 2D Perovskites via Fluorination of Organic Cation. *Journal of the American Chemical Society*, **2019**, 141, 5972-5979	16.4	170
123	On-device lead sequestration for perovskite solar cells. *Nature*, **2020**, 578, 555-558	50.4	162
122	Structural and chemical evolution of methylammonium lead halide perovskites during thermal processing from solution. *Energy and Environmental Science*, **2016**, 9, 2072-2082	35.4	153
121	Design of low bandgap tin-lead halide perovskite solar cells to achieve thermal, atmospheric and operational stability. *Nature Energy*, **2019**, 4, 939-947	62.3	152
120	Direct spectroscopic characterization of a transitory dirhodium donor-acceptor carbene complex. *Science*, **2013**, 342, 351-4	33.3	146
119	Enhancing electron diffusion length in narrow-bandgap perovskites for efficient monolithic perovskite tandem solar cells. *Nature Communications*, **2019**, 10, 4498	17.4	138
118	Roll-to-Roll Printing of Perovskite Solar Cells. *ACS Energy Letters*, **2018**, 3, 2558-2565	20.1	137
117	Low-temperature, solution-processed molybdenum oxide hole-collection layer for organic photovoltaics. *Journal of Materials Chemistry*, **2012**, 22, 3249		136
116	Bimolecular Additives Improve Wide-Band-Gap Perovskites for Efficient Tandem Solar Cells with CIGS. *Joule*, **2019**, 3, 1734-1745	27.8	131
115	The 2020 photovoltaic technologies roadmap. *Journal Physics D: Applied Physics*, **2020**, 53, 493001	3	128
114	Strontium Insertion in Methylammonium Lead Iodide: Long Charge Carrier Lifetime and High Fill-Factor Solar Cells. *Advanced Materials*, **2016**, 28, 9839-9845	24	127
113	Overcoming Redox Reactions at Perovskite-Nickel Oxide Interfaces to Boost Voltages in Perovskite Solar Cells. *Joule*, **2020**, 4, 1759-1775	27.8	121
112	From Defects to Degradation: A Mechanistic Understanding of Degradation in Perovskite Solar Cell Devices and Modules. *Advanced Energy Materials*, **2020**, 10, 1904054	21.8	119

111	Spin-dependent charge transport through 2D chiral hybrid lead-iodide perovskites. *Science Advances*, **2019**, 5, eaay0571	14.3	118
110	Mechanisms of Electron-Beam-Induced Damage in Perovskite Thin Films Revealed by Cathodoluminescence Spectroscopy. *Journal of Physical Chemistry C*, **2015**, 119, 26904-26911	3.8	117
109	Highly Efficient Perovskite Solar Modules by Scalable Fabrication and Interconnection Optimization. *ACS Energy Letters*, **2018**, 3, 322-328	20.1	111
108	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	21.8	111
107	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	16.7	110
106	Efficient charge extraction and slow recombination in organic–inorganic perovskites capped with semiconducting single-walled carbon nanotubes. *Energy and Environmental Science*, **2016**, 9, 1439-1449	35.4	109
105	Scalable slot-die coating of high performance perovskite solar cells. *Sustainable Energy and Fuels*, **2018**, 2, 2442-2449	5.8	109
104	The role of three-center/four-electron bonds in superelectrophilic dirhodium carbene and nitrene catalytic intermediates. *Dalton Transactions*, **2012**, 41, 700-13	4.3	102
103	300% Enhancement of Carrier Mobility in Uniaxial-Oriented Perovskite Films Formed by Topotactic-Oriented Attachment. *Advanced Materials*, **2017**, 29, 1606831	24	101
102	Ultrasonically sprayed and inkjet printed thin film electrodes for organic solar cells. *Thin Solid Films*, **2009**, 517, 2781-2786	2.2	93
101	Acid Additives Enhancing the Conductivity of Spiro-OMeTAD Toward High-Efficiency and Hysteresis-Less Planar Perovskite Solar Cells. *Advanced Energy Materials*, **2017**, 7, 1601451	21.8	90
100	Insights into operational stability and processing of halide perovskite active layers. *Energy and Environmental Science*, **2019**, 12, 1341-1348	35.4	89
99	Stability of inverted organic solar cells with ZnO contact layers deposited from precursor solutions. *Energy and Environmental Science*, **2015**, 8, 592-601	35.4	88
98	Perovskite-Inspired Photovoltaic Materials: Toward Best Practices in Materials Characterization and Calculations. *Chemistry of Materials*, **2017**, 29, 1964-1988	9.6	87
97	Stability in Perovskite Photovoltaics: A Paradigm for Newfangled Technologies. *ACS Energy Letters*, **2018**, 3, 2136-2143	20.1	86
96	Control of the Electrical Properties in Spinel Oxides by Manipulating the Cation Disorder. *Advanced Functional Materials*, **2014**, 24, 610-618	15.6	86
95	Chiral-induced spin selectivity enables a room-temperature spin light-emitting diode. *Science*, **2021**, 371, 1129-1133	33.3	86
94	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	20.1	84

93	Self-Seeding Growth for Perovskite Solar Cells with Enhanced Stability. *Joule*, **2019**, 3, 1452-1463	27.8	83
92	Rh2(II,III) Catalysts with Chelating Carboxylate and Carboxamidate Supports: Electronic Structure and Nitrene Transfer Reactivity. *Journal of the American Chemical Society*, **2016**, 138, 2327-41	16.4	82
91	Highly Distorted Chiral Two-Dimensional Tin Iodide Perovskites for Spin Polarized Charge Transport. *Journal of the American Chemical Society*, **2020**, 142, 13030-13040	16.4	79
90	Large polarization-dependent exciton optical Stark effect in lead iodide perovskites. *Nature Communications*, **2016**, 7, 12613	17.4	72
89	Charge Transfer Dynamics between Carbon Nanotubes and Hybrid Organic Metal Halide Perovskite Films. *Journal of Physical Chemistry Letters*, **2016**, 7, 418-25	6.4	69
88	Improving Charge Transport via Intermediate-Controlled Crystal Growth in 2D Perovskite Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1901652	15.6	64
87	In situ investigation of the formation and metastability of formamidinium lead tri-iodide perovskite solar cells. *Energy and Environmental Science*, **2016**, 9, 2372-2382	35.4	64
86	Degradation of Highly Alloyed Metal Halide Perovskite Precursor Inks: Mechanism and Storage Solutions. *ACS Energy Letters*, **2018**, 3, 979-985	20.1	57
85	Defect Engineering in Conjugated Polymers. *Chemistry of Materials*, **2009**, 21, 4914-4919	9.6	53
84	Efficient modification of metal oxide surfaces with phosphonic acids by spray coating. *Langmuir*, **2013**, 29, 3935-42	4	52
83	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. *Science*, **2022**, 375, 71-76	33.3	51
82	Integer Charge Transfer and Hybridization at an Organic Semiconductor/Conductive Oxide Interface. *Journal of Physical Chemistry C*, **2015**, 119, 4865-4873	3.8	50
81	Probing Perovskite Inhomogeneity beyond the Surface: TOF-SIMS Analysis of Halide Perovskite Photovoltaic Devices. *ACS Applied Materials & Interfaces*, **2018**, 10, 28541-28552	9.5	49
80	Thermally Stable Perovskite Solar Cells by Systematic Molecular Design of the Hole-Transport Layer. *ACS Energy Letters*, **2019**, 4, 473-482	20.1	48
79	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Two-Dimensional Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2019**, 58, 11737-11741	16.4	48
78	Assessing health and environmental impacts of solvents for producing perovskite solar cells. *Nature Sustainability*, **2021**, 4, 277-285	22.1	48
77	Reactions at noble metal contacts with methylammonium lead triiodide perovskites: Role of underpotential deposition and electrochemistry. *APL Materials*, **2019**, 7, 041103	5.7	47
76	Tailoring Electron-Transfer Barriers for Zinc Oxide/C60 Fullerene Interfaces. *Advanced Functional Materials*, **2014**, 24, 7381-7389	15.6	47

75	Oriented Growth of Al2O3:ZnO Nanolaminates for Use as Electron-Selective Electrodes in Inverted Polymer Solar Cells. *Advanced Functional Materials*, **2012**, 22, 1531-1538	15.6	47
74	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. *Solar Rrl*, **2020**, 4, 2000082	7.1	46
73	Improving Low-Bandgap Tin□lead Perovskite Solar Cells via Contact Engineering and Gas Quench Processing. *ACS Energy Letters*, **2020**, 5, 1215-1223	20.1	43
72	Monitoring a Silent Phase Transition in CH3NH3PbI3 Solar Cells via Operando X-ray Diffraction. *ACS Energy Letters*, **2016**, 1, 1007-1012	20.1	43
71	Perovskite Photovoltaics: The Path to a Printable Terawatt-Scale Technology. *ACS Energy Letters*, **2017**, 2, 2540-2544	20.1	42
70	Methylammonium lead iodide grain boundaries exhibit depth-dependent electrical properties. *Energy and Environmental Science*, **2016**, 9, 3642-3649	35.4	42
69	Amine additive reactions induced by the soft Lewis acidity of Pb2+ in halide perovskites. Part I: evidence for Pb□alkylamide formation. *Journal of Materials Chemistry C*, **2019**, 7, 5251-5259	7.1	41
68	The Role of Dimethylammonium in Bandgap Modulation for Stable Halide Perovskites. *ACS Energy Letters*, **2020**, 5, 1856-1864	20.1	39
67	Highly-Tunable Nickel Cobalt Oxide as a Low-Temperature P-Type Contact in Organic Photovoltaic Devices. *Advanced Energy Materials*, **2013**, 3, 524-531	21.8	38
66	Enhanced Electron Mobility Due to Dopant-Defect Pairing in Conductive ZnMgO. *Advanced Functional Materials*, **2014**, 24, 2875-2882	15.6	36
65	Efficient and Stable Graded CsPbI3□Brx Perovskite Solar Cells and Submodules by Orthogonal Processable Spray Coating. *Joule*, **2021**, 5, 481-494	27.8	34
64	Strategies to Achieve High Circularly Polarized Luminescence from Colloidal Organic-Inorganic Hybrid Perovskite Nanocrystals. *ACS Nano*, **2020**, 14, 8816-8825	16.7	33
63	Sputtered nickel oxide thin film for efficient hole transport layer in polymer□fullerene bulk-heterojunction organic solar cell. *Thin Solid Films*, **2012**, 520, 3813-3818	2.2	32
62	The Molybdenum Oxide Interface Limits the High-Temperature Operational Stability of Unencapsulated Perovskite Solar Cells. *ACS Energy Letters*, **2020**, 5, 2349-2360	20.1	31
61	Surface Treatment of NiO Hole Transport Layers for Organic Solar Cells. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 1649-1655	3.8	31
60	Surface-Activated Corrosion in Tin□lead Halide Perovskite Solar Cells. *ACS Energy Letters*, **2020**, 5, 3344-3351	20.1	31
59	Investigating the Effects of Chemical Gradients on Performance and Reliability within Perovskite Solar Cells with TOF-SIMS. *Advanced Energy Materials*, **2020**, 10, 1903674	21.8	29
58	Mitigating Measurement Artifacts in TOF-SIMS Analysis of Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 30911-30918	9.5	29

57	Modification of the Gallium-Doped Zinc Oxide Surface with Self-Assembled Monolayers of Phosphonic Acids: A Joint Theoretical and Experimental Study. *Advanced Functional Materials*, **2014** , 24, 3593-3603	15.6	29
56	PM-IRRAS Determination of Molecular Orientation of Phosphonic Acid Self-Assembled Monolayers on Indium Zinc Oxide. *Langmuir*, **2015**, 31, 5603-13	4	28
55	Enhanced Nucleation of Atomic Layer Deposited Contacts Improves Operational Stability of Perovskite Solar Cells in Air. *Advanced Energy Materials*, **2019**, 9, 1902353	21.8	28
54	Impact of Hole Transport Layer Surface Properties on the Morphology of a Polymer-Fullerene Bulk Heterojunction. *Advanced Energy Materials*, **2014**, 4, 1301879	21.8	26
53	Comment on "Light-induced lattice expansion leads to high-efficiency perovskite solar cells". *Science*, **2020**, 368,	33.3	26
52	Tandem Mass Spectrometry in Combination with Product Ion Mobility for the Identification of Phospholipids. *Analytical Chemistry*, **2017**, 89, 916-921	7.8	24
51	Choose Your Own Adventure: Fabrication of Monolithic All-Perovskite Tandem Photovoltaics. *Advanced Materials*, **2020**, 32, e2003312	24	23
50	High-performance methylammonium-free ideal-band-gap perovskite solar cells. *Matter*, **2021**, 4, 1365-1376	17.7	23
49	Stability at Scale: Challenges of Module Interconnects for Perovskite Photovoltaics. *ACS Energy Letters*, **2018**, 3, 2502-2503	20.1	23
48	Electronic and Morphological Inhomogeneities in Pristine and Deteriorated Perovskite Photovoltaic Films. *Nano Letters*, **2017**, 17, 1796-1801	11.5	22
47	A Synthetic Oxygen Atom Transfer Photocycle from a Diruthenium Oxyanion Complex. *Journal of the American Chemical Society*, **2016**, 138, 10032-40	16.4	22
46	Effect of Water Vapor, Temperature, and Rapid Annealing on Formamidinium Lead Triiodide Perovskite Crystallization. *ACS Energy Letters*, **2016**, 1, 155-161	20.1	21
45	A Synthetic Cycle for Nitrogen Atom Transfer Featuring a Diruthenium Nitride Intermediate. *European Journal of Inorganic Chemistry*, **2013**, 2013, 3808-3811	2.3	19
44	3D/2D passivation as a secret to success for polycrystalline thin-film solar cells. *Joule*, **2021**, 5, 1057-1073	37.8	19
43	Gradient Doping in Sn-Pb Perovskites by Barium Ions for Efficient Single-junction and Tandem Solar Cells.. *Advanced Materials*, **2022**, e2110351	24	19
42	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	7.1	18
41	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	18
40	Learning from existing photovoltaic technologies to identify alternative perovskite module designs. *Energy and Environmental Science*, **2020**, 13, 3393-3403	35.4	18

39	Surface lattice engineering through three-dimensional lead iodide perovskitoid for high-performance perovskite solar cells. *CheM*, **2021**, 7, 774-785	16.2	18
38	Curtailing Perovskite Processing Limitations via Lamination at the Perovskite/Perovskite Interface. *ACS Energy Letters*, **2018**, 3, 1192-1197	20.1	17
37	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Two-Dimensional Perovskite Solar Cells. *Angewandte Chemie*, **2019**, 131, 11863-11867	3.6	16
36	Fabrication, electrical and optical properties of silver, indium tin oxide (ITO), and indium zinc oxide (IZO) nanostructure arrays. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 831-838	1.6	16
35	Disrupted Attosecond Charge Carrier Delocalization at a Hybrid Organic/Inorganic Semiconductor Interface. *Journal of Physical Chemistry Letters*, **2015**, 6, 1935-41	6.4	15
34	Low Threshold Voltages Electrochemically Drive Gold Migration in Halide Perovskite Devices. *ACS Energy Letters*, **2020**, 5, 3352-3356	20.1	15
33	Electronic Structure of Ru2(II,II) Oxypyridinates: Synthetic, Structural, and Theoretical Insights into Axial Ligand Binding. *Inorganic Chemistry*, **2015**, 54, 8571-89	5.1	13
32	A Multi-Dimensional Perspective on Electronic Doping in Metal Halide Perovskites. *ACS Energy Letters*, **2021**, 6, 1104-1123	20.1	13
31	Reducing Surface Recombination Velocity of Methylammonium-Free Mixed-Cation Mixed-Halide Perovskites via Surface Passivation. *Chemistry of Materials*, **2021**, 33, 5035-5044	9.6	13
30	Radio-frequency superimposed direct current magnetron sputtered Ga:ZnO transparent conducting thin films. *Journal of Applied Physics*, **2012**, 111, 093718	2.5	12
29	Control of charge separation by electric field manipulation in polymer-oxide hybrid organic photovoltaic bilayer devices. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 1257-1265	1.6	12
28	Hybridization-Induced Carrier Localization at the C60 /ZnO Interface. *Advanced Materials*, **2016**, 28, 3960-5	24	11
27	Improving Photostability of Cesium-Doped Formamidinium Lead Triiodide Perovskite. *ACS Energy Letters*, **2021**, 6, 574-580	20.1	10
26	Complementary interface formation toward high-efficiency all-back-contact perovskite solar cells. *Cell Reports Physical Science*, **2021**, 2, 100363	6.1	10
25	Designing Modules to Prevent Reverse Bias Degradation in Perovskite Solar Cells when Partial Shading Occurs. *Solar Rrl*,2100239	7.1	9
24	The Role of Nanoscale Seed Layers on the Enhanced Performance of Niobium doped TiO2 Thin Films on Glass. *Scientific Reports*, **2016**, 6, 32830	4.9	8
23	The Structural Origin of Chiroptical Properties in Perovskite Nanocrystals with Chiral Organic Ligands. *Advanced Functional Materials*,2200454	15.6	8
22	Atomically Resolved Electrically Active Intragrain Interfaces in Perovskite Semiconductors.. *Journal of the American Chemical Society*, **2022**,	16.4	7

21	Anilinopyridinate-supported Ru (x = 5 or 6) paddlewheel complexes with labile axial ligands. *Dalton Transactions*, **2017**, 46, 5532-5539	4.3	6
20	In situ investigation of halide incorporation into perovskite solar cells. *MRS Communications*, **2017**, 7, 575-582	2.7	6
19	Enhanced lifetime in unencapsulated organic photovoltaics with air stable electrodes **2010**,		6
18	Mixing Matters: Nanoscale Heterogeneity and Stability in Metal Halide Perovskite Solar Cells. *ACS Energy Letters*, **2022**, 7, 471-480	20.1	6
17	Spontaneous N formation by a diruthenium complex enables electrocatalytic and aerobic oxidation of ammonia. *Nature Chemistry*, **2021**, 13, 1221-1227	17.6	5
16	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, 051514	2.9	4
15	SMART Perovskite Growth: Enabling a Larger Range of Process Conditions. *ACS Energy Letters*, **2021**, 6, 650-658	20.1	4
14	The Complicated Morality of Named Inventions. *ACS Energy Letters*, **2021**, 6, 565-567	20.1	4
13	Electromechanical tuning of nanoscale MIM diodes by nanoindentation. *Journal of Materials Research*, **2013**, 28, 1912-1919	2.5	3
12	Optimization of organic photovoltaic devices using tuned mixed metal oxide contact layers **2010**,		2
11	A novel way to characterize Metal-Insulator-Metal devices via nanoindentation **2011**,		2
10	Solution deposition of amorphous IZO films by ultrasonic spray pyrolysis **2009**,		2
9	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. *Science*, **2021**, eabj2637	33.3	2
8	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. *Solar Rrl*, **2020**, 4, 2070065	7.1	1
7	Novel transparent conducting barriers for photovoltaics **2010**,		1
6	Overcoming degradation in organic photovoltaics: Illuminating the role of fullerene functionalization **2011**,		1
5	Electrochemical Screening of Contact Layers for Metal Halide Perovskites. *ACS Energy Letters*, **2022**, 7, 683-689	20.1	1
4	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	6.1	1

3	Nanoscale Photoexcited Carrier Dynamics in Perovskites.. *Journal of Physical Chemistry Letters*, **2022**, 2388-2395	6.4	0
2	Digital alloy contact layers for perovskite solar cells. *Synthetic Metals*, **2020**, 266, 116412	3.6	
1	Halide Organic Photovoltaics for Energy: Hybrid Perovskites for Solar Cells **2022**, 1-59		