Henry J Snaith

List of Publications by Citations

443 papers	115,548 citations	142 h-index	338 g-index
498 ext. papers	128,759 ext. citations	15.5 avg, IF	8.98 L-index

#	Paper	IF	Citations
443	Efficient hybrid solar cells based on meso-superstructured organometal halide perovskites. *Science*, **2012**, 338, 643-7	33.3	7959
442	Electron-hole diffusion lengths exceeding 1 micrometer in an organometal trihalide perovskite absorber. *Science*, **2013**, 342, 341-4	33.3	7280
441	Efficient planar heterojunction perovskite solar cells by vapour deposition. *Nature*, **2013**, 501, 395-8	50.4	6183
440	The emergence of perovskite solar cells. *Nature Photonics*, **2014**, 8, 506-514	33.9	4538
439	Bright light-emitting diodes based on organometal halide perovskite. *Nature Nanotechnology*, **2014** , 9, 687-92	28.7	2958
438	Formamidinium lead trihalide: a broadly tunable perovskite for efficient planar heterojunction solar cells. *Energy and Environmental Science*, **2014**, 7, 982	35.4	2706
437	High charge carrier mobilities and lifetimes in organolead trihalide perovskites. *Advanced Materials*, **2014**, 26, 1584-9	24	2282
436	Perovskites: The Emergence of a New Era for Low-Cost, High-Efficiency Solar Cells. *Journal of Physical Chemistry Letters*, **2013**, 4, 3623-3630	6.4	2120
435	Metal-halide perovskites for photovoltaic and light-emitting devices. *Nature Nanotechnology*, **2015**, 10, 391-402	28.7	2083
434	A mixed-cation lead mixed-halide perovskite absorber for tandem solar cells. *Science*, **2016**, 351, 151-5	33.3	2024
433	Anomalous Hysteresis in Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2014**, 5, 1511-5	6.4	1951
432	Morphological Control for High Performance, Solution-Processed Planar Heterojunction Perovskite Solar Cells. *Advanced Functional Materials*, **2014**, 24, 151-157	15.6	1639
431	Lead-free organic–inorganic tin halide perovskites for photovoltaic applications. *Energy and Environmental Science*, **2014**, 7, 3061-3068	35.4	1635
430	Solar cells. Impact of microstructure on local carrier lifetime in perovskite solar cells. *Science*, **2015**, 348, 683-6	33.3	1533
429	Low-temperature processed meso-superstructured to thin-film perovskite solar cells. *Energy and Environmental Science*, **2013**, 6, 1739	35.4	1380
428	Efficient organometal trihalide perovskite planar-heterojunction solar cells on flexible polymer substrates. *Nature Communications*, **2013**, 4, 2761	17.4	1371
427	Overcoming ultraviolet light instability of sensitized TiO_2 with meso-superstructured organometal tri-halide perovskite solar cells. *Nature Communications*, **2013**, 4, 2885	17.4	1367

426	High Photoluminescence Efficiency and Optically Pumped Lasing in Solution-Processed Mixed Halide Perovskite Semiconductors. *Journal of Physical Chemistry Letters*, **2014**, 5, 1421-6	6.4	1292
425	Direct measurement of the exciton binding energy and effective masses for charge carriers in organic–inorganic tri-halide perovskites. *Nature Physics*, **2015**, 11, 582-587	16.2	1282
424	Excitons versus free charges in organo-lead tri-halide perovskites. *Nature Communications*, **2014**, 5, 3586	17.4	1231
423	Enhanced photoluminescence and solar cell performance via Lewis base passivation of organic-inorganic lead halide perovskites. *ACS Nano*, **2014**, 8, 9815-21	16.7	1194
422	The renaissance of dye-sensitized solar cells. *Nature Photonics*, **2012**, 6, 162-169	33.9	1091
421	Inorganic caesium lead iodide perovskite solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 19688-19695	12	1085
420	Bandgap-Tunable Cesium Lead Halide Perovskites with High Thermal Stability for Efficient Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1502458	21.8	992
419	23.6%-efficient monolithic perovskite/silicon tandem solar cells with improved stability. *Nature Energy*, **2017**, 2,	62.3	965
418	Carbon nanotube/polymer composites as a highly stable hole collection layer in perovskite solar cells. *Nano Letters*, **2014**, 14, 5561-8	11.5	944
417	Low-temperature processed electron collection layers of graphene/TiO2 nanocomposites in thin film perovskite solar cells. *Nano Letters*, **2014**, 14, 724-30	11.5	917
416	Enhanced photovoltage for inverted planar heterojunction perovskite solar cells. *Science*, **2018**, 360, 1442-1446	33.3	915
415	Efficient ambient-air-stable solar cells with 2D–3D heterostructured butylammonium-caesium-formamidinium lead halide perovskites. *Nature Energy*, **2017**, 2,	62.3	901
414	Recombination Kinetics in Organic-Inorganic Perovskites: Excitons, Free Charge, and Subgap States. *Physical Review Applied*, **2014**, 2,	4.3	874
413	Perovskite-perovskite tandem photovoltaics with optimized band gaps. *Science*, **2016**, 354, 861-865	33.3	865
412	Stability of Metal Halide Perovskite Solar Cells. *Advanced Energy Materials*, **2015**, 5, 1500963	21.8	861
411	Planar perovskite solar cells with long-term stability using ionic liquid additives. *Nature*, **2019**, 571, 245-250	50.4	697
410	Ultrasmooth organic-inorganic perovskite thin-film formation and crystallization for efficient planar heterojunction solar cells. *Nature Communications*, **2015**, 6, 6142	17.4	695
409	Mesoporous TiO2 single crystals delivering enhanced mobility and optoelectronic device performance. *Nature*, **2013**, 495, 215-9	50.4	669

408	Electron-phonon coupling in hybrid lead halide perovskites. *Nature Communications*, **2016**, 7,	17.4	668
407	Temperature-Dependent Charge-Carrier Dynamics in CH3NH3PbI3 Perovskite Thin Films. *Advanced Functional Materials*, **2015**, 25, 6218-6227	15.6	645
406	Toward Lead-Free Perovskite Solar Cells. *ACS Energy Letters*, **2016**, 1, 1233-1240	20.1	636
405	Photo-induced halide redistribution in organic-inorganic perovskite films. *Nature Communications*, **2016**, 7, 11683	17.4	621
404	Steric engineering of metal-halide perovskites with tunable optical band gaps. *Nature Communications*, **2014**, 5, 5757	17.4	605
403	Electron mobility and injection dynamics in mesoporous ZnO, SnO and TiO films used in dye-sensitized solar cells. *ACS Nano*, **2011**, 5, 5158-66	16.7	602
402	Lead-Free Halide Double Perovskites via Heterovalent Substitution of Noble Metals. *Journal of Physical Chemistry Letters*, **2016**, 7, 1254-9	6.4	567
401	Heterojunction modification for highly efficient organic-inorganic perovskite solar cells. *ACS Nano*, **2014**, 8, 12701-9	16.7	546
400	High-performance perovskite-polymer hybrid solar cells via electronic coupling with fullerene monolayers. *Nano Letters*, **2013**, 13, 3124-8	11.5	545
399	Metal halide perovskites for energy applications. *Nature Energy*, **2016**, 1,	62.3	528
398	Supramolecular halogen bond passivation of organic-inorganic halide perovskite solar cells. *Nano Letters*, **2014**, 14, 3247-54	11.5	527
397	Advances in Liquid-Electrolyte and Solid-State Dye-Sensitized Solar Cells. *Advanced Materials*, **2007**, 19, 3187-3200	24	527
396	Plasmonic dye-sensitized solar cells using core-shell metal-insulator nanoparticles. *Nano Letters*, **2011**, 11, 438-45	11.5	515
395	Sub-150 °C processed meso-superstructured perovskite solar cells with enhanced efficiency. *Energy and Environmental Science*, **2014**, 7, 1142-1147	35.4	511
394	High-efficiency perovskite polymer bulk heterostructure light-emitting diodes. *Nature Photonics*, **2018**, 12, 783-789	33.9	511
393	Photon recycling in lead iodide perovskite solar cells. *Science*, **2016**, 351, 1430-3	33.3	501
392	CsInAgCl: A New Lead-Free Halide Double Perovskite with Direct Band Gap. *Journal of Physical Chemistry Letters*, **2017**, 8, 772-778	6.4	494
391	Enhanced optoelectronic quality of perovskite thin films with hypophosphorous acid for planar heterojunction solar cells. *Nature Communications*, **2015**, 6, 10030	17.4	492

390	Modeling Anomalous Hysteresis in Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2015**, 6, 3808-14	6.4	487
389	The Raman Spectrum of the CH3NH3PbI3 Hybrid Perovskite: Interplay of Theory and Experiment. *Journal of Physical Chemistry Letters*, **2014**, 5, 279-84	6.4	476
388	Lithium salts as "redox active" p-type dopants for organic semiconductors and their impact in solid-state dye-sensitized solar cells. *Physical Chemistry Chemical Physics*, **2013**, 15, 2572-9	3.6	459
387	Determination of the exciton binding energy and effective masses for methylammonium and formamidinium lead tri-halide perovskite semiconductors. *Energy and Environmental Science*, **2016**, 9, 962-970	35.4	457
386	Enhanced UV-light stability of planar heterojunction perovskite solar cells with caesium bromide interface modification. *Energy and Environmental Science*, **2016**, 9, 490-498	35.4	450
385	Enhancement of perovskite-based solar cells employing core-shell metal nanoparticles. *Nano Letters*, **2013**, 13, 4505-10	11.5	447
384	SnO2-based dye-sensitized hybrid solar cells exhibiting near unity absorbed photon-to-electron conversion efficiency. *Nano Letters*, **2010**, 10, 1259-65	11.5	440
383	Photovoltaic solar cell technologies: analysing the state of the art. *Nature Reviews Materials*, **2019**, 4, 269-285	73.3	430
382	A generic interface to reduce the efficiency-stability-cost gap of perovskite solar cells. *Science*, **2017**, 358, 1192-1197	33.3	418
381	Present status and future prospects of perovskite photovoltaics. *Nature Materials*, **2018**, 17, 372-376	27	414
380	Estimating the Maximum Attainable Efficiency in Dye-Sensitized Solar Cells. *Advanced Functional Materials*, **2010**, 20, 13-19	15.6	411
379	Band Gaps of the Lead-Free Halide Double Perovskites Cs2BiAgCl6 and Cs2BiAgBr6 from Theory and Experiment. *Journal of Physical Chemistry Letters*, **2016**, 7, 2579-85	6.4	395
378	A bicontinuous double gyroid hybrid solar cell. *Nano Letters*, **2009**, 9, 2807-12	11.5	392
377	Charge-carrier dynamics in vapour-deposited films of the organolead halide perovskite CH3NH3PbI3□Clx. *Energy and Environmental Science*, **2014**, 7, 2269-2275	35.4	378
376	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. *Nature Energy*, **2020**, 5, 35-49	62.3	369
375	The Importance of Moisture in Hybrid Lead Halide Perovskite Thin Film Fabrication. *ACS Nano*, **2015**, 9, 9380-93	16.7	366
374	Neutral color semitransparent microstructured perovskite solar cells. *ACS Nano*, **2014**, 8, 591-8	16.7	365
373	Photovoltaic mixed-cation lead mixed-halide perovskites: links between crystallinity, photo-stability and electronic properties. *Energy and Environmental Science*, **2017**, 10, 361-369	35.4	362

372	Structural and optical properties of methylammonium lead iodide across the tetragonal to cubic phase transition: implications for perovskite solar cells. *Energy and Environmental Science*, **2016**, 9, 155-163	35.4	355
371	Efficiency enhancements in solid-state hybrid solar cells via reduced charge recombination and increased light capture. *Nano Letters*, **2007**, 7, 3372-6	11.5	350
370	Enhanced charge mobility in a molecular hole transporter via addition of redox inactive ionic dopant: Implication to dye-sensitized solar cells. *Applied Physics Letters*, **2006**, 89, 262114	3.4	344
369	Charge selective contacts, mobile ions and anomalous hysteresis in organic–inorganic perovskite solar cells. *Materials Horizons*, **2015**, 2, 315-322	14.4	338
368	Optical properties and limiting photocurrent of thin-film perovskite solar cells. *Energy and Environmental Science*, **2015**, 8, 602-609	35.4	335
367	Electronic properties of meso-superstructured and planar organometal halide perovskite films: charge trapping, photodoping, and carrier mobility. *ACS Nano*, **2014**, 8, 7147-55	16.7	328
366	Perovskite Crystals for Tunable White Light Emission. *Chemistry of Materials*, **2015**, 27, 8066-8075	9.6	327
365	Charge-Carrier Dynamics in 2D Hybrid Metal-Halide Perovskites. *Nano Letters*, **2016**, 16, 7001-7007	11.5	327
364	Efficient sensitization of nanocrystalline TiO2 films by a near-IR-absorbing unsymmetrical zinc phthalocyanine. *Angewandte Chemie - International Edition*, **2007**, 46, 373-6	16.4	318
363	Carrier trapping and recombination: the role of defect physics in enhancing the open circuit voltage of metal halide perovskite solar cells. *Energy and Environmental Science*, **2016**, 9, 3472-3481	35.4	317
362	Characterization of Planar Lead Halide Perovskite Solar Cells by Impedance Spectroscopy, Open-Circuit Photovoltage Decay, and Intensity-Modulated Photovoltage/Photocurrent Spectroscopy. *Journal of Physical Chemistry C*, **2015**, 119, 3456-3465	3.8	310
361	Solution Deposition-Conversion for Planar Heterojunction Mixed Halide Perovskite Solar Cells. *Advanced Energy Materials*, **2014**, 4, 1400355	21.8	305
360	Improving the Long-Term Stability of Perovskite Solar Cells with a Porous Al2O3 Buffer Layer. *Journal of Physical Chemistry Letters*, **2015**, 6, 432-7	6.4	301
359	Efficient perovskite solar cells by metal ion doping. *Energy and Environmental Science*, **2016**, 9, 2892-2901	35.4	301
358	Performance and Stability Enhancement of Dye-Sensitized and Perovskite Solar Cells by Al Doping of TiO2. *Advanced Functional Materials*, **2014**, 24, 6046-6055	15.6	294
357	Cubic or Orthorhombic? Revealing the Crystal Structure of Metastable Black-Phase CsPbI3 by Theory and Experiment. *ACS Energy Letters*, **2018**, 3, 1787-1794	20.1	292
356	Homogeneous Emission Line Broadening in the Organo Lead Halide Perovskite CH3NH3PbI3-xClx. *Journal of Physical Chemistry Letters*, **2014**, 5, 1300-6	6.4	286
355	Charge-Carrier Dynamics and Mobilities in Formamidinium Lead Mixed-Halide Perovskites. *Advanced Materials*, **2015**, 27, 7938-44	24	276

354	C60 as an Efficient n-Type Compact Layer in Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2015**, 6, 2399-405	6.4	271
353	Crystallization kinetics of organic-inorganic trihalide perovskites and the role of the lead anion in crystal growth. *Journal of the American Chemical Society*, **2015**, 137, 2350-8	16.4	266
352	A low viscosity, low boiling point, clean solvent system for the rapid crystallisation of highly specular perovskite films. *Energy and Environmental Science*, **2017**, 10, 145-152	35.4	253
351	Light-induced annihilation of Frenkel defects in organo-lead halide perovskites. *Energy and Environmental Science*, **2016**, 9, 3180-3187	35.4	243
350	Thermally induced structural evolution and performance of mesoporous block copolymer-directed alumina perovskite solar cells. *ACS Nano*, **2014**, 8, 4730-9	16.7	241
349	Highly efficient perovskite solar cells with tunable structural color. *Nano Letters*, **2015**, 15, 1698-702	11.5	240
348	Metal halide perovskite tandem and multiple-junction photovoltaics. *Nature Reviews Chemistry*, **2017**, 1,	34.6	236
347	Charge collection and pore filling in solid-state dye-sensitized solar cells. *Nanotechnology*, **2008**, 19, 424003	3.4	232
346	Vertically segregated hybrid blends for photovoltaic devices with improved efficiency. *Journal of Applied Physics*, **2005**, 97, 014914	2.5	232
345	A piperidinium salt stabilizes efficient metal-halide perovskite solar cells. *Science*, **2020**, 369, 96-102	33.3	231
344	Monodisperse Dual-Functional Upconversion Nanoparticles Enabled Near-Infrared Organolead Halide Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2016**, 55, 4280-4	16.4	230
343	Optical phonons in methylammonium lead halide perovskites and implications for charge transport. *Materials Horizons*, **2016**, 3, 613-620	14.4	228
342	Efficient single-layer polymer light-emitting diodes. *Advanced Materials*, **2010**, 22, 3194-8	24	225
341	Radiative efficiency of lead iodide based perovskite solar cells. *Scientific Reports*, **2014**, 4, 6071	4.9	224
340	Metal Halide Perovskite Polycrystalline Films Exhibiting Properties of Single Crystals. *Joule*, **2017**, 1, 155-167	27.7	222
339	Pinhole-free perovskite films for efficient solar modules. *Energy and Environmental Science*, **2016**, 9, 484-489	35.4	221
338	The Impact of the Crystallization Processes on the Structural and Optical Properties of Hybrid Perovskite Films for Photovoltaics. *Journal of Physical Chemistry Letters*, **2014**, 5, 3836-42	6.4	218
337	Influence of Thermal Processing Protocol upon the Crystallization and Photovoltaic Performance of Organic–Inorganic Lead Trihalide Perovskites. *Journal of Physical Chemistry C*, **2014**, 118, 17171-17177	3.8	214

336	Formation of thin films of organic-inorganic perovskites for high-efficiency solar cells. *Angewandte Chemie - International Edition*, **2015**, 54, 3240-8	16.4	214
335	Efficient and Air-Stable Mixed-Cation Lead Mixed-Halide Perovskite Solar Cells with n-Doped Organic Electron Extraction Layers. *Advanced Materials*, **2017**, 29, 1604186	24	211
334	Structured Organic-Inorganic Perovskite toward a Distributed Feedback Laser. *Advanced Materials*, **2016**, 28, 923-9	24	209
333	Charge Generation Kinetics and Transport Mechanisms in Blended Polyfluorene Photovoltaic Devices. *Nano Letters*, **2002**, 2, 1353-1357	11.5	205
332	The Importance of Perovskite Pore Filling in Organometal Mixed Halide Sensitized TiO2-Based Solar Cells. *Journal of Physical Chemistry Letters*, **2014**, 5, 1096-102	6.4	200
331	Crystallization Kinetics and Morphology Control of Formamidinium-Cesium Mixed-Cation Lead Mixed-Halide Perovskite via Tunability of the Colloidal Precursor Solution. *Advanced Materials*, **2017** , 29, 1607039	24	197
330	A one-step low temperature processing route for organolead halide perovskite solar cells. *Chemical Communications*, **2013**, 49, 7893-5	5.8	197
329	Charge density dependent mobility of organic hole-transporters and mesoporous TiO determined by transient mobility spectroscopy: implications to dye-sensitized and organic solar cells. *Advanced Materials*, **2013**, 25, 3227-33	24	189
328	Tailoring metal halide perovskites through metal substitution: influence on photovoltaic and material properties. *Energy and Environmental Science*, **2017**, 10, 236-246	35.4	185
327	Aligned and Graded Type-II Ruddlesden Popper Perovskite Films for Efficient Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1800185	21.8	184
326	The Potential of Multijunction Perovskite Solar Cells. *ACS Energy Letters*, **2017**, 2, 2506-2513	20.1	180
325	Mapping Electric Field-Induced Switchable Poling and Structural Degradation in Hybrid Lead Halide Perovskite Thin Films. *Advanced Energy Materials*, **2015**, 5, 1500962	21.8	179
324	The function of a TiO2 compact layer in dye-sensitized solar cells incorporating "planar" organic dyes. *Nano Letters*, **2008**, 8, 977-81	11.5	177
323	Non-ferroelectric nature of the conductance hysteresis in CH3NH3PbI3 perovskite-based photovoltaic devices. *Applied Physics Letters*, **2015**, 106, 173502	3.4	173
322	How should you measure your excitonic solar cells?. *Energy and Environmental Science*, **2012**, 5, 6513	35.4	173
321	Ligand-engineered bandgap stability in mixed-halide perovskite LEDs. *Nature*, **2021**, 591, 72-77	50.4	172
320	Charge carrier recombination channels in the low-temperature phase of organic-inorganic lead halide perovskite thin films. *APL Materials*, **2014**, 2, 081513	5.7	170
319	Plasmonic-Induced Photon Recycling in Metal Halide Perovskite Solar Cells. *Advanced Functional Materials*, **2015**, 25, 5038-5046	15.6	167

318	Consolidation of the optoelectronic properties of CHNHPbBr perovskite single crystals. *Nature Communications*, **2017**, 8, 590	17.4	164
317	Well-Defined Nanostructured, Single-Crystalline TiO2 Electron Transport Layer for Efficient Planar Perovskite Solar Cells. *ACS Nano*, **2016**, 10, 6029-36	16.7	161
316	Infrared Light Management Using a Nanocrystalline Silicon Oxide Interlayer in Monolithic Perovskite/Silicon Heterojunction Tandem Solar Cells with Efficiency above 25%. *Advanced Energy Materials*, **2019**, 9, 1803241	21.8	161
315	Microseconds, milliseconds and seconds: deconvoluting the dynamic behaviour of planar perovskite solar cells. *Physical Chemistry Chemical Physics*, **2017**, 19, 5959-5970	3.6	160
314	High-Performance Inverted Planar Heterojunction Perovskite Solar Cells Based on Lead Acetate Precursor with Efficiency Exceeding 18%. *Advanced Functional Materials*, **2016**, 26, 3508-3514	15.6	159
313	Oxygen Degradation in Mesoporous Al2O3/CH3NH3PbI3-xClx Perovskite Solar Cells: Kinetics and Mechanisms. *Advanced Energy Materials*, **2016**, 6, 1600014	21.8	159
312	Hydrophobic Organic Hole Transporters for Improved Moisture Resistance in Metal Halide Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 5981-9	9.5	158
311	Block copolymer morphologies in dye-sensitized solar cells: probing the photovoltaic structure-function relation. *Nano Letters*, **2009**, 9, 2813-9	11.5	156
310	Electron and Hole Transport through Mesoporous TiO2 Infiltrated with Spiro-MeOTAD. *Advanced Materials*, **2007**, 19, 3643-3647	24	155
309	Revealing the origin of voltage loss in mixed-halide perovskite solar cells. *Energy and Environmental Science*, **2020**, 13, 258-267	35.4	155
308	Ion coordinating sensitizer for high efficiency mesoscopic dye-sensitized solar cells: influence of lithium ions on the photovoltaic performance of liquid and solid-state cells. *Nano Letters*, **2006**, 6, 769-73	11.5	154
307	Efficient, Semitransparent Neutral-Colored Solar Cells Based on Microstructured Formamidinium Lead Trihalide Perovskite. *Journal of Physical Chemistry Letters*, **2015**, 6, 129-38	6.4	153
306	Atmospheric influence upon crystallization and electronic disorder and its impact on the photophysical properties of organic-inorganic perovskite solar cells. *ACS Nano*, **2015**, 9, 2311-20	16.7	152
305	Light intensity, temperature, and thickness dependence of the open-circuit voltage in solid-state dye-sensitized solar cells. *Physical Review B*, **2006**, 74,	3.3	152
304	Mechanism for rapid growth of organic-inorganic halide perovskite crystals. *Nature Communications* , **2016**, 7, 13303	17.4	150
303	Hysteresis Index: A Figure without Merit for Quantifying Hysteresis in Perovskite Solar Cells. *ACS Energy Letters*, **2018**, 3, 2472-2476	20.1	150
302	A transparent conductive adhesive laminate electrode for high-efficiency organic-inorganic lead halide perovskite solar cells. *Advanced Materials*, **2014**, 26, 7499-504	24	148
301	Predicting and optimising the energy yield of perovskite-on-silicon tandem solar cells under real world conditions. *Energy and Environmental Science*, **2017**, 10, 1983-1993	35.4	142

300	High irradiance performance of metal halide perovskites for concentrator photovoltaics. *Nature Energy*, **2018**, 3, 855-861	62.3	140
299	Self-organization of nanocrystals in polymer brushes. Application in heterojunction photovoltaic diodes. *Nano Letters*, **2005**, 5, 1653-7	11.5	139
298	Impact of Bi Heterovalent Doping in Organic-Inorganic Metal Halide Perovskite Crystals. *Journal of the American Chemical Society*, **2018**, 140, 574-577	16.4	135
297	Solution-Processed Cesium Hexabromopalladate(IV), CsPdBr, for Optoelectronic Applications. *Journal of the American Chemical Society*, **2017**, 139, 6030-6033	16.4	134
296	Electronic Traps and Phase Segregation in Lead Mixed-Halide Perovskite. *ACS Energy Letters*, **2019**, 4, 75-84	20.1	134
295	Lessons learned: from dye-sensitized solar cells to all-solid-state hybrid devices. *Advanced Materials* , **2014**, 26, 4013-30	24	133
294	Role of Microstructure in Oxygen Induced Photodegradation of Methylammonium Lead Triiodide Perovskite Films. *Advanced Energy Materials*, **2017**, 7, 1700977	21.8	132
293	Protic ionic liquids as p-dopant for organic hole transporting materials and their application in high efficiency hybrid solar cells. *Journal of the American Chemical Society*, **2013**, 135, 13538-48	16.4	131
292	Enhanced Efficiency and Stability of Perovskite Solar Cells Through Nd-Doping of Mesostructured TiO2. *Advanced Energy Materials*, **2016**, 6, 1501868	21.8	130
291	High Efficiency Composite Metal Oxide-Polymer Electroluminescent Devices: A Morphological and Material Based Investigation. *Advanced Materials*, **2008**, 20, 3447-3452	24	129
290	Cation exchange for thin film lead iodide perovskite interconversion. *Materials Horizons*, **2016**, 3, 63-71	14.4	128
289	Enhanced Hole Extraction in Perovskite Solar Cells Through Carbon Nanotubes. *Journal of Physical Chemistry Letters*, **2014**, 5, 4207-12	6.4	126
288	Impact of the Halide Cage on the Electronic Properties of Fully Inorganic Cesium Lead Halide Perovskites. *ACS Energy Letters*, **2017**, 2, 1621-1627	20.1	125
287	Observation and Mediation of the Presence of Metallic Lead in Organic-Inorganic Perovskite Films. *ACS Applied Materials & Interfaces*, **2015**, 7, 13440-4	9.5	125
286	Control of Solid-State Dye-Sensitized Solar Cell Performance by Block-Copolymer-Directed TiO2 Synthesis. *Advanced Functional Materials*, **2010**, 20, 1787-1796	15.6	125
285	Optoelectronic and spectroscopic characterization of vapour-transport grown Cu2ZnSnS4 single crystals. *Journal of Materials Chemistry A*, **2017**, 5, 1192-1200	13	123
284	Morphological and electronic consequences of modifications to the polymer anode PEDOT:PSS *Polymer*, **2005**, 46, 2573-2578	3.9	122
283	Highly efficient, flexible, indium-free perovskite solar cells employing metallic substrates. *Journal of Materials Chemistry A*, **2015**, 3, 9141-9145	13	119

282	Nonlinear Optical Response of Organic–Inorganic Halide Perovskites. *ACS Photonics*, **2016**, 3, 371-377	6.3	118
281	Charge Generation and Photovoltaic Operation of Solid-State Dye-Sensitized Solar Cells Incorporating a High Extinction Coefficient Indolene-Based Sensitizer. *Advanced Functional Materials*, **2009**, 19, 1810-1818	15.6	118
280	Influence of Shell Thickness and Surface Passivation on PbS/CdS Core/Shell Colloidal Quantum Dot Solar Cells. *Chemistry of Materials*, **2014**, 26, 4004-4013	9.6	115
279	The Origin of Collected Charge and Open-Circuit Voltage in Blended Polyfluorene Photovoltaic Devices. *Advanced Materials*, **2004**, 16, 1640-1645	24	115
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277	Unraveling the Exciton Binding Energy and the Dielectric Constant in Single-Crystal Methylammonium Lead Triiodide Perovskite. *Journal of Physical Chemistry Letters*, **2017**, 8, 1851-1855	6.4	108
276	Interface-Dependent Ion Migration/Accumulation Controls Hysteresis in MAPbI3 Solar Cells. *Journal of Physical Chemistry C*, **2016**, 120, 16399-16411	3.8	106
275	Research Update: Strategies for improving the stability of perovskite solar cells. *APL Materials*, **2016**, 4, 091503	5.7	106
274	Effect of Structural Phase Transition on Charge-Carrier Lifetimes and Defects in CH3NH3SnI3 Perovskite. *Journal of Physical Chemistry Letters*, **2016**, 7, 1321-6	6.4	105
273	Unveiling the Influence of pH on the Crystallization of Hybrid Perovskites, Delivering Low Voltage Loss Photovoltaics. *Joule*, **2017**, 1, 328-343	27.8	104
272	Vapour-Deposited Cesium Lead Iodide Perovskites: Microsecond Charge Carrier Lifetimes and Enhanced Photovoltaic Performance. *ACS Energy Letters*, **2017**, 2, 1901-1908	20.1	104
271	Block copolymer directed synthesis of mesoporous TiO2 for dye-sensitized solar cells. *Soft Matter*, **2009**, 5, 134-139	3.6	104
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