Samuel D Stranks

List of Publications by Year
in descending order

195 papers	51,319 citations	6233 80 h-index	3815 178 g-index
205 all docs	205 docs citations	205 times ranked	25869 citing authors

#	Article	IF	Citations
1	Nanoscale chemical heterogeneity dominates the optoelectronic response of alloyed perovskite solar cells. Nature Nanotechnology, 2022, 17, 190-196.	15.6	75
2	Perovskite Solar Cells with Carbonâ€Based Electrodes â€“ Quantification of Losses and Strategies to Overcome Them. Advanced Energy Materials, 2022, 12, .	10.2	29
3	Overcoming Nanoscale Inhomogeneities in Thin-Film Perovskites via Exceptional Post-annealing Grain Growth for Enhanced Photodetection. Nano Letters, 2022, 22, 979-988.	4.5	9
4	Optical emission from focused ion beam milled halide perovskite device crossâ€sections. Microscopy Research and Technique, 2022, 85, 2351-2355.	1.2	7
5	Understanding Performance Limiting Interfacial Recombination in <i>pin</i> Perovskite Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	95
6	Unveiling the Interaction Mechanisms of Electron and Xâ€ray Radiation with Halide Perovskite Semiconductors using Scanning Nanoprobe Diffraction. Advanced Materials, 2022, 34, e2200383.	11.1	13
7	Influence of Halide Choice on Formation of Lowâ€Dimensional Perovskite Interlayer in Efficient Perovskite Solar Cells. Energy and Environmental Materials, 2022, 5, 670-682.	7.3	9
8	From Bulk to Surface Passivation: Double Role of Chlorineâ€Doping for Boosting Efficiency of FAPbI₃â€rich Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	12
9	An open-access database and analysis tool for perovskite solar cells based on the FAIR data principles. Nature Energy, 2022, 7, 107-115.	19.8	136
10	Extracting Decay-Rate Ratios From Photoluminescence Quantum Efficiency Measurements in Optoelectronic Semiconductors. Physical Review Applied, 2022, 17, .	1.5	5
11	Energy Spotlight. ACS Energy Letters, 2022, 7, 1862-1863.	8.8	0
12	Investigation of Singlet Fissionâ€“Halide Perovskite Interfaces. Chemistry of Materials, 2022, 34, 4865-4875.	3.2	8
13	Local nanoscale phase impurities are degradation sites in halide perovskites. Nature, 2022, 607, 294-300.	13.7	89
14	Fast Aâ€Site Cation Crossâ€Exchange at Room Temperature: Singleâ€to Doubleâ€and Tripleâ€Cation Halide Perovskite Nanocrystals. Angewandte Chemie - International Edition, 2022, 61, .	7.2	29
15	Elucidating the Role of Antisolvents on the Surface Chemistry and Optoelectronic Properties of CsPbBr_{<i>x</i>}I_{3-x} Perovskite Nanocrystals. Journal of the American Chemical Society, 2022, 144, 12102-12115.	6.6	31
16	Halide perovskites scintillators: unique promise and current limitations. Journal of Materials Chemistry C, 2021, 9, 11588-11604.	2.7	43
17	Buried Interfaces in Halide Perovskite Photovoltaics. Advanced Materials, 2021, 33, e2006435.	11.1	214
18	Unraveling the varied nature and roles of defects in hybrid halide perovskites with time-resolved photoemission electron microscopy. Energy and Environmental Science, 2021, 14, 6320-6328.	15.6	34

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19	Halide Perovskite Lightâ€Emitting Diode Technologies. Advanced Optical Materials, 2021, 9, 2002128.	3.6	100
20	Revealing Nanomechanical Domains and Their Transient Behavior in Mixedâ€Halide Perovskite Films. Advanced Functional Materials, 2021, 31, 2100293.	7.8	23
21	Local Energy Landscape Drives Long-Range Exciton Diffusion in Two-Dimensional Halide Perovskite Semiconductors. Journal of Physical Chemistry Letters, 2021, 12, 4003-4011.	2.1	14
22	Multimodal Microscale Imaging of Textured Perovskiteâ€"Silicon Tandem Solar Cells. ACS Energy Letters, 2021, 6, 2293-2304.	8.8	25
23	Pressing challenges in halide perovskite photovoltaicsâ€"from the atomic to module level. Joule, 2021, 5, 1024-1030.	11.7	23
24	Rational Passivation of Sulfur Vacancy Defects in Two-Dimensional Transition Metal Dichalcogenides. ACS Nano, 2021, 15, 8780-8789.	7.3	52
25	Decoupling the effects of defects on efficiency and stability through phosphonates in stable halide perovskite solar cells. Joule, 2021, 5, 1246-1266.	11.7	91
26	Using pulsed mode scanning electron microscopy for cathodoluminescence studies on hybrid perovskite films. Nano Express, 2021, 2, 024002.	1.2	10
27	Life cycle assessment of recycling strategies for perovskite photovoltaic modules. Nature Sustainability, 2021, 4, 821-829.	11.5	87
28	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	7.3	705
29	Highâ€Performance ITOâ€Free Perovskite Solar Cells Enabled by Singleâ€Walled Carbon Nanotube Films. Advanced Functional Materials, 2021, 31, 2104396.	7.8	30
30	Sprayâ€Coated Leadâ€Free Cs₂AgBiBr₆ Double Perovskite Solar Cells with High Openâ€Circuit Voltage. Solar Rrl, 2021, 5, 2100422.	3.1	40
31	Tetrafluoroborateâ€Induced Reduction in Defect Density in Hybrid Perovskites through Halide Management. Advanced Materials, 2021, 33, e2102462.	11.1	24
32	Optoelectronic Properties of Lowâ€Bandgap Halide Perovskites for Solar Cell Applications. Advanced Materials, 2021, 33, e2102300.	11.1	36
33	NMR spectroscopy probes microstructure, dynamics and doping of metal halide perovskites. Nature Reviews Chemistry, 2021, 5, 624-645.	13.8	73
34	Protonâ€Radiation Tolerant Allâ€Perovskite Multijunction Solar Cells. Advanced Energy Materials, 2021, 11, 2102246.	10.2	25
35	Efficient and Spectrally Stable Blue Perovskite Lightâ€Emitting Diodes Employing a Cationic Ï€â€Conjugated Polymer. Advanced Materials, 2021, 33, e2103640.	11.1	77
36	Strain analysis and engineering in halide perovskite photovoltaics. Nature Materials, 2021, 20, 1337-1346.	13.3	220

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37	22.8%-Efficient single-crystal mixed-cation inverted perovskite solar cells with a near-optimal bandgap. Energy and Environmental Science, 2021, 14, 2263-2268.	15.6	149
38	Relaxed Current Matching Requirements in Highly Luminescent Perovskite Tandem Solar Cells and Their Fundamental Efficiency Limits. ACS Energy Letters, 2021, 6, 612-620.	8.8	38
39	Enhanced visible light absorption in layered Cs₃Bi₂Br₉ through mixed-valence Sn(<scp>ii</scp>)/Sn(<scp>iv</scp>) doping. Chemical Science, 2021, 12, 14686-14699.	3.7	21
40	Mechanistic insight into the chemical treatments of monolayer transition metal disulfides for photoluminescence enhancement. Nature Communications, 2021, 12, 6044.	5.8	17
41	Degradation mechanisms of perovskite solar cells under vacuum and one atmosphere of nitrogen. Nature Energy, 2021, 6, 977-986.	19.8	103
42	Protonâ€Radiation Tolerant Allâ€Perovskite Multijunction Solar Cells (Adv. Energy Mater. 41/2021). Advanced Energy Materials, 2021, 11, 2170164.	10.2	0
43	To nano or not to nano for bright halide perovskite emitters. Nature Nanotechnology, 2021, 16, 1164-1168.	15.6	40
44	Multimodal microscopy characterization of halide perovskite semiconductors: Revealing a new world (dis)order. Matter, 2021, 4, 3852-3866.	5.0	15
45	Stabilized tilted-octahedra halide perovskites inhibit local formation of performance-limiting phases. Science, 2021, 374, 1598-1605.	6.0	115
46	Molecular aggregation method for perovskiteâ€"fullerene bulk heterostructure solar cells. Journal of Materials Chemistry A, 2020, 8, 1326-1334.	5.2	15
47	Photobrightening in Lead Halide Perovskites: Observations, Mechanisms, and Future Potential. Advanced Energy Materials, 2020, 10, 1903109.	10.2	53
48	Understanding the Origin of Ultrasharp Sub-bandgap Luminescence from Zero-Dimensional Inorganic Perovskite Cs₄PbBr₆. ACS Applied Energy Materials, 2020, 3, 192-199.	2.5	36
49	Visualizing Buried Local Carrier Diffusion in Halide Perovskite Crystals via Two-Photon Microscopy. ACS Energy Letters, 2020, 5, 117-123.	8.8	37
50	Directed Energy Transfer from Monolayer WS₂ to Near-Infrared Emitting PbSâ€"CdS Quantum Dots. ACS Nano, 2020, 14, 15374-15384.	7.3	28
51	Efficient light-emitting diodes from mixed-dimensional perovskites on a fluoride interface. Nature Electronics, 2020, 3, 704-710.	13.1	143
52	Optical and Electronic Properties of Colloidal CdSe Quantum Rings. ACS Nano, 2020, 14, 14740-14760.	7.3	8
53	Critical Assessment of the Use of Excess Lead Iodide in Lead Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2020, 11, 6505-6512.	2.1	116
54	Halide Perovskites â€" Optoelectronic and Structural Characterization Methods. Advanced Energy Materials, 2020, 10, 2001812.	10.2	3

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55	Colloidal Synthesis and Optical Properties of Perovskite-Inspired Cesium Zirconium Halide Nanocrystals. , 2020, 2, 1644-1652.		69
56	Elucidating and Mitigating Degradation Processes in Perovskite Lightâ€Emitting Diodes. Advanced Energy Materials, 2020, 10, 2002676.	10.2	28
57	Quantifying Photon Recycling in Solar Cells and Light-Emitting Diodes: Absorption and Emission Are Always Key. Physical Review Letters, 2020, 125, 067401.	2.9	30
58	Life cycle energy use and environmental implications of high-performance perovskite tandem solar cells. Science Advances, 2020, 6, eabb0055.	4.7	60
59	Influence of the Vibrational Modes from the Organic Moieties in 2D Lead Halides on Excitonic Recombination and Phase Transition. Advanced Optical Materials, 2020, 8, 2001431.	3.6	19
60	Photo-rechargeable Zinc-Ion Capacitors using V₂O₅-Activated Carbon Electrodes. ACS Energy Letters, 2020, 5, 3132-3139.	8.8	106
61	Halide Mixing and Phase Segregation in Cs₂AgBiX₆ (X = Cl, Br, and I) Double Perovskites from Cesium-133 Solid-State NMR and Optical Spectroscopy. Chemistry of Materials, 2020, 32, 8129-8138.	3.2	44
62	Impact of Mesoporous Silicon Template Pore Dimension and Surface Chemistry on Methylammonium Lead Trihalide Perovskite Photophysics. Advanced Materials Interfaces, 2020, 7, 2001138.	1.9	1
63	Unraveling the antisolvent dripping delay effect on the Stranskiâ€“Krastanov growth of CH3NH3PbBr3 thin films: a facile route for preparing a textured morphology with improved optoelectronic properties. Physical Chemistry Chemical Physics, 2020, 22, 26592-26604.	1.3	16
64	Stable Hexylphosphonate-Capped Blue-Emitting Quantum-Confined CsPbBr₃ Nanoplatelets. ACS Energy Letters, 2020, 5, 1900-1907.	8.8	82
65	Rapid Vapor-Phase Deposition of High-Mobility <i>p</i>-Type Buffer Layers on Perovskite Photovoltaics for Efficient Semitransparent Devices. ACS Energy Letters, 2020, 5, 2456-2465.	8.8	32
66	How To Quantify the Efficiency Potential of Neat Perovskite Films: Perovskite Semiconductors with an Implied Efficiency Exceeding 28%. Advanced Materials, 2020, 32, e2000080.	11.1	134
67	Local Structure and Dynamics in Methylammonium, Formamidinium, and Cesium Tin(II) Mixed-Halide Perovskites from ¹¹⁹Sn Solid-State NMR. Journal of the American Chemical Society, 2020, 142, 7813-7826.	6.6	66
68	Correlated Electrical and Chemical Nanoscale Properties in Potassiumâ€Passivated, Tripleâ€Cation Perovskite Solar Cells. Advanced Materials Interfaces, 2020, 7, 2000515.	1.9	4
69	Multisource Vacuum Deposition of Methylammonium-Free Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2498-2504.	8.8	90
70	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. Nature Energy, 2020, 5, 35-49.	19.8	797
71	Structural and spectroscopic studies of a nanostructured siliconâ€“perovskite interface. Nanoscale, 2020, 12, 4498-4505.	2.8	4
72	Proton Radiation Hardness of Perovskite Tandem Photovoltaics. Joule, 2020, 4, 1054-1069.	11.7	104

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73	Performance-limiting nanoscale trap clusters at grain junctions in halide perovskites. Nature, 2020, 580, 360-366.	13.7	255
74	Imaging Carrier Transport Properties in Halide Perovskites using Timeâ€Resolved Optical Microscopy. Advanced Energy Materials, 2020, 10, 1903814.	10.2	21
75	Photodoping through local charge carrier accumulation in alloyed hybrid perovskites for highly efficient luminescence. Nature Photonics, 2020, 14, 123-128.	15.6	93
76	Maximizing the external radiative efficiency of hybrid perovskite solar cells. Pure and Applied Chemistry, 2020, 92, 697-706.	0.9	9
77	Influence of Grain Size on Phase Transitions in Halide Perovskite Films. Advanced Energy Materials, 2019, 9, 1901883.	10.2	30
78	Charge Carriers Are Not Affected by the Relatively Slow-Rotating Methylammonium Cations in Lead Halide Perovskite Thin Films. Journal of Physical Chemistry Letters, 2019, 10, 5128-5134.	2.1	16
79	Enhancing Photoluminescence and Mobilities in WS₂ Monolayers with Oleic Acid Ligands. Nano Letters, 2019, 19, 6299-6307.	4.5	80
80	Microsecond Carrier Lifetimes, Controlled p-Doping, and Enhanced Air Stability in Low-Bandgap Metal Halide Perovskites. ACS Energy Letters, 2019, 4, 2301-2307.	8.8	46
81	Heterogeneity at multiple length scales in halide perovskite semiconductors. Nature Reviews Materials, 2019, 4, 573-587.	23.3	200
82	Synthesis of Polycrystalline Ruddlesdenâ€“Popper Organic Lead Halides and Their Growth Dynamics. Chemistry of Materials, 2019, 31, 9472-9479.	3.2	18
83	Controlling the Growth Kinetics and Optoelectronic Properties of 2D/3D Leadâ€“Tin Perovskite Heterojunctions. Advanced Materials, 2019, 31, e1905247.	11.1	36
84	Halide Perovskites: Low Dimensions for Devices. ACS Energy Letters, 2019, 4, 2902-2904.	8.8	0
85	A Highly Emissive Surface Layer in Mixedâ€Halide Multication Perovskites. Advanced Materials, 2019, 31, e1902374.	11.1	57
86	Phase-Transition-Induced Carrier Mass Enhancement in 2D Ruddlesdenâ€“Popper Perovskites. ACS Energy Letters, 2019, 4, 2386-2392.	8.8	38
87	Reversible Removal of Intermixed Shallow States by Light Soaking in Multication Mixed Halide Perovskite Films. ACS Energy Letters, 2019, 4, 2360-2367.	8.8	41
88	Charge-Carrier Recombination in Halide Perovskites. Chemical Reviews, 2019, 119, 11007-11019.	23.0	197
89	Impact of Oxygen on the Electronic Structure of Triple-Cation Halide Perovskites. , 2019, 1, 506-510.		30
90	Lattice strain causes non-radiative losses in halide perovskites. Energy and Environmental Science, 2019, 12, 596-606.	15.6	343

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91	Excitonic Properties of Low-Band-Gap Leadâ€"Tin Halide Perovskites. ACS Energy Letters, 2019, 4, 615-621.	8.8	51
92	Impact of Excess Lead Iodide on the Recombination Kinetics in Metal Halide Perovskites. ACS Energy Letters, 2019, 4, 1370-1378.	8.8	71
93	Correlative AFM-FLIM Measurements in Living Cells, Tissues and in Solar Cell Materials. Biophysical Journal, 2019, 116, 327a.	0.2	0
94	Identifying and Reducing Interfacial Losses to Enhance Color-Pure Electroluminescence in Blue-Emitting Perovskite Nanoplatelet Light-Emitting Diodes. ACS Energy Letters, 2019, 4, 1181-1188.	8.8	115
95	Hybrid perovskites for device applications. , 2019, , 211-256.		13
96	Best practices for measuring emerging light-emitting diode technologies. Nature Photonics, 2019, 13, 818-821.	15.6	59
97	The Physics of Light Emission in Halide Perovskite Devices. Advanced Materials, 2019, 31, e1803336.	11.1	189
98	Visualizing the Creation and Healing of Traps in Perovskite Photovoltaic Films by Light Soaking and Passivation Treatments. , 2019, , .		1
99	The Impact of Atmosphere on the Local Luminescence Properties of Metal Halide Perovskite Grains. Advanced Materials, 2018, 30, e1706208.	11.1	149
100	The influence of the Rashba effect. Nature Materials, 2018, 17, 381-382.	13.3	116
101	How Methylammonium Cations and Chlorine Dopants Heal Defects in Lead Iodide Perovskites. Advanced Energy Materials, 2018, 8, 1702754.	10.2	86
102	<i>In situ</i> simultaneous photovoltaic and structural evolution of perovskite solar cells during film formation. Energy and Environmental Science, 2018, 11, 383-393.	15.6	77
103	Stable Lightâ€Emitting Diodes Using Phaseâ€Pure Ruddlesdenâ€"Popper Layered Perovskites. Advanced Materials, 2018, 30, 1704217.	11.1	258
104	Maximizing and stabilizing luminescence from halide perovskites with potassium passivation. Nature, 2018, 555, 497-501.	13.7	1,336
105	Unveiling the Chemical Composition of Halide Perovskite Films Using Multivariate Statistical Analyses. ACS Applied Energy Materials, 2018, 1, 7174-7181.	2.5	31
106	Potassium- and Rubidium-Passivated Alloyed Perovskite Films: Optoelectronic Properties and Moisture Stability. ACS Energy Letters, 2018, 3, 2671-2678.	8.8	126
107	Conjugated Polyelectrolytes as Efficient Hole Transport Layers in Perovskite Light-Emitting Diodes. ACS Nano, 2018, 12, 5826-5833.	7.3	56
108	Static and Dynamic Disorder in Triple-Cation Hybrid Perovskites. Journal of Physical Chemistry C, 2018, 122, 17473-17480.	1.5	21

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109	Taking Control of Ion Transport in Halide Perovskite Solar Cells. ACS Energy Letters, 2018, 3, 1983-1990.	8.8	158
110	Boosting Tunable Blue Luminescence of Halide Perovskite Nanoplatelets through Postsynthetic Surface Trap Repair. Nano Letters, 2018, 18, 5231-5238.	4.5	382
111	Investigation of Trap States and Their Dynamics in Hybrid Organic-inorganic Mixed Cation Perovskite Films Using Time Resolved Photoemission Electron Microscopy. , 2018, , .		2
112	Probing buried recombination pathways in perovskite structures using 3D photoluminescence tomography. Energy and Environmental Science, 2018, 11, 2846-2852.	15.6	42
113	Layered Mixed Tinâ€"Lead Hybrid Perovskite Solar Cells with High Stability. ACS Energy Letters, 2018, 3, 2246-2251.	8.8	64
114	Impact of microstructure on the electronâ€"hole interaction in lead halide perovskites. Energy and Environmental Science, 2017, 10, 1358-1366.	15.6	36
115	Nonradiative Losses in Metal Halide Perovskites. ACS Energy Letters, 2017, 2, 1515-1525.	8.8	290
116	Tailoring metal halide perovskites through metal substitution: influence on photovoltaic and material properties. Energy and Environmental Science, 2017, 10, 236-246.	15.6	230
117	Metal Halide Perovskite Polycrystalline Films Exhibiting Properties of Single Crystals. Joule, 2017, 1, 155-167.	11.7	264
118	Vapour-Deposited Cesium Lead Iodide Perovskites: Microsecond Charge Carrier Lifetimes and Enhanced Photovoltaic Performance. ACS Energy Letters, 2017, 2, 1901-1908.	8.8	128
119	Directâ€"indirect character of the bandgap in methylammonium lead iodide perovskite. Nature Materials, 2017, 16, 115-120.	13.3	369
120	Methylammonium Bismuth Iodide as a Leadâ€Free, Stable Hybrid Organicâ€"Inorganic Solar Absorber. Chemistry - A European Journal, 2016, 22, 2605-2610.	1.7	312
121	Charge carrier recombination dynamics in perovskite and polymer solar cells. Applied Physics Letters, 2016, 108, .	1.5	42
122	Highly Tunable Colloidal Perovskite Nanoplatelets through Variable Cation, Metal, and Halide Composition. ACS Nano, 2016, 10, 7830-7839.	7.3	466
123	Revisiting photocarrier lifetimes in photovoltaics. Nature Photonics, 2016, 10, 562-562.	15.6	17
124	Light-induced annihilation of Frenkel defects in organo-lead halide perovskites. Energy and Environmental Science, 2016, 9, 3180-3187.	15.6	302
125	Quantum dot-like excitonic behavior in individual single walled-carbon nanotubes. Scientific Reports, 2016, 6, 37167.	1.6	6
126	Functional Singleâ€Walled Carbon Nanotubes and Nanoengineered Networks for Organicâ€and Perovskiteâ€Solarâ€Cell Applications. Advanced Materials, 2016, 28, 9668-9685.	11.1	22

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127	Unreacted PbI₂ as a Double-Edged Sword for Enhancing the Performance of Perovskite Solar Cells. Journal of the American Chemical Society, 2016, 138, 10331-10343.	6.6	696
128	The Impact of Phase Retention on the Structural and Optoelectronic Properties of Metal Halide Perovskites. Advanced Materials, 2016, 28, 10757-10763.	11.1	65
129	Photo-induced halide redistribution in organicâ€“inorganic perovskite films. Nature Communications, 2016, 7, 11683.	5.8	778
130	Structured Organicâ€“Inorganic Perovskite toward a Distributed Feedback Laser. Advanced Materials, 2016, 28, 923-929.	11.1	257
131	The mechanism of toluene-assisted crystallization of organicâ€“inorganic perovskites for highly efficient solar cells. Journal of Materials Chemistry A, 2016, 4, 4464-4471.	5.2	86
132	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.	15.6	603
133	Plasmonicâ€Induced Photon Recycling in Metal Halide Perovskite Solar Cells. Advanced Functional Materials, 2015, 25, 5038-5046.	7.8	198
134	Observation and Mediation of the Presence of Metallic Lead in Organicâ€“Inorganic Perovskite Films. ACS Applied Materials & Interfaces, 2015, 7, 13440-13444.	4.0	167
135	Formation of Thin Films of Organicâ€“Inorganic Perovskites for Highâ€Efficiency Solar Cells. Angewandte Chemie - International Edition, 2015, 54, 3240-3248.	7.2	245
136	Ultrasmooth organicâ€“inorganic perovskite thin-film formation and crystallization for efficient planar heterojunction solar cells. Nature Communications, 2015, 6, 6142.	5.8	784
137	Thiophene-based dyes for probing membranes. Organic and Biomolecular Chemistry, 2015, 13, 3792-3802.	1.5	41
138	Atmospheric Influence upon Crystallization and Electronic Disorder and Its Impact on the Photophysical Properties of Organicâ€“Inorganic Perovskite Solar Cells. ACS Nano, 2015, 9, 2311-2320.	7.3	173
139	Outshining Silicon. Scientific American, 2015, 313, 54-59.	1.0	23
140	Charge Carriers in Planar and Meso-Structured Organicâ€“Inorganic Perovskites: Mobilities, Lifetimes, and Concentrations of Trap States. Journal of Physical Chemistry Letters, 2015, 6, 3082-3090.	2.1	257
141	Enhanced Amplified Spontaneous Emission in Perovskites Using a Flexible Cholesteric Liquid Crystal Reflector. Nano Letters, 2015, 15, 4935-4941.	4.5	117
142	Direct measurement of the exciton binding energy and effective masses for charge carriers in organicâ€“inorganic tri-halide perovskites. Nature Physics, 2015, 11, 582-587.	6.5	1,651
143	Impact of microstructure on local carrier lifetime in perovskite solar cells. Science, 2015, 348, 683-686.	6.0	1,833
144	Metal-halide perovskites for photovoltaic and light-emitting devices. Nature Nanotechnology, 2015, 10, 391-402.	15.6	2,604

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145	Perovskite Crystals for Tunable White Light Emission. Chemistry of Materials, 2015, 27, 8066-8075.	3.2	362
146	Quantum funneling in blended multi-band gap core/shell colloidal quantum dot solar cells. Applied Physics Letters, 2015, 107, 103902.	1.5	7
147	Modulating the Electronâ€“Hole Interaction in a Hybrid Lead Halide Perovskite with an Electric Field. Journal of the American Chemical Society, 2015, 137, 15451-15459.	6.6	61
148	Optical properties and limiting photocurrent of thin-film perovskite solar cells. Energy and Environmental Science, 2015, 8, 602-609.	15.6	417
149	Efficient, Semitransparent Neutral-Colored Solar Cells Based on Microstructured Formamidinium Lead Trihalide Perovskite. Journal of Physical Chemistry Letters, 2015, 6, 129-138.	2.1	173
150	An ultrafast carbon nanotube terahertz polarisation modulator. Journal of Applied Physics, 2014, 115, .	1.1	36
151	Engineering Nanostructures by Binding Single Molecules to Single-Walled Carbon Nanotubes. ACS Nano, 2014, 8, 12748-12754.	7.3	10
152	Dependence of Dye Regeneration and Charge Collection on the Pore-Filling Fraction in Solid-State Dye-Sensitized Solar Cells. Advanced Functional Materials, 2014, 24, 668-677.	7.8	29
153	Excitons versus free charges in organo-lead tri-halide perovskites. Nature Communications, 2014, 5, 3586.	5.8	1,443
154	The Importance of Perovskite Pore Filling in Organometal Mixed Halide Sensitized TiO₂-Based Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 1096-1102.	2.1	221
155	High Photoluminescence Efficiency and Optically Pumped Lasing in Solution-Processed Mixed Halide Perovskite Semiconductors. Journal of Physical Chemistry Letters, 2014, 5, 1421-1426.	2.1	1,490
156	Supramolecular Halogen Bond Passivation of Organicâ€“Inorganic Halide Perovskite Solar Cells. Nano Letters, 2014, 14, 3247-3254.	4.5	651
157	Lead-free organicâ€“inorganic tin halide perovskites for photovoltaic applications. Energy and Environmental Science, 2014, 7, 3061-3068.	15.6	2,086
158	An Organic â€œDonorâ€Freeâ€•Dye with Enhanced Openâ€Circuit Voltage in Solidâ€State Sensitized Solar Cells. Advanced Energy Materials, 2014, 4, 1400166.	10.2	35
159	Solution Depositionâ€Conversion for Planar Heterojunction Mixed Halide Perovskite Solar Cells. Advanced Energy Materials, 2014, 4, 1400355.	10.2	325
160	Formamidinium lead trihalide: a broadly tunable perovskite for efficient planar heterojunction solar cells. Energy and Environmental Science, 2014, 7, 982.	15.6	3,352
161	Enhanced Hole Extraction in Perovskite Solar Cells Through Carbon Nanotubes. Journal of Physical Chemistry Letters, 2014, 5, 4207-4212.	2.1	156
162	Heterojunction Modification for Highly Efficient Organicâ€“Inorganic Perovskite Solar Cells. ACS Nano, 2014, 8, 12701-12709.	7.3	614

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163	Recombination Kinetics in Organic-Inorganic Perovskites: Excitons, Free Charge, and Subgap States. Physical Review Applied, 2014, 2, .	1.5	1,005
164	Enhanced Photoluminescence and Solar Cell Performance <i>via</i> Lewis Base Passivation of Organicâ€“Inorganic Lead Halide Perovskites. ACS Nano, 2014, 8, 9815-9821.	7.3	1,439
165	Carbon Nanotube/Polymer Composites as a Highly Stable Hole Collection Layer in Perovskite Solar Cells. Nano Letters, 2014, 14, 5561-5568.	4.5	1,073
166	Hyperspectral Imaging of Exciton Photoluminescence in Individual Carbon Nanotubes Controlled by High Magnetic Fields. Nano Letters, 2014, 14, 5194-5200.	4.5	15
167	Role of the crystallization substrate on the photoluminescence properties of organo-lead mixed halides perovskites. APL Materials, 2014, 2, .	2.2	89
168	Anomalous Hysteresis in Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 1511-1515.	2.1	2,190
169	Influence of Shell Thickness and Surface Passivation on PbS/CdS Core/Shell Colloidal Quantum Dot Solar Cells. Chemistry of Materials, 2014, 26, 4004-4013.	3.2	129
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