Nam-Gyu Park

List of Publications by Year
in descending order

358 papers	62,919 citations	1370 108 h-index	850 244 g-index
375 all docs	375 docs citations	375 times ranked	34888 citing authors

#	Article	IF	Citations
1	Lead Iodide Perovskite Sensitized All-Solid-State Submicron Thin Film Mesoscopic Solar Cell with Efficiency Exceeding 9%. Scientific Reports, 2012, 2, 591.	1.6	6,763
2	6.5% efficient perovskite quantum-dot-sensitized solar cell. Nanoscale, 2011, 3, 4088.	2.8	2,789
3	Water photolysis at 12.3% efficiency via perovskite photovoltaics and Earth-abundant catalysts. Science, 2014, 345, 1593-1596.	6.0	2,260
4	Highly Reproducible Perovskite Solar Cells with Average Efficiency of 18.3% and Best Efficiency of 19.7% Fabricated via Lewis Base Adduct of Lead(II) Iodide. Journal of the American Chemical Society, 2015, 137, 8696-8699.	6.6	2,030
5	Growth of CH3NH3PbI3 cuboids with controlled size for high-efficiency perovskite solar cells. Nature Nanotechnology, 2014, 9, 927-932.	15.6	1,600
6	High-Efficiency Perovskite Solar Cells. Chemical Reviews, 2020, 120, 7867-7918.	23.0	1,480
7	Perovskite solar cells: an emerging photovoltaic technology. Materials Today, 2015, 18, 65-72.	8.3	1,477
8	Formamidinium and Cesium Hybridization for Photoâ€and Moistureâ€Stable Perovskite Solar Cell. Advanced Energy Materials, 2015, 5, 1501310.	10.2	1,350
9	Organometal Perovskite Light Absorbers Toward a 20% Efficiency Low-Cost Solid-State Mesoscopic Solar Cell. Journal of Physical Chemistry Letters, 2013, 4, 2423-2429.	2.1	1,232
10	Perovskite Solar Cells: From Materials to Devices. Small, 2015, 11, 10-25.	5.2	1,210
11	Comparison of Dye-Sensitized Rutile- and Anatase-Based TiO2 Solar Cells. Journal of Physical Chemistry B, 2000, 104, 8989-8994.	1.2	1,082
12	Parameters Affecting <i>I</i>â€“<i>V</i> Hysteresis of CH₃NH₃PbI₃ Perovskite Solar Cells: Effects of Perovskite Crystal Size and Mesoporous TiO₂ Layer. Journal of Physical Chemistry Letters, 2014, 5, 2927-2934.	2.1	974
13	Towards stable and commercially available perovskite solar cells. Nature Energy, 2016, 1, .	19.8	941
14	High Efficiency Solid-State Sensitized Solar Cell-Based on Submicrometer Rutile TiO₂ Nanorod and CH₃NH₃PbI₃ Perovskite Sensitizer. Nano Letters, 2013, 13, 2412-2417.	4.5	908
15	Self-formed grain boundary healing layer for highly efficient CH3NH3PbI3 perovskite solar cells. Nature Energy, 2016, 1, .	19.8	902
16	Lewis Acidâ€“Base Adduct Approach for High Efficiency Perovskite Solar Cells. Accounts of Chemical Research, 2016, 49, 311-319.	7.6	878
17	Highâ€Efficiency Perovskite Solar Cells Based on the Black Polymorph of HC(NH₂)₂PbI₃. Advanced Materials, 2014, 26, 4991-4998.	11.1	847
18	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. Nature Energy, 2020, 5, 35-49.	19.8	797

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19	Influence of Electrical Potential Distribution, Charge Transport, and Recombination on the Photopotential and Photocurrent Conversion Efficiency of Dye-Sensitized Nanocrystalline TiO2Solar Cells:Â A Study by Electrical Impedance and Optical Modulation Techniques. Journal of Physical Chemistry B, 2000, 104, 2044-2052.	1.2	777
20	Printable organometallic perovskite enables large-area, low-dose X-ray imaging. Nature, 2017, 550, 87-91.	13.7	763
21	Mechanism of carrier accumulation in perovskite thin-absorber solar cells. Nature Communications, 2013, 4, 2242.	5.8	760
22	Universal Approach toward Hysteresis-Free Perovskite Solar Cell via Defect Engineering. Journal of the American Chemical Society, 2018, 140, 1358-1364.	6.6	708
23	Organolead Halide Perovskite: New Horizons in Solar Cell Research. Journal of Physical Chemistry C, 2014, 118, 5615-5625.	1.5	616
24	11% Efficient Perovskite Solar Cell Based on ZnO Nanorods: An Effective Charge Collection System. Journal of Physical Chemistry C, 2014, 118, 16567-16573.	1.5	611
25	Slow Dynamic Processes in Lead Halide Perovskite Solar Cells. Characteristic Times and Hysteresis. Journal of Physical Chemistry Letters, 2014, 5, 2357-2363.	2.1	609
26	Highly efficient and bending durable perovskite solar cells: toward a wearable power source. Energy and Environmental Science, 2015, 8, 916-921.	15.6	602
27	Scalable fabrication and coating methods for perovskite solar cells and solar modules. Nature Reviews Materials, 2020, 5, 333-350.	23.3	568
28	Nanoâ€embossed Hollow Spherical TiO₂ as Bifunctional Material for Highâ€Efficiency Dyeâ€Sensitized Solar Cells. Advanced Materials, 2008, 20, 195-199.	11.1	557
29	Symmetric redox supercapacitor with conducting polyaniline electrodes. Journal of Power Sources, 2002, 103, 305-309.	4.0	524
30	Formation of Highly Efficient Dyeâ€Sensitized Solar Cells by Hierarchical Pore Generation with Nanoporous TiO₂ Spheres. Advanced Materials, 2009, 21, 3668-3673.	11.1	452
31	Control of <i>I</i>â€“<i>V</i> Hysteresis in CH₃NH₃PbI₃ Perovskite Solar Cell. Journal of Physical Chemistry Letters, 2015, 6, 4633-4639.	2.1	430
32	Causes and Solutions of Recombination in Perovskite Solar Cells. Advanced Materials, 2019, 31, e1803019.	11.1	422
33	A highly efficient organic sensitizer for dye-sensitized solar cells. Chemical Communications, 2007, , 4887.	2.2	417
34	Morphology-photovoltaic property correlation in perovskite solar cells: One-step versus two-step deposition of CH3NH3PbI3. APL Materials, 2014, 2, .	2.2	399
35	Evaluation of the Charge-Collection Efficiency of Dye-Sensitized Nanocrystalline TiO2Solar Cells. Journal of Physical Chemistry B, 1999, 103, 782-791.	1.2	394
36	Multifunctional Chemical Linker Imidazoleacetic Acid Hydrochloride for 21% Efficient and Stable Planar Perovskite Solar Cells. Advanced Materials, 2019, 31, e1902902.	11.1	366

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37	Dye-Sensitized TiO2Solar Cells:Â Structural and Photoelectrochemical Characterization of Nanocrystalline Electrodes Formed from the Hydrolysis of TiCl4. Journal of Physical Chemistry B, 1999, 103, 3308-3314.	1.2	355
38	On the Currentâ€"Voltage Hysteresis in Perovskite Solar Cells: Dependence on Perovskite Composition and Methods to Remove Hysteresis. Advanced Materials, 2019, 31, e1805214.	11.1	351
39	Ambipolar Diffusion of Photocarriers in Electrolyte-Filled, Nanoporous TiO2â€. Journal of Physical Chemistry B, 2000, 104, 3930-3936.	1.2	336
40	Nanowire Perovskite Solar Cell. Nano Letters, 2015, 15, 2120-2126.	4.5	321
41	Methodologies toward Highly Efficient Perovskite Solar Cells. Small, 2018, 14, e1704177.	5.2	315
42	An ultra-thin, un-doped NiO hole transporting layer of highly efficient (16.4%) organicâ€"inorganic hybrid perovskite solar cells. Nanoscale, 2016, 8, 11403-11412.	2.8	307
43	Materials and Methods for Interface Engineering toward Stable and Efficient Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2742-2786.	8.8	307
44	15.76% efficiency perovskite solar cells prepared under high relative humidity: importance of PbI₂ morphology in two-step deposition of CH₃NH₃PbI₃. Journal of Materials Chemistry A, 2015, 3, 8808-8815.	5.2	304
45	Organolead Halide Perovskites for Low Operating Voltage Multilevel Resistive Switching. Advanced Materials, 2016, 28, 6562-6567.	11.1	285
46	Material and Device Stability in Perovskite Solar Cells. ChemSusChem, 2016, 9, 2528-2540.	3.6	256
47	Simultaneous Improvement of Photovoltaic Performance and Stability by In Situ Formation of 2D Perovskite at (FAPbI₃)_{0.88}(CsPbBr₃)_{0.12}/CuSCN Interface. Advanced Energy Materials, 2018, 8, 1702714.	10.2	253
48	Size-dependent scattering efficiency in dye-sensitized solar cell. Inorganica Chimica Acta, 2008, 361, 677-683.	1.2	250
49	Flexible Perovskite Solar Cells. Joule, 2019, 3, 1850-1880.	11.7	242
50	Selective positioning of organic dyes in a mesoporous inorganic oxide film. Nature Materials, 2009, 8, 665-671.	13.3	240
51	The 2019 materials by design roadmap. Journal Physics D: Applied Physics, 2019, 52, 013001.	1.3	236
52	Stability-limiting heterointerfaces of perovskite photovoltaics. Nature, 2022, 605, 268-273.	13.7	229
53	A 4.2% efficient flexible dye-sensitized TiO2 solar cells using stainless steel substrate. Solar Energy Materials and Solar Cells, 2006, 90, 574-581.	3.0	228
54	Quantum-Dot-Sensitized Solar Cell with Unprecedentedly High Photocurrent. Scientific Reports, 2013, 3, 1050.	1.6	228

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55	The Interplay between Trap Density and Hysteresis in Planar Heterojunction Perovskite Solar Cells. Nano Letters, 2017, 17, 4270-4276.	4.5	226
56	Synthesis, structure, and photovoltaic property of a nanocrystalline 2H perovskite-type novel sensitizer (CH3CH2NH3)PbI3. Nanoscale Research Letters, 2012, 7, 353.	3.1	225
57	FA_{0.88}Cs_{0.12}PbI_{3âˆ’}<i>_x</i>(PF₆)<i>_x</i> Interlayer Formed by Ion Exchange Reaction between Perovskite and Hole Transporting Layer for Improving Photovoltaic Performance and Stability. Advanced Materials, 2018, 30, e1801948.	11.1	214
58	Characteristics of PVdF-HFP/TiO2 composite membrane electrolytes prepared by phase inversion and conventional casting methods. Electrochimica Acta, 2006, 51, 5636-5644.	2.6	212
59	Chemical Sintering of Nanoparticles: A Methodology for Low-Temperature Fabrication of Dye-Sensitized TiO2 Films. Advanced Materials, 2005, 17, 2349-2353.	11.1	208
60	Rethinking the A cation in halide perovskites. Science, 2022, 375, eabj1186.	6.0	207
61	Transparent Conductive Oxideâ€Free Grapheneâ€Based Perovskite Solar Cells with over 17% Efficiency. Advanced Energy Materials, 2016, 6, 1501873.	10.2	206
62	Single-step solvothermal synthesis of mesoporous Agâ€“TiO2â€“reduced graphene oxide ternary composites with enhanced photocatalytic activity. Nanoscale, 2013, 5, 5093.	2.8	204
63	Effect of Selective Contacts on the Thermal Stability of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 7148-7153.	4.0	203
64	Dye-sensitized nanocrystalline solar cells based on composite polymer electrolytes containing fumed silica nanoparticles. Chemical Communications, 2004, , 1662.	2.2	202
65	Poly(ethylenedioxythiophene) (PEDOT) as polymer electrode in redox supercapacitor. Electrochimica Acta, 2004, 50, 843-847.	2.6	201
66	Stability Issues on Perovskite Solar Cells. Photonics, 2015, 2, 1139-1151.	0.9	201
67	Compact Inverseâ€Opal Electrode Using Nonâ€Aggregated TiO₂ Nanoparticles for Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2009, 19, 1093-1099.	7.8	195
68	Research Direction toward Scalable, Stable, and High Efficiency Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903106.	10.2	193
69	Impact of Interfacial Layers in Perovskite Solar Cells. ChemSusChem, 2017, 10, 3687-3704.	3.6	191
70	Rutile TiO2-based perovskite solar cells. Journal of Materials Chemistry A, 2014, 2, 9251.	5.2	188
71	High efficiency electrospun TiO₂nanofiber based hybrid organicâ€“inorganic perovskite solar cell. Nanoscale, 2014, 6, 1675-1679.	2.8	185
72	Ferroelectric Polarization in CH₃NH₃PbI₃ Perovskite. Journal of Physical Chemistry Letters, 2015, 6, 1729-1735.	2.1	180

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73	Reduced Graphene Oxide/Mesoporous TiO₂ Nanocomposite Based Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 23521-23526.	4.0	180
74	Verification and mitigation of ion migration in perovskite solar cells. APL Materials, 2019, 7, .	2.2	179
75	Transferred vertically aligned N-doped carbon nanotube arrays: use in dye-sensitized solar cells as counter electrodes. Chemical Communications, 2011, 47, 4264.	2.2	175
76	Perovskite Solar Cells with Inorganic Electronâ€•and Holeâ€Transport Layers Exhibiting Longâ€Term (â‰ˆ500) Tj ETQq0 0 0 rgBT /Overl e1801010.	11.1	174
77	Dye-sensitized solar cells with Pt- and TCO-free counter electrodes. Chemical Communications, 2010, 46, 4505.	2.2	172
78	Inorganic Hole Transporting Materials for Stable and High Efficiency Perovskite Solar Cells. Journal of Physical Chemistry C, 2018, 122, 14039-14063.	1.5	171
79	Retarding charge recombination in perovskite solar cells using ultrathin MgO-coated TiO₂ nanoparticulate films. Journal of Materials Chemistry A, 2015, 3, 9160-9164.	5.2	167
80	Two-Step Solâ^'Gel Method-Based TiO₂ Nanoparticles with Uniform Morphology and Size for Efficient Photo-Energy Conversion Devices. Chemistry of Materials, 2010, 22, 1958-1965.	3.2	166
81	<i>In-Situ</i> Formed Type I Nanocrystalline Perovskite Film for Highly Efficient Light-Emitting Diode. ACS Nano, 2017, 11, 3311-3319.	7.3	161
82	A Realistic Methodology for 30% Efficient Perovskite Solar Cells. CheM, 2020, 6, 1254-1264.	5.8	160
83	Importance of Functional Groups in Cross-Linking Methoxysilane Additives for High-Efficiency and Stable Perovskite Solar Cells. ACS Energy Letters, 2019, 4, 2192-2200.	8.8	157
84	Real-Space Imaging of the Atomic Structure of Organicâ€"Inorganic Perovskite. Journal of the American Chemical Society, 2015, 137, 16049-16054.	6.6	155
85	Effects of Seed Layer on Growth of ZnO Nanorod and Performance of Perovskite Solar Cell. Journal of Physical Chemistry C, 2015, 119, 10321-10328.	1.5	151
86	Morphological and Photoelectrochemical Characterization of Coreâ^'Shell Nanoparticle Films for Dye-Sensitized Solar Cells:Â Znâ^'O Type Shell on SnO2and TiO2Cores. Langmuir, 2004, 20, 4246-4253.	1.6	150
87	Hybrid solar cells with vertically aligned CdTe nanorods and a conjugated polymer. Applied Physics Letters, 2005, 86, 113101.	1.5	146
88	Solution-processed SnO₂thin film for a hysteresis-free planar perovskite solar cell with a power conversion efficiency of 19.2%. Journal of Materials Chemistry A, 2017, 5, 24790-24803.	5.2	143
89	Effect of bidentate and tridentate additives on the photovoltaic performance and stability of perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 4977-4987.	5.2	143
90	A Review on Scaling Up Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2008621.	7.8	143

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91	Moth-Eye TiO₂Layer for Improving Light Harvesting Efficiency in Perovskite Solar Cells. Small, 2016, 12, 2443-2449.	5.2	142
92	Highâ€Performance Longâ€Termâ€Stable Dopantâ€Free Perovskite Solar Cells and Additiveâ€Free Organic Solar Cells by Employing Newly Designed Multirole Ï€â€Conjugated Polymers. Advanced Materials, 2017, 29, 1700183.	11.1	141
93	Niobium Doping Effects on TiO₂ Mesoscopic Electron Transport Layerâ€Based Perovskite Solar Cells. ChemSusChem, 2015, 8, 2392-2398.	3.6	139
94	Inverted Layerâ€Byâ€Layer Fabrication of an Ultraflexible and Transparent Ag Nanowire/Conductive Polymer Composite Electrode for Use in Highâ€Performance Organic Solar Cells. Advanced Functional Materials, 2015, 25, 4580-4589.	7.8	139
95	Achieving Reproducible and High-Efficiency (>21%) Perovskite Solar Cells with a Presynthesized FAPbI₃ Powder. ACS Energy Letters, 2020, 5, 360-366.	8.8	139
96	Morphological and compositional progress in halide perovskite solar cells. Chemical Communications, 2019, 55, 1192-1200.	2.2	136
97	Perovskite Cluster-Containing Solution for Scalable D-Bar Coating toward High-Throughput Perovskite Solar Cells. ACS Energy Letters, 2019, 4, 1189-1195.	8.8	134
98	Chemical Approaches for Stabilizing Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903249.	10.2	132
99	Dye-sensitized solar cells based on composite solid polymer electrolytes. Chemical Communications, 2005, , 889.	2.2	129
100	Stabilizing the Ag Electrode and Reducing <i>J</i>â€"<i>V</i> Hysteresis through Suppression of Iodide Migration in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 36338-36349.	4.0	129
101	Research Direction toward Theoretical Efficiency in Perovskite Solar Cells. ACS Photonics, 2018, 5, 2970-2977.	3.2	129
102	Precursor Engineering for a Large-Area Perovskite Solar Cell with >19% Efficiency. ACS Energy Letters, 2019, 4, 2393-2401.	8.8	127
103	High performance organic photosensitizers for dye-sensitized solar cells. Chemical Communications, 2010, 46, 1335.	2.2	124
104	Perovskite-related (CH₃NH₃)₃Sb₂Br₉ for forming-free memristor and low-energy-consuming neuromorphic computing. Nanoscale, 2019, 11, 6453-6461.	2.8	121
105	Characterization of poly(vinylidenefluoride-co-hexafluoropropylene)-based polymer electrolyte filled with TiO2 nanoparticles. Polymer, 2002, 43, 3951-3957.	1.8	120
106	High efficiency solar cells combining a perovskite and a silicon heterojunction solar cells via an optical splitting system. Applied Physics Letters, 2015, 106, .	1.5	119
107	Cooperative kinetics of depolarization in CH₃NH₃PbI₃ perovskite solar cells. Energy and Environmental Science, 2015, 8, 910-915.	15.6	116
108	Photovoltaic characteristics of dye-sensitized surface-modified nanocrystalline SnO2 solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 161, 105-110.	2.0	114

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109	Quasi-Two-Dimensional Perovskite Solar Cells with Efficiency Exceeding 22%. ACS Energy Letters, 2022, 7, 757-765.	8.8	114
110	Wafer-scale reliable switching memory based on 2-dimensional layered organicâ€“inorganic halide perovskite. Nanoscale, 2017, 9, 15278-15285.	2.8	113
111	Control of Crystal Growth toward Scalable Fabrication of Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1807047.	7.8	111
112	Paradoxical Approach with a Hydrophilic Passivation Layer for Moisture-Stable, 23% Efficient Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 3268-3275.	8.8	110
113	Proton-transfer-induced 3D/2D hybrid perovskites suppress ion migration and reduce luminance overshoot. Nature Communications, 2020, 11, 3378.	5.8	108
114	Perovskite Solar Cellsâ€”Towards Commercialization. ACS Energy Letters, 2017, 2, 1749-1751.	8.8	107
115	Strong Photocurrent Amplification in Perovskite Solar Cells with a Porous TiO₂ Blocking Layer under Reverse Bias. Journal of Physical Chemistry Letters, 2014, 5, 3931-3936.	2.1	104
116	Pseudo First-Order Adsorption Kinetics of N719 Dye on TiO₂ Surface. ACS Applied Materials & Interfaces, 2011, 3, 1953-1957.	4.0	101
117	Interfacial Modification of Perovskite Solar Cells Using an Ultrathin MAI Layer Leads to Enhanced Energy Level Alignment, Efficiencies, and Reproducibility. Journal of Physical Chemistry Letters, 2017, 8, 3947-3953.	2.1	101
118	Fully solution-processed transparent electrodes based on silver nanowire composites for perovskite solar cells. Nanoscale, 2016, 8, 6308-6316.	2.8	99
119	Acid Dissociation Constant: A Criterion for Selecting Passivation Agents in Perovskite Solar Cells. ACS Energy Letters, 0, , 1612-1621.	8.8	99
120	Intracrystalline Structure of Molecular Mercury Halide Intercalated in High-Tc Superconducting Lattice of Bi2Sr2CaCu2Oy. Journal of the American Chemical Society, 1997, 119, 1624-1633.	6.6	98
121	Novel thixotropic gel electrolytes based on dicationic bis-imidazolium salts for quasi-solid-state dye-sensitized solar cells. Journal of Power Sources, 2008, 175, 692-697.	4.0	97
122	Thermodynamic regulation of CH₃NH₃PbI₃crystal growth and its effect on photovoltaic performance of perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 19901-19906.	5.2	94
123	Redox supercapacitor using polyaniline doped with Li salt as electrode. Solid State Ionics, 2002, 152-153, 861-866.	1.3	93
124	Device Performance of Emerging Photovoltaic Materials (Version 1). Advanced Energy Materials, 2021, 11, 2002774.	10.2	93
125	Zn₂SnO₄-Based Photoelectrodes for Organolead Halide Perovskite Solar Cells. Journal of Physical Chemistry C, 2014, 118, 22991-22994.	1.5	92
126	Raman spectroscopic studies of Niâ€“W oxide thin films. Solid State Ionics, 2001, 140, 135-139.	1.3	91

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127	Observation of Enhanced Hole Extraction in Br Concentration Gradient Perovskite Materials. Nano Letters, 2016, 16, 5756-5763.	4.5	91
128	Bifacial stamping for high efficiency perovskite solar cells. Energy and Environmental Science, 2019, 12, 308-321.	15.6	91
129	Transparent solar cells based on dyeâ€sensitized nanocrystalline semiconductors. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1895-1904.	0.8	90
130	Dual function interfacial layer for highly efficient and stable lead halide perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 6091-6097.	5.2	90
131	Low-temperature oxygen plasma treatment of TiO2 film for enhanced performance of dye-sensitized solar cells. Journal of Power Sources, 2008, 175, 914-919.	4.0	89
132	Formation of Efficient Dye-Sensitized Solar Cells by Introducing an Interfacial Layer of Long-Range Ordered Mesoporous TiO₂ Thin Film. Langmuir, 2008, 24, 13225-13230.	1.6	88
133	Methodologies for high efficiency perovskite solar cells. Nano Convergence, 2016, 3, 15.	6.3	88
134	All-Inorganic Bismuth Halide Perovskite-Like Materials A₃Bi₂I₉ and A₃Bi_{1.8}Na_{0.2}I_{8.6} (A = Rb and Cs) for Low-Voltage Switching Resistive Memory. ACS Applied Materials & Interfaces, 2018, 10, 29741-29749.	4.0	88
135	Importance of tailoring lattice strain in halide perovskite crystals. NPG Asia Materials, 2020, 12, .	3.8	88
136	Highly durable and flexible dye-sensitized solar cells fabricated on plastic substrates: PVDF-nanofiber-reinforced TiO2 photoelectrodes. Energy and Environmental Science, 2012, 5, 8950.	15.6	87
137	Determining the locus for photocarrier recombination in dye-sensitized solar cells. Applied Physics Letters, 2002, 80, 685-687.	1.5	86
138	Crystal growth engineering for high efficiency perovskite solar cells. CrystEngComm, 2016, 18, 5977-5985.	1.3	85
139	Nano-grain SnO2 electrodes for high conversion efficiency SnO2â€"DSSC. Solar Energy Materials and Solar Cells, 2011, 95, 179-183.	3.0	84
140	Analysing the effect of crystal size and structure in highly efficient CH₃NH₃PbI₃ perovskite solar cells by spatially resolved photo- and electroluminescence imaging. Nanoscale, 2015, 7, 19653-19662.	2.8	84
141	Propylammonium Chloride Additive for Efficient and Stable FAPbI₃ Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2102538.	10.2	84
142	Characterization of poly(vinylidenefluoride-co-hexafluoropropylene)-based polymer electrolyte filled with rutile TiO2 nanoparticles. Solid State Ionics, 2003, 161, 121-131.	1.3	82
143	Post-treatment of perovskite film with phenylalkylammonium iodide for hysteresis-less perovskite solar cells. Solar Energy Materials and Solar Cells, 2018, 179, 57-65.	3.0	81
144	Cyclohexylammoniumâ€Based 2D/3D Perovskite Heterojunction with Funnelâ€Like Energy Band Alignment for Efficient Solar Cells (23.91%). Advanced Energy Materials, 2021, 11, 2102236.	10.2	77

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145	ITO/ATO/TiO2 triple-layered transparent conducting substrates for dye-sensitized solar cells. Solar Energy Materials and Solar Cells, 2008, 92, 873-877.	3.0	76
146	Atomic layer deposition for efficient and stable perovskite solar cells. Chemical Communications, 2019, 55, 2403-2416.	2.2	76
147	Dye-Sensitized TiO[sub 2] Solar Cells Using Polymer Gel Electrolytes Based on PVdF-HFP. Journal of the Electrochemical Society, 2004, 151, E257.	1.3	75
148	Rear-Surface Passivation by Melaminium Iodide Additive for Stable and Hysteresis-less Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 25372-25383.	4.0	72
149	Improvement of mass transport of the [Co(bpy)3]II/III redox couple by controlling nanostructure of TiO2 films in dye-sensitized solar cells. Chemical Communications, 2011, 47, 12637.	2.2	71
150	New Hybrid Hole Extraction Layer of Perovskite Solar Cells with a Planar pâ€“iâ€“n Geometry. Journal of Physical Chemistry C, 2015, 119, 27285-27290.	1.5	71
151	1D Hexagonal HC(NH₂)₂PbI₃ for Multilevel Resistive Switching Nonvolatile Memory. Advanced Electronic Materials, 2018, 4, 1800190.	2.6	70
152	Layered (C₆H₅CH₂NH₃)₂CuBr₄ Perovskite for Multilevel Storage Resistive Switching Memory. Advanced Functional Materials, 2020, 30, 2002653.	7.8	70
153	Evaluation of external quantum efficiency of a 12.35% tandem solar cell comprising dye-sensitized and CIGS solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 3419-3423.	3.0	68
154	Empowering Semiâ€Transparent Solar Cells with Thermalâ€Mirror Functionality. Advanced Energy Materials, 2016, 6, 1502466.	10.2	68
155	On the Role of Interfaces in Planarâ€Structured HC(NH₂)₂PbI₃ Perovskite Solar Cells. ChemSusChem, 2015, 8, 2414-2419.	3.6	67
156	Opto-electronic properties of TiO₂nanohelices with embedded HC(NH₂)₂PbI₃perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 9179-9186.	5.2	67
157	Water Splitting Exceeding 17% Solar-to-Hydrogen Conversion Efficiency Using Solution-Processed Ni-Based Electrocatalysts and Perovskite/Si Tandem Solar Cell. ACS Applied Materials & Interfaces, 2019, 11, 33835-33843.	4.0	67
158	Dual Additive for Simultaneous Improvement of Photovoltaic Performance and Stability of Perovskite Solar Cell. Advanced Functional Materials, 2021, 31, 2100396.	7.8	66
159	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials, 2021, 11, .	10.2	66
160	Electrochemical supercapacitor based on polyaniline doped with lithium salt and active carbon electrodes. Solid State Ionics, 2004, 175, 765-768.	1.3	65
161	Controlled growth of vertically oriented hematite/Pt composite nanorod arrays: use for photoelectrochemical water splitting. Nanotechnology, 2011, 22, 175703.	1.3	65
162	Water-repellent perovskite solar cell. Journal of Materials Chemistry A, 2014, 2, 20017-20021.	5.2	65

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