Zi Shuai Wang

List of Publications by Year
in descending order

169	10,769	26610 56	33869 99
papers	citations	h-index	g-index

172	172	172	11833
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhancing the Brightness of Cesium Lead Halide Perovskite Nanocrystal Based Green Light-Emitting Devices through the Interface Engineering with Perfluorinated Ionomer. Nano Letters, 2016, 16, 1415-1420.	4.5	685
2	The efficiency limit of CH3NH3PbI3 perovskite solar cells. Applied Physics Letters, 2015, 106, .	1.5	480
3	Pinhole-Free and Surface-Nanostructured NiO_x Film by Room-Temperature Solution Process for High-Performance Flexible Perovskite Solar Cells with Good Stability and Reproducibility. ACS Nano, 2016, 10, 1503-1511.	7.3	477
4	Postâ€treatmentâ€Free Solutionâ€Processed Nonâ€stoichiometric NiO_x Nanoparticles for Efficient Holeâ€Transport Layers of Organic Optoelectronic Devices. Advanced Materials, 2015, 27, 2930-2937.	11.1	300
5	Recent Advances in Transition Metal Complexes and Lightâ€Management Engineering in Organic Optoelectronic Devices. Advanced Materials, 2014, 26, 5368-5399.	11.1	266
6	Optical and electrical properties of efficiency enhanced polymer solar cells with Au nanoparticles in a PEDOTâ€“PSS layer. Journal of Materials Chemistry, 2011, 21, 16349.	6.7	259
7	A Smooth CH₃NH₃PbI₃ Film via a New Approach for Forming the PbI₂ Nanostructure Together with Strategically High CH₃NH₃I Concentration for High Efficient Planarâ€Heterojunction Solar Cells. Advanced Energy Materials, 2015, 5, 1501354.	10.2	228
8	Optical and electrical effects of gold nanoparticles in the active layer of polymer solar cells. Journal of Materials Chemistry, 2012, 22, 1206-1211.	6.7	222
9	Highly Efficient Ternaryâ€Blend Polymer Solar Cells Enabled by a Nonfullerene Acceptor and Two Polymer Donors with a Broad Composition Tolerance. Advanced Materials, 2017, 29, 1704271.	11.1	221
10	Alkyl Sideâ€Chain Engineering in Wideâ€Bandgap Copolymers Leading to Power Conversion Efficiencies over 10%. Advanced Materials, 2017, 29, 1604251.	11.1	213
11	Perovskite Photovoltaics: The Significant Role of Ligands in Film Formation, Passivation, and Stability. Advanced Materials, 2019, 31, e1805702.	11.1	192
12	Effects of Selfâ€Assembled Monolayer Modification of Nickel Oxide Nanoparticles Layer on the Performance and Application of Inverted Perovskite Solar Cells. ChemSusChem, 2017, 10, 3794-3803.	3.6	185
13	Improving the stability and performance of perovskite solar cells via off-the-shelf post-device ligand treatment. Energy and Environmental Science, 2018, 11, 2253-2262.	15.6	181
14	Toward All Roomâ€Temperature, Solutionâ€Processed, Highâ€Performance Planar Perovskite Solar Cells: A New Scheme of Pyridineâ€Promoted Perovskite Formation. Advanced Materials, 2017, 29, 1604695.	11.1	178
15	Highly Intensified Surface Enhanced Raman Scattering by Using Monolayer Graphene as the Nanospacer of Metal Filmâ€“Metal Nanoparticle Coupling System. Advanced Functional Materials, 2014, 24, 3114-3122.	7.8	171
16	Highâ€Performance Blue Perovskite Lightâ€Emitting Diodes Enabled by Efficient Energy Transfer between Coupled Quasiâ€2D Perovskite Layers. Advanced Materials, 2021, 33, e2005570.	11.1	171
17	Biodegradable Materials and Green Processing for Green Electronics. Advanced Materials, 2020, 32, e2001591.	11.1	168
18	Surface Plasmon and Scatteringâ€Enhanced Lowâ€Bandgap Polymer Solar Cell by a Metal Grating Back Electrode. Advanced Energy Materials, 2012, 2, 1203-1207.	10.2	160

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19	Waterâ€Soluble Triazolium Ionicâ€Liquidâ€Induced Surface Selfâ€Assembly to Enhance the Stability and Efficiency of Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1900417.	7.8	145
20	Plasmonic Electrically Functionalized TiO₂ for Highâ€Performance Organic Solar Cells. Advanced Functional Materials, 2013, 23, 4255-4261.	7.8	138
21	Locally Welded Silver Nanoâ€Network Transparent Electrodes with High Operational Stability by a Simple Alcoholâ€Based Chemical Approach. Advanced Functional Materials, 2015, 25, 4211-4218.	7.8	131
22	Room-Temperature Solution-Processed NiO_x:PbI₂ Nanocomposite Structures for Realizing High-Performance Perovskite Photodetectors. ACS Nano, 2016, 10, 6808-6815.	7.3	122
23	Selective Growth and Integration of Silver Nanoparticles on Silver Nanowires at Room Conditions for Transparent Nano-Network Electrode. ACS Nano, 2014, 8, 10980-10987.	7.3	119
24	Efficient and Stable Red Perovskite Lightâ€Emitting Diodes with Operational Stability >300 h. Advanced Materials, 2021, 33, e2008820.	11.1	119
25	Highâ€Quality Cuboid CH₃NH₃PbI₃ Single Crystals for High Performance Xâ€Ray and Photon Detectors. Advanced Functional Materials, 2019, 29, 1806984.	7.8	115
26	Strategic Synthesis of Ultrasmall NiCo₂O₄ NPs as Hole Transport Layer for Highly Efficient Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1702722.	10.2	112
27	Polyhedral Oligomeric Silsesquioxane Enhances the Brightness of Perovskite Nanocrystal-Based Green Light-Emitting Devices. Journal of Physical Chemistry Letters, 2016, 7, 4398-4404.	2.1	105
28	Solutionâ€Processed Metal Oxide Nanocrystals as Carrier Transport Layers in Organic and Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1804660.	7.8	105
29	Novel Direct Nanopatterning Approach to Fabricate Periodically Nanostructured Perovskite for Optoelectronic Applications. Advanced Functional Materials, 2017, 27, 1606525.	7.8	101
30	Exploring the Way To Approach the Efficiency Limit of Perovskite Solar Cells by Drift-Diffusion Model. ACS Photonics, 2017, 4, 934-942.	3.2	98
31	Lending Triarylphosphine Oxide to Phenanthroline: a Facile Approach to Highâ€Performance Organic Smallâ€Molecule Cathode Interfacial Material for Organic Photovoltaics utilizing Airâ€Stable Cathodes. Advanced Functional Materials, 2014, 24, 6540-6547.	7.8	96
32	Enhanced charge extraction in organic solar cells through electron accumulation effects induced by metal nanoparticles. Energy and Environmental Science, 2013, 6, 3372.	15.6	95
33	All-Perovskite Emission Architecture for White Light-Emitting Diodes. ACS Nano, 2018, 12, 10486-10492.	7.3	92
34	Hole Transport Bilayer Structure for Quasiâ€2D Perovskite Based Blue Lightâ€Emitting Diodes with High Brightness and Good Spectral Stability. Advanced Functional Materials, 2019, 29, 1905339.	7.8	92
35	Strategies Toward Efficient Blue Perovskite Lightâ€Emitting Diodes. Advanced Functional Materials, 2021, 31, 2100516.	7.8	92
36	Al-TiO₂ Composite-Modified Single-Layer Graphene as an Efficient Transparent Cathode for Organic Solar Cells. ACS Nano, 2013, 7, 1740-1747.	7.3	90

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37	High Phase Stability in CsPbI₃ Enabled by Pbâ€“I Octahedra Anchors for Efficient Inorganic Perovskite Photovoltaics. Advanced Materials, 2020, 32, e2000186.	11.1	90
38	Room-temperature solution-processed molybdenum oxide as a hole transport layer with Ag nanoparticles for highly efficient inverted organic solar cells. Journal of Materials Chemistry A, 2013, 1, 6614.	5.2	89
39	Simultaneous Low-Order Phase Suppression and Defect Passivation for Efficient and Stable Blue Light-Emitting Diodes. ACS Energy Letters, 2020, 5, 2569-2579.	8.8	89
40	Lowâ€Bandgap Organic Bulkâ€Heterojunction Enabled Efficient and Flexible Perovskite Solar Cells. Advanced Materials, 2021, 33, e2105539.	11.1	89
41	Organicâ€“Inorganic Perovskite Lightâ€Emitting Electrochemical Cells with a Large Capacitance. Advanced Functional Materials, 2015, 25, 7226-7232.	7.8	87
42	Buried Interface Modification in Perovskite Solar Cells: A Materials Perspective. Advanced Energy Materials, 2022, 12, .	10.2	87
43	Controllable Crystallization of CH₃NH₃Sn_{0.25}Pb_{0.75}I₃ Perovskites for Hysteresisâ€Free Solar Cells with Efficiency Reaching 15.2%. Advanced Functional Materials, 2017, 27, 1605469.	7.8	84
44	Room-temperature solution-processed and metal oxide-free nano-composite for the flexible transparent bottom electrode of perovskite solar cells. Nanoscale, 2016, 8, 5946-5953.	2.8	83
45	Quantifying Efficiency Loss of Perovskite Solar Cells by a Modified Detailed Balance Model. Advanced Energy Materials, 2018, 8, 1701586.	10.2	82
46	Recent Advances in Organic Photovoltaics: Device Structure and Optical Engineering Optimization on the Nanoscale. Small, 2016, 12, 1547-1571.	5.2	77
47	High Efficiency Organic Solar Cells Achieved by the Simultaneous Plasmonâ€Optical and Plasmonâ€Electrical Effects from Plasmonic Asymmetric Modes of Gold Nanostars. Small, 2016, 12, 5200-5207.	5.2	73
48	Emerging Novel Metal Electrodes for Photovoltaic Applications. Small, 2018, 14, e1703140.	5.2	73
49	Thick TiO₂-Based Top Electron Transport Layer on Perovskite for Highly Efficient and Stable Solar Cells. ACS Energy Letters, 2018, 3, 2891-2898.	8.8	71
50	Lowâ€Bandgap Methylammoniumâ€Rubidium Cation Snâ€Rich Perovskites for Efficient Ultravioletâ€“Visibleâ€“Near Infrared Photodetectors. Advanced Functional Materials, 2018, 28, 1706068.	7.8	70
51	Multifunctional Synthesis Approach of In:CuCrO₂ Nanoparticles for Hole Transport Layer in Highâ€Performance Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1902600.	7.8	70
52	Solution-Processed Metal Oxides as Efficient Carrier Transport Layers for Organic Photovoltaics. Small, 2016, 12, 416-431.	5.2	67
53	Highâ€Performance Organic Solar Cells with Broadband Absorption Enhancement and Reliable Reproducibility Enabled by Collective Plasmonic Effects. Advanced Optical Materials, 2015, 3, 1220-1231.	3.6	66
54	Evolution of Diffusion Length and Trap State Induced by Chloride in Perovskite Solar Cell. Journal of Physical Chemistry C, 2016, 120, 21248-21253.	1.5	64

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55	Angular response of thin-film organic solar cells with periodic metal back nanostrips. Optics Letters, 2011, 36, 478.	1.7	62
56	Breaking the Space Charge Limit in Organic Solar Cells by a Novel Plasmonic-Electrical Concept. Scientific Reports, 2014, 4, 6236.	1.6	62
57	High Performance Flexible Transparent Electrode via Oneâ€Step Multifunctional Treatment for Ag Nanonetwork Composites Semiâ€Embedded in Lowâ€Temperatureâ€Processed Substrate for Highly Performed Organic Photovoltaics. Advanced Energy Materials, 2020, 10, 1903919.	10.2	58
58	How far does the defect tolerance of lead-halide perovskites range? The example of Bi impurities introducing efficient recombination centers. Journal of Materials Chemistry A, 2019, 7, 23838-23853.	5.2	57
59	Transition metal oxides as hole-transporting materials in organic semiconductor and hybrid perovskite based solar cells. Science China Chemistry, 2017, 60, 472-489.	4.2	52
60	Efficient CsPbBr₃ Nanoplatelet-Based Blue Light-Emitting Diodes Enabled by Engineered Surface Ligands. ACS Energy Letters, 2022, 7, 1137-1145.	8.8	52
61	The mechanism of universal green antisolvents for intermediate phase controlled high-efficiency formamidinium-based perovskite solar cells. Materials Horizons, 2020, 7, 934-942.	6.4	51
62	Tailoring the Interface in FAPbI₃ Planar Perovskite Solar Cells by Imidazoleâ€Grapheneâ€Quantumâ€Dots. Advanced Functional Materials, 2021, 31, 2101438.	7.8	51
63	Semitransparent organic solar cells with hybrid monolayer graphene/metal grid as top electrodes. Applied Physics Letters, 2013, 102, 113303.	1.5	49
64	Plasmon-Electrical Effects on Organic Solar Cells by Incorporation of Metal Nanostructures. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 1-9.	1.9	49
65	Polarization-independent efficiency enhancement of organic solar cells by using 3-dimensional plasmonic electrode. Applied Physics Letters, 2013, 102, 153304.	1.5	48
66	Room temperature formation of organicâ€“inorganic lead halide perovskites: design of nanostructured and highly reactive intermediates. Journal of Materials Chemistry A, 2017, 5, 3599-3608.	5.2	48
67	Operational and Spectral Stability of Perovskite Light-Emitting Diodes. ACS Energy Letters, 2021, 6, 3114-3131.	8.8	46
68	The emerging multiple metal nanostructures for enhancing the light trapping of thin film organic photovoltaic cells. Chemical Communications, 2014, 50, 11984-11993.	2.2	45
69	Over 1.1 eV Workfunction Tuning of Cesium Intercalated Metal Oxides for Functioning as Both Electron and Hole Transport Layers in Organic Optoelectronic Devices. Advanced Functional Materials, 2014, 24, 7348-7356.	7.8	44
70	A General Design Rule to Manipulate Photocarrier Transport Path in Solar Cells and Its Realization by the Plasmonic-Electrical Effect. Scientific Reports, 2015, 5, 8525.	1.6	44
71	Solutionâ€Processed Ternary Oxides as Carrier Transport/Injection Layers in Optoelectronics. Advanced Energy Materials, 2020, 10, 1900903.	10.2	44
72	Triple Interface Passivation Strategyâ€Enabled Efficient and Stable Inverted Perovskite Solar Cells. Small Methods, 2020, 4, 2000478.	4.6	44

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73	Polymer solar cells with gold nanoclusters decorated multi-layer graphene as transparent electrode. Applied Physics Letters, 2011, 99, 223302.	1.5	43
74	Efficient near-infrared light-emitting diodes based on organometallic halide perovskiteâ€“poly(2-ethyl-2-oxazoline) nanocomposite thin films. Nanoscale, 2016, 8, 19846-19852.	2.8	43
75	Crystallization, Properties, and Challenges of Lowâ€Bandgap Snâ€“Pb Binary Perovskites. Solar Rrl, 2018, 2, 1800146.	3.1	43
76	Efficient and Stable Allâ€Inorganic Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000408.	3.1	43
77	Efficient Interconnection in Perovskite Tandem Solar Cells. Small Methods, 2020, 4, 2000093.	4.6	43
78	Efficient hole transport layers with widely tunable work function for deep HOMO level organic solar cells. Journal of Materials Chemistry A, 2015, 3, 23955-23963.	5.2	40
79	Thermionic Emissionâ€“Based Interconnecting Layer Featuring Solvent Resistance for Monolithic Tandem Solar Cells with Solutionâ€Processed Perovskites. Advanced Energy Materials, 2018, 8, 1801954.	10.2	40
80	Achieving High-Quality Snâ€“Pb Perovskite Films on Complementary Metal-Oxide-Semiconductor-Compatible Metal/Silicon Substrates for Efficient Imaging Array. ACS Nano, 2019, 13, 11800-11808.	7.3	40
81	Selfâ€Assembled Quasiâ€3D Nanocomposite: A Novel pâ€Type Hole Transport Layer for High Performance Inverted Organic Solar Cells. Advanced Functional Materials, 2018, 28, 1706403.	7.8	39
82	A General Method: Designing a Hypocrystalline Hydroxide Intermediate to Achieve Ultrasmall and Wellâ€Dispersed Ternary Metal Oxide for Efficient Photovoltaic Devices. Advanced Functional Materials, 2019, 29, 1904684.	7.8	39
83	Photovoltaic Mode Ultraviolet Organic Photodetectors with High On/Off Ratio and Fast Response. Advanced Optical Materials, 2014, 2, 1082-1089.	3.6	37
84	A New Interconnecting Layer of Metal Oxide/Dipole Layer/Metal Oxide for Efficient Tandem Organic Solar Cells. Advanced Energy Materials, 2015, 5, 1500631.	10.2	37
85	Highly efficient planar perovskite solar cells achieved by simultaneous defect engineering and formation kinetic control. Journal of Materials Chemistry A, 2018, 6, 23865-23874.	5.2	37
86	Efficient and Rigorous Modeling of Light Emission in Planar Multilayer Organic Light-Emitting Diodes. Journal of Display Technology, 2007, 3, 110-117.	1.3	36
87	Transient Photovoltage Measurements on Perovskite Solar Cells with Varied Defect Concentrations and Inhomogeneous Recombination Rates. Small Methods, 2020, 4, 2000290.	4.6	36
88	A low temperature gradual annealing scheme for achieving high performance perovskite solar cells with no hysteresis. Journal of Materials Chemistry A, 2015, 3, 14424-14430.	5.2	34
89	Device Physics of the Carrier Transporting Layer in Planar Perovskite Solar Cells. Advanced Optical Materials, 2019, 7, 1900407.	3.6	34
90	High-Performance Blue Quasi-2D Perovskite Light-Emitting Diodes via Balanced Carrier Confinement and Transfer. Nano-Micro Letters, 2022, 14, 66.	14.4	34

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91	Sequential Processing: Spontaneous Improvements in Film Quality and Interfacial Engineering for Efficient Perovskite Solar Cells. Solar Rrl, 2018, 2, 1800027.	3.1	33
92	Enhanced hole injection assisted by electric dipoles for efficient perovskite light-emitting diodes. Communications Materials, 2020, 1, .	2.9	33
93	In Situ Tin(II) Complex Antisolvent Process Featuring Simultaneous Quasiâ€Coreâ€“Shell Structure and Heterojunction for Improving Efficiency and Stability of Lowâ€Bandgap Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903013.	10.2	31
94	An efficacious multifunction codoping strategy on a room-temperature solution-processed hole transport layer for realizing high-performance perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 371-379.	5.2	30
95	A Switchable Interconnecting Layer for High Performance Tandem Organic Solar Cell. Advanced Energy Materials, 2017, 7, 1701164.	10.2	29
96	Uncovering the Electronâ€Phonon Interplay and Dynamical Energyâ€Dissipation Mechanisms of Hot Carriers in Hybrid Lead Halide Perovskites. Advanced Energy Materials, 2021, 11, 2003071.	10.2	28
97	Polarization Control by Using Anisotropic 3-D Chiral Structures. IEEE Transactions on Antennas and Propagation, 2016, 64, 4687-4694.	3.1	27
98	Defect Behaviors in Perovskite Light-Emitting Diodes. , 2021, 3, 1702-1728.		27
99	Electron-pinned defect dipoles in (Li, Al) co-doped ZnO ceramics with colossal dielectric permittivity. Journal of Materials Chemistry A, 2020, 8, 4764-4774.	5.2	26
100	Inorganic top electron transport layer for high performance inverted perovskite solar cells. EcoMat, 2021, 3, e12127.	6.8	26
101	Energy Regulation in White-Light-Emitting Diodes. ACS Energy Letters, 2022, 7, 2173-2188.	8.8	26
102	Critical Role of Functional Groups in Defect Passivation and Energy Band Modulation in Efficient and Stable Inverted Perovskite Solar Cells Exceeding 21% Efficiency. ACS Applied Materials & Interfaces, 2020, 12, 57165-57173.	4.0	24
103	Highly Efficient 1D/3D Ferroelectric Perovskite Solar Cell. Advanced Functional Materials, 2021, 31, 2100205.	7.8	24
104	Enhanced Silver Nanowire Composite Window Electrode Protected by Large Size Graphene Oxide Sheets for Perovskite Solar Cells. Nanomaterials, 2019, 9, 193.	1.9	23
105	Indium Tin Oxide Modified by Au and Vanadium Pentoxide as an Efficient Anode for Organic Light-Emitting Devices. IEEE Transactions on Electron Devices, 2008, 55, 2517-2520.	1.6	22
106	Improving efficiency roll-off in organic light emitting devices with a fluorescence-interlayer-phosphorescence emission architecture. Applied Physics Letters, 2009, 95, 133304.	1.5	22
107	Synergic Effects of Randomly Aligned SWCNT Mesh and Selfâ€Assembled Molecule Layer for Highâ€Performance, Lowâ€Bandgap, Polymer Solar Cells with Fast Charge Extraction. Advanced Materials Interfaces, 2015, 2, 1500324.	1.9	22
108	Characterization, modeling, and analysis of organic light-emitting diodes with different structures. IEEE Transactions on Power Electronics, 2016, 31, 581-592.	5.4	21

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109	Recent progress of interconnecting layer for tandem organic solar cells. Science China Chemistry, 2017, 60, 460-471.	4.2	21
110	Magnetic field modulated exciton generation in organic semiconductors: An intermolecular quantum correlated effect. Physical Review B, 2010, 82, .	1.1	20
111	Establishing Multifunctional Interface Layer of Perovskite Ligand Modified Lead Sulfide Quantum Dots for Improving the Performance and Stability of Perovskite Solar Cells. Small, 2020, 16, e2002628.	5.2	20
112	Multifunctional Ionâ€Lock Interface Layer Achieved by Solidâ€“Solid Contact Approach for Stabilizing Perovskite Solar Cells. Advanced Functional Materials, 2022, 32, .	7.8	20
113	1â€Chloronaphthaleneâ€Induced Donor/Acceptor Vertical Distribution and Carrier Dynamics Changes in Nonfullerene Organic Solar Cells and the Governed Mechanism. Small Methods, 2022, 6, e2101475.	4.6	19
114	Exciton delocalization incorporated drift-diffusion model for bulk-heterojunction organic solar cells. Journal of Applied Physics, 2016, 120, .	1.1	18
115	Antioxidation and Energy-Level Alignment for Improving Efficiency and Stability of Hole Transport Layer-Free and Methylammonium-Free Tinâ€“Lead Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 45059-45067.	4.0	18
116	Smooth CH₃NH₃PbI₃from controlled solidâ€“gas reaction for photovoltaic applications. RSC Advances, 2015, 5, 73760-73766.	1.7	17
117	The effects of interfacial recombination and injection barrier on the electrical characteristics of perovskite solar cells. AIP Advances, 2018, 8, .	0.6	17
118	Soldering Grain Boundaries Yields Inverted Perovskite Solar Cells with Enhanced Openâ€Circuit Voltages. Advanced Materials Interfaces, 2019, 6, 1900474.	1.9	17
119	Efficient Semiâ€Transparent Organic Solar Cells with High Color Rendering Index Enabled by Selfâ€Assembled and Knitted AgNPs/MWCNTs Transparent Top Electrode via Solution Process. Advanced Optical Materials, 2021, 9, 2002108.	3.6	16
120	Doubleâ€Side Crystallization Tuning to Achieve over 1ÂÂµm Thick and Wellâ€Aligned Blockâ€Like Narrowâ€Bandgap Perovskites for Highâ€Efficiency Nearâ€Infrared Photodetectors. Advanced Functional Materials, 2021, 31, 2010532.	7.8	16
121	In Situ Growth Mechanism for Highâ€Quality Hybrid Perovskite Singleâ€Crystal Thin Films with High Area to Thickness Ratio: Looking for the Sweet Spot. Advanced Science, 2022, 9, e2104788.	5.6	16
122	Electron Delocalization in CsPbI₃ Quantum Dots Enables Efficient Lightâ€Emitting Diodes with Improved Efficiency Rollâ€Off. Advanced Optical Materials, 2022, 10, .	3.6	16
123	Capacitanceâ€“voltage characteristics of perovskite light-emitting diodes: Modeling and implementing on the analysis of carrier behaviors. Applied Physics Letters, 2022, 120, .	1.5	16
124	The roles of metallic rectangular-grating and planar anodes in the photocarrier generation and transport of organic solar cells. Applied Physics Letters, 2012, 101, .	1.5	15
125	High-Quality MAPbBr₃ Cuboid Film with Promising Optoelectronic Properties Prepared by a Hot Methylamine Precursor Approach. ACS Applied Materials & Interfaces, 2020, 12, 24498-24504.	4.0	14
126	Selfâ€Polymerization of Monomer and Induced Interactions with Perovskite for Highly Performed and Stable Perovskite Solar Cells. Advanced Functional Materials, 2022, 32, 2105290.	7.8	14

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127	Recent Progress on Emerging Transparent Metallic Electrodes for Flexible Organic and Perovskite Photovoltaics. Solar Rrl, 2022, 6, .	3.1	14
128	Electro-absorptive properties of interdiffused InGaAsP/InP quantum wells. Journal of Applied Physics, 1997, 82, 3861-3869.	1.1	13
129	Efficient Gradient Potential Top Electron Transport Structures Achieved by Combining an Oxide Family for Inverted Perovskite Solar Cells with High Efficiency and Stability. ACS Applied Materials & Interfaces, 2021, 13, 27179-27187.	4.0	13
130	Improving polymer solar cell performances by manipulating the self-organization of polymer. Applied Physics Letters, 2011, 98, .	1.5	12
131	Metallated conjugation in small-sized-molecular donors for solution-processed organic solar cells. Science China Chemistry, 2015, 58, 347-356.	4.2	12
132	Recent Developments in Organic Tandem Solar Cells toward High Efficiency. Advanced Energy and Sustainability Research, 2021, 2, 2000050.	2.8	12
133	Highâ€Performance Semitransparent Organic Solar Cells Enabled by Improved Charge Transport and Optical Engineering of Ternary Blend Active Layer. Solar Rrl, 2022, 6, 2100785.	3.1	12
134	Broadband near-field enhancement in the macro-periodic and micro-random structure with a hybridized excitation of propagating Bloch-plasmonic and localized surface-plasmonic modes. Nanoscale, 2015, 7, 16798-16804.	2.8	11
135	Observing abnormally large group velocity at the plasmonic band edge via a universal eigenvalue analysis. Optics Letters, 2014, 39, 158.	1.7	10
136	Nanostructures: A Smooth CH₃NH₃PbI₃ Film via a New Approach for Forming the PbI₂ Nanostructure Together with Strategically High CH₃NH₃I Concentration for High Efficient Planarâ€Heterojunction Solar Cells (Adv. Energy Mater. 23/2015). Advanced Energy Materials, 2015, 5, .	10.2	10
137	Experimental and Theoretical Investigation of Macro-Periodic and Micro-Random Nanostructures with Simultaneously Spatial Translational Symmetry and Long-Range Order Breaking. Scientific Reports, 2015, 5, 7876.	1.6	10
138	Hybrid 3D Nanostructure-Based Hole Transport Layer for Highly Efficient Inverted Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 16611-16619.	4.0	10
139	Stability of electroluminescent perovskite quantum dots lightâ€emitting diode. Nano Select, 2022, 3, 505-530.	1.9	10
140	Twinning mediated growth of ZnSe tri- and bi-crystal nanobelts with single crystalline wurtzite nanobelts as building blocks. CrystEngComm, 2010, 12, 150-158.	1.3	9
141	Evaporationâ€Free Organic Solar Cells with High Efficiency Enabled by Dry and Nonimmersive Sintering Strategy. Advanced Functional Materials, 2021, 31, 2010764.	7.8	8
142	Polarity continuation and frustration in ZnSe nanospirals. Scientific Reports, 2014, 4, 7447.	1.6	7
143	Realizing the ultimate goal of fully solution-processed organic solar cells: a compatible self-sintering method to achieve silver back electrode. Journal of Materials Chemistry A, 2020, 8, 6083-6091.	5.2	7
144	Highly efficient and tunable fluorescence of a nanofluorophore in silica/metal dual shells with plasmonic resonance. Journal of Applied Physics, 2008, 103, .	1.1	5

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145	Largely extended light-emission shift of ZnSe nanostructures with temperature. Applied Optics, 2011, 50, G37.	2.1	5
146	Modeling and Analysis for Modulation of Light-Conversion Materials in Visible Light Communication. IEEE Photonics Journal, 2019, 11, 1-13.	1.0	5
147	Perovskite Lightâ€Emitting Diodes: Highâ€Performance Blue Perovskite Lightâ€Emitting Diodes Enabled by Efficient Energy Transfer between Coupled Quasiâ€2D Perovskite Layers (Adv. Mater. 1/2021). Advanced Materials, 2021, 33, 2170006.	11.1	5
148	Observing and Understanding the Corrosion of Silver Nanowire Electrode by Precursor Reagents and MAPbI₃ Film in Different Environmental Conditions. Advanced Materials Interfaces, 2021, 8, 2001669.	1.9	5
149	ZnO Nanorods on In-Situ Synthesized ZnSe Grains. Journal of Nanoscience and Nanotechnology, 2006, 6, 802-806.	0.9	4
150	The Electroluminescent Decay Mechanism of Rare-Earth Ions in OLEDs Based on a Terbium Complex. IEEE Photonics Technology Letters, 2007, 19, 1178-1180.	1.3	4
151	Organic Solar Cells: High Efficiency Organic Solar Cells Achieved by the Simultaneous Plasmonâ€Optical and Plasmonâ€Electrical Effects from Plasmonic Asymmetric Modes of Gold Nanostars (Small 37/2016). Small, 2016, 12, 5102-5102.	5.2	4
152	Perovskite Films: Toward All Roomâ€Temperature, Solutionâ€Processed, Highâ€Performance Planar Perovskite Solar Cells: A New Scheme of Pyridineâ€Promoted Perovskite Formation (Adv. Mater. 13/2017). Advanced Materials, 2017, 29, .	11.1	4
153	Real-Time Color-Tunable Electroluminescence From Stacked Organic LEDs Using Independently Addressable Middle Electrode. IEEE Photonics Technology Letters, 2008, 20, 1154-1156.	1.3	3
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155	Organic Solar Cells: A New Interconnecting Layer of Metal Oxide/Dipole Layer/Metal Oxide for Efficient Tandem Organic Solar Cells (Adv. Energy Mater. 17/2015). Advanced Energy Materials, 2015, 5, n/a-n/a.	10.2	3
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