## Fullerene derivative anchored SnO<sub>2</sub> for hig cells

Energy and Environmental Science 11, 3463-3471 DOI: 10.1039/c8ee02172d

Citation Report

#	Article	IF	CITATIONS
1	Fullerene Derivative-Modified SnO <sub>2</sub> Electron Transport Layer for Highly Efficient Perovskite Solar Cells with Efficiency over 21%. ACS Applied Materials & Interfaces, 2019, 11, 33825-33834.	4.0	73
2	A crystal-growth boundary-fusion strategy to prepare high-quality MAPbI3 films for excellent Vis-NIR photodetectors. Nano Energy, 2019, 64, 103914.	8.2	30
3	Beneficial Role of Organolead Halide Perovskite CH <sub>3</sub> NH <sub>3</sub> Pbl <sub>3</sub> /SnO <sub>2</sub> Interface: Theoretical and Experimental Study. Advanced Materials Interfaces, 2019, 6, 1900400.	1.9	22
4	Sulfonyl-based non-fullerene electron acceptor-assisted grain boundary passivation for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 19881-19888.	5.2	28
5	Recent Progress in Highâ€efficiency Planarâ€structure Perovskite Solar Cells. Energy and Environmental Materials, 2019, 2, 93-106.	7.3	45
6	Fully low-temperature processed carbon-based perovskite solar cells using thermally evaporated cadmium sulfide as efficient electron transport layer. Organic Electronics, 2019, 74, 152-160.	1.4	14
7	A Simple Way to Simultaneously Release the Interface Stress and Realize the Inner Encapsulation for Highly Efficient and Stable Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1905336.	7.8	96
8	Fine Multiâ€Phase Alignments in 2D Perovskite Solar Cells with Efficiency over 17% via Slow Postâ€Annealing. Advanced Materials, 2019, 31, e1903889.	11.1	178
9	Insights into Fullerene Passivation of SnO <sub>2</sub> Electron Transport Layers in Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1905883.	7.8	124
10	Zwitterion Nondetergent Sulfobetaine-Modified SnO <sub>2</sub> as an Efficient Electron Transport Layer for Inverted Organic Solar Cells. ACS Omega, 2019, 4, 19225-19237.	1.6	14
11	Highly Selective and Scalable Fullerene-Cation-Mediated Synthesis Accessing Cyclo[60]fullerenes with Five-Membered Carbon Ring and Their Application to Perovskite Solar Cells. Chemistry of Materials, 2019, 31, 8432-8439.	3.2	44
12	Highly efficient planar perovskite solar cells <i>via</i> acid-assisted surface passivation. Journal of Materials Chemistry A, 2019, 7, 22323-22331.	5.2	34
13	Highly efficient flexible MAPbI <sub>3</sub> solar cells with a fullerene derivative-modified SnO <sub>2</sub> layer as the electron transport layer. Journal of Materials Chemistry A, 2019, 7, 6659-6664.	5.2	77
14	Vapor Exchange Deposition of an Air-Stable Lead Iodide Adduct on 19% Efficient 1.8 cm <sup>2</sup> Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 2506-2514.	2.5	19
15	Highly Selective Synthesis of Tetrahydronaphthaleno[60]fullerenes via Fullerene-Cation-Mediated Intramolecular Cyclization. Journal of Organic Chemistry, 2019, 84, 16314-16322.	1.7	7
16	A sandwich-like electron transport layer to assist highly efficient planar perovskite solar cells. Nanoscale, 2019, 11, 21917-21926.	2.8	31
17	Progress of Surface Science Studies on ABX <sub>3</sub> â€Based Metal Halide Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1902726.	10.2	87
18	Interfacial Bridge Using a <i>cis</i> â€Fulleropyrrolidine for Efficient Planar Perovskite Solar Cells with Enhanced Stability. Small Methods, 2020, 4, 1900476.	4.6	65

#	Article	IF	Citations
	Ethyl acetate green antisolvent process for high-performance planar low-temperature SnO2-based		
19	peróvskite solar cells made in ambient air. Chemical Engineering Journal, 2020, 379, 122298.	6.6	95
20	Interconnected SnO <sub>2</sub> Nanocrystals Electron Transport Layer for Highly Efficient Flexible Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900229.	3.1	31
21	A Short Review on Interface Engineering of Perovskite Solar Cells: A Selfâ€Assembled Monolayer and Its Roles. Solar Rrl, 2020, 4, 1900251.	3.1	75
22	Additive Engineering for Efficient and Stable Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1902579.	10.2	477
23	The low temperature solution-processable SnO2 modified by Bi2O2S as an efficient electron transport layer for perovskite solar cells. Electrochimica Acta, 2020, 330, 135197.	2.6	25
24	Graphitic carbon nitride doped SnO <sub>2</sub> enabling efficient perovskite solar cells with PCEs exceeding 22%. Journal of Materials Chemistry A, 2020, 8, 2644-2653.	5.2	98
25	Improved Efficiency of Perovskite Solar Cells Using a Nitrogen-Doped Graphene-Oxide-Treated Tin Oxide Layer. ACS Applied Materials & Interfaces, 2020, 12, 2417-2423.	4.0	40
26	Molecular Aggregation of Naphthalene Diimide(NDI) Derivatives in Electron Transport Layers of Inverted Perovskite Solar Cells and Their Influence on the Device Performance. Chemistry - an Asian Journal, 2020, 15, 112-121.	1.7	20
27	Low-temperature solution-combustion-processed Zn-Doped Nb2O5 as an electron transport layer for efficient and stable perovskite solar cells. Journal of Power Sources, 2020, 448, 227419.	4.0	19
28	Passivated Metal Oxide n-Type Contacts for Efficient and Stable Organic Solar Cells. ACS Applied Energy Materials, 2020, 3, 1111-1118.	2.5	26
29	Boosting performance of perovskite solar cells with Graphene quantum dots decorated SnO2 electron transport layers. Applied Surface Science, 2020, 507, 145099.	3.1	66
30	TiO <sub>2</sub> /WO <sub>3</sub> Bilayer as Electron Transport Layer for Efficient Planar Perovskite Solar Cell with Efficiency Exceeding 20%. Advanced Materials Interfaces, 2020, 7, 1901406.	1.9	69
31	Selfâ€Assembled Monolayers as Interface Engineering Nanomaterials in Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 2002606.	10.2	156
32	Polymeric room-temperature molten salt as a multifunctional additive toward highly efficient and stable inverted planar perovskite solar cells. Energy and Environmental Science, 2020, 13, 5068-5079.	15.6	121
33	Compositional optimization of a 2D–3D heterojunction interface for 22.6% efficient and stable planar perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 25831-25841.	5.2	59
34	Applications of Selfâ€Assembled Monolayers for Perovskite Solar Cells Interface Engineering to Address Efficiency and Stability. Advanced Energy Materials, 2020, 10, 2002989.	10.2	117
35	A novel perylene diimide-based zwitterion as the cathode interlayer for high-performance perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 18117-18124.	5.2	31
36	Improvement of the interfacial contact between zinc oxide and a mixed cation perovskite using carbon nanotubes for ambient-air-processed perovskite solar cells. New Journal of Chemistry, 2020, 44, 19802-19811.	1.4	43

#	Article	IF	CITATIONS
37	Unravelling the origin of the photocarrier dynamics of fullerene-derivative passivation of SnO <sub>2</sub> electron transporters in perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 23607-23616.	5.2	30
38	NdCl <sub>3</sub> Dose as a Universal Approach for High-Efficiency Perovskite Solar Cells Based on Low-Temperature-Processed SnO <sub><i>x</i></sub> . ACS Applied Materials & Interfaces, 2020, 12, 46306-46316.	4.0	28
39	[(C 8 H 17 ) 4 N] 4 [SiW 12 O 40 ] (TASiWâ€12)â€Modified SnO 2 Electron Transport Layer for Efficient and Stable Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000406.	3.1	10
40	Modification Engineering in SnO <sub>2</sub> Electron Transport Layer toward Perovskite Solar Cells: Efficiency and Stability. Advanced Functional Materials, 2020, 30, 2004209.	7.8	98
41	Efficient Naphthalene Imide-Based Interface Engineering Materials for Enhancing Perovskite Photovoltaic Performance and Stability. ACS Applied Materials & Interfaces, 2020, 12, 42348-42356.	4.0	16
42	Vertical Phase Separated Cesium Fluoride Doping Organic Electron Transport Layer: A Facile and Efficient "Bridge―Linked Heterojunction for Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2001418.	7.8	44
43	Effect of Interfacial Layers on the Device Lifetime of Perovskite Solar Cells. Small Methods, 2020, 4, 2000065.	4.6	22
44	Improved performance of perovskite photodetectors with a hybrid planar-mixed heterojunction. Materials Research Express, 2020, 7, 066201.	0.8	4
45	Lewis acid/base approach for efficacious defect passivation in perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 12201-12225.	5.2	149
46	Functionalization of fullerene materials toward applications in perovskite solar cells. Materials Chemistry Frontiers, 2020, 4, 2256-2282.	3.2	91
47	Choline Chloride-Modified SnO <sub>2</sub> Achieving High Output Voltage in MAPbI <sub>3</sub> Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 3504-3511.	2.5	57
48	Interfacial engineering for organic and perovskite solar cells using molecular materials. Journal Physics D: Applied Physics, 2020, 53, 263001.	1.3	6
49	Synergistic Reinforcement of Builtâ€In Electric Fields for Highly Efficient and Stable Perovskite Photovoltaics. Advanced Functional Materials, 2020, 30, 1909755.	7.8	47
50	Understanding of perovskite crystal growth and film formation in scalable deposition processes. Chemical Society Reviews, 2020, 49, 1653-1687.	18.7	364
51	Influence of a UV-ozone treatment on amorphous SnO2 electron selective layers for highly efficient planar MAPbI3 perovskite solar cells. Journal of Materials Science and Technology, 2020, 59, 195-202.	5.6	28
52	Rapid preparation of ultra-fine and well-dispersed SnO2 nanoparticles via a double hydrolysis reaction for lithium storage. Nanoscale, 2020, 12, 15697-15705.	2.8	12
53	Potassium salt promoted regioselective three-component coupling synthesis of 1,4-asymmetrical [60]fullerene bisadducts with superior electron transport properties. Chemical Communications, 2020, 56, 9513-9516.	2.2	9
54	Inorganic material passivation of defects toward efficient perovskite solar cells. Science Bulletin, 2020, 65, 2022-2032.	4.3	36

#	Article	IF	Citations
55	Modifying Mesoporous TiO2 by Ammonium Sulfonate Boosts Performance of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 12696-12705.	4.0	32
57	Bird-nest structured ZnO/TiO2 as a direct Z-scheme photoanode with enhanced light harvesting and carriers kinetics for highly efficient and stable photoelectrochemical water splitting. Applied Catalysis B: Environmental, 2020, 267, 118599.	10.8	116
58	A Crossâ€Linked PCBM Interlayer for Efficient and UVâ€Stable Methylammoniumâ€Free Perovskite Solar Cells. Energy Technology, 2020, 8, 2000224.	1.8	9
59	In-Situ Electropolymerized Polyamines as Dopant-Free Hole-Transporting Materials for Efficient and Stable Inverted Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 5058-5066.	2.5	26
60	Graphdiyne: Bridging SnO <sub>2</sub> and Perovskite in Planar Solar Cells. Angewandte Chemie, 2020, 132, 11670-11679.	1.6	17
61	Graphdiyne: Bridging SnO <sub>2</sub> and Perovskite in Planar Solar Cells. Angewandte Chemie - International Edition, 2020, 59, 11573-11582.	7.2	171
62	The diverse passivation effects of fullerene derivative on hysteresis behavior for normal and inverted perovskite solar cells. Journal of Power Sources, 2020, 461, 228156.	4.0	4
63	Inorganic Electron Transport Materials in Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2008300.	7.8	105
64	Impact of PC71BM layer on the performance of perovskite solar cells prepared at high moisture conditions using a low temperature annealed ZnO thin film as the electron transport layer. Journal of Materials Science: Materials in Electronics, 2021, 32, 265-276.	1.1	2
65	Stabilizing TiO <sub>2</sub> /CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> heterostructure and enhancing interface trap passivation for efficient and stable perovskite solar cells. Journal of Materials Chemistry C, 2021, 9, 9982-9989.	2.7	3
66	Boosted charge extraction of NbO <sub><i>x</i></sub> -enveloped SnO <sub>2</sub> nanocrystals enables 24% efficient planar perovskite solar cells. Energy and Environmental Science, 2021, 14, 5074-5083.	15.6	98
67	Graphdiyne oxide doped SnO <sub>2</sub> electron transport layer for high performance perovskite solar cells. Materials Chemistry Frontiers, 2021, 5, 6913-6922.	3.2	7
68	The dual effect of "inorganic fullerene―{Mo <sub>132</sub> } doped with SnO <sub>2</sub> for efficient perovskite-based photodetectors. Materials Chemistry Frontiers, 2021, 5, 6931-6940.	3.2	5
69	Advances in SnO <sub>2</sub> -based perovskite solar cells: from preparation to photovoltaic applications. Journal of Materials Chemistry A, 2021, 9, 19554-19588.	5.2	88
70	Gourmet powder functionalization of SnO2 for high-performance perovskite solar cells made in air. Electrochimica Acta, 2021, 371, 137812.	2.6	16
71	Tin Oxide Electronâ€Selective Layers for Efficient, Stable, and Scalable Perovskite Solar Cells. Advanced Materials, 2021, 33, e2005504.	11.1	196
72	Efficient and Stable Perovskite Solar Cells Achieved by Using Bifunctional Interfacial Materials to Modify SnO <sub>2</sub> and MAPbI <sub>3–<i>x</i></sub> Cl <sub><i>x</i></sub> Simultaneously. ACS Applied Energy Materials, 2021, 4, 3794-3802.	2.5	10
73	Interfacial Engineering via Selfâ€Assembled Thiol Silane for High Efficiency and Stability Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100128.	3.1	24

#	Article	lF	CITATIONS
74	Perovskite solar cell with improved performance passivated by all inorganic perovskite quantum dots. Journal of Physics: Conference Series, 2021, 1885, 022019.	0.3	1
75	One-step direct oxidation of fullerene-fused alkoxy ethers to ketones for evaporable fullerene derivatives. Communications Chemistry, 2021, 4, .	2.0	12
76	Efficient and Stable Large-Area Perovskite Solar Cells with Inorganic Perovskite/Carbon Quantum Dot-Graded Heterojunction. Research, 2021, 2021, 9845067.	2.8	9
77	Hydrophilic Surface-Driven Crystalline Grain Growth of Perovskites on Metal Oxides. ACS Applied Energy Materials, 2021, 4, 6923-6932.	2.5	17
78	Designing conductive fullerenes ionene polymers as efficient cathode interlayer to improve inverted perovskite solar cells efficiency and stability. Chemical Engineering Journal, 2021, 415, 128816.	6.6	15
79	High Shunt Resistance SnO <sub>2</sub> â€₽bO Electron Transport Layer for Perovskite Solar Cells Used in Low Lighting Applications. Advanced Sustainable Systems, 2021, 5, 2100120.	2.7	36
80	Room-temperature sputtered-SnO2 modified anode toward efficient TiO2-based planar perovskite solar cells. Science China Technological Sciences, 2021, 64, 1995-2002.	2.0	6
81	Bioinspired molecules design for bilateral synergistic passivation in buried interfaces of planar perovskite solar cells. Nano Research, 2022, 15, 1069-1078.	5.8	52
82	Grain Size and Interface Modification via Cesium Carbonate Post-Treatment for Efficient SnO <sub>2</sub> -Based Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 7002-7011.	2.5	32
83	Interfacial defect passivation and stress release by multifunctional KPF6 modification for planar perovskite solar cells with enhanced efficiency and stability. Chemical Engineering Journal, 2021, 418, 129375.	6.6	157
84	Review on engineering two-dimensional nanomaterials for promoting efficiency and stability of perovskite solar cells. Journal of Energy Chemistry, 2022, 68, 154-175.	7.1	11
85	Ï€â€Conjugated Small Molecules Modified SnO <sub>2</sub> Layer for Perovskite Solar Cells with over 23% Efficiency. Advanced Energy Materials, 2021, 11, 2101416.	10.2	84
86	Mechanism of bifunctional p-amino benzenesulfonic acid modified interface in perovskite solar cells. Chemical Engineering Journal, 2021, 420, 129579.	6.6	44
87	Simultaneous Passivation of the SnO <sub>2</sub> /Perovskite Interface and Perovskite Absorber Layer in Perovskite Solar Cells Using KF Surface Treatment. ACS Applied Energy Materials, 2021, 4, 10921-10930.	2.5	35
88	Solution-processed amino acid modified SnO2 electron transport layer for carbon-based CsPbIBr2 perovskite solar cells. Materials Science in Semiconductor Processing, 2021, 133, 105964.	1.9	15
89	Interface modification by ethanolamine interfacial layer for efficient planar structure perovskite solar cells. Journal of Power Sources, 2021, 513, 230549.	4.0	11
90	Fullerenes in Photovoltaics. , 2021, , 1-38.		0
91	Two dimensional graphitic carbon nitride quantum dots modified perovskite solar cells and photodetectors with high performances. Journal of Power Sources, 2020, 451, 227825.	4.0	44

#	Article	IF	CITATIONS
92	Metal oxide charge transport layers in perovskite solar cells—optimising low temperature processing and improving the interfaces towards low temperature processed, efficient and stable devices. JPhys Energy, 2021, 3, 012004.	2.3	11
93	Designs from single junctions, heterojunctions to multijunctions for high-performance perovskite solar cells. Chemical Society Reviews, 2021, 50, 13090-13128.	18.7	91
94	Tin-based perovskite solar cells: Further improve the performance of the electron transport layer-free structure by device simulation. Solar Energy, 2021, 230, 345-354.	2.9	32
95	In Situ Perovskitoid Engineering at SnO <sub>2</sub> Interface toward Highly Efficient and Stable Formamidinium Lead Triiodide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2021, 12, 10567-10573.	2.1	18
96	Enhancing the performance of n-i-p perovskite solar cells by introducing hydroxyethylpiperazine ethane sulfonic acid for interfacial adjustment. Nanoscale, 2021, 14, 35-41.	2.8	18
97	3,5-Difluorophenylboronic acid-modified SnO2 as ETLs for perovskite solar cells: PCEÂ>Â22.3%, T82Â>Â3000Âh. Chemical Engineering Journal, 2022, 433, 133744.	6.6	22
98	A self-assembled hierarchical structure to keep the 3D crystal dimensionality in <i>n</i> -butylammonium cation-capped Pb–Sn perovskites. Journal of Materials Chemistry A, 2021, 9, 27541-27550.	5.2	5
99	Size-tunable MoS <sub>2</sub> nanosheets for controlling the crystal morphology and residual stress in sequentially deposited perovskite solar cells with over 22.5% efficiency. Journal of Materials Chemistry A, 2022, 10, 3605-3617.	5.2	15
100	Hydrogen-Iodide Bonding between Glycine and Perovskite Greatly Improve Moisture Stability for Binary PSCs. SSRN Electronic Journal, 0, , .	0.4	0
101	Progress and Challenges of SnO <sub>2</sub> Electron Transport Layer for Perovskite Solar Cells: A Critical Review. Solar Rrl, 2022, 6, .	3.1	44
102	Bifunctional Interfacial Regulation with 4â€(Trifluoromethyl) Benzoic Acid to Reduce the Photovoltage Deficit of MAPbI <sub>3</sub> â€Based Perovskite Solar Cells. ChemNanoMat, 2022, 8, .	1.5	2
103	Effects of potassium treatment on SnO2 electron transport layers for improvements of perovskite solar cells. Solar Energy, 2022, 233, 353-362.	2.9	18
104	Fullerene Derivative with Flexible Alkyl Chain for Efficient Tin-Based Perovskite Solar Cells. Nanomaterials, 2022, 12, 532.	1.9	17
105	Simultaneous Bottom-Up Double-Layer Synergistic Optimization by Multifunctional Fused-Ring Acceptor with Electron-Deficient Core for Stable Planar Perovskite Solar Cells with Approaching 24% Efficiency. SSRN Electronic Journal, 0, , .	0.4	0
106	Manipulating Ion Migration and Interfacial Carrier Dynamics via Amino Acid Treatment in Planar Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 15840-15848.	4.0	20
107	Manipulating Crystallization Kinetics in Highâ€Performance Bladeâ€Coated Perovskite Solar Cells via Cosolventâ€Assisted Phase Transition. Advanced Materials, 2022, 34, e2200276.	11.1	64
108	Reducing Energy Disorder in Perovskite Solar Cells by Chelation. Journal of the American Chemical Society, 2022, 144, 5400-5410.	6.6	72
109	Advances in SnO <sub>2</sub> for Efficient and Stable n–i–p Perovskite Solar Cells. Advanced Materials, 2022, 34, e2110438.	11.1	186

#	Article	IF	CITATIONS
110	Asymmetric organic diammonium salt buried in SnO2 layer enables fast carrier transfer and interfacial defects passivation for efficient perovskite solar cells. Chemical Engineering Journal, 2022, 442, 136291.	6.6	37
111	Targeted Molecular Design of Functionalized Fullerenes for Highâ€Performance and Stable Perovskite Solar Cells. Small Structures, 2022, 3, .	6.9	17
112	Effective Surface Passivation via Intermolecular Interactions for Highâ€Performance Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	10
113	Passivating buried interface with multifunctional novel ionic liquid containing simultaneously fluorinated anion and cation yielding stable perovskite solar cells over 23% efficiency. Journal of Energy Chemistry, 2022, 69, 659-666.	7.1	52
114	Modification of SnO2 electron transport Layer: Brilliant strategies to make perovskite solar cells stronger. Chemical Engineering Journal, 2022, 439, 135687.	6.6	40
115	Recent Progress of Critical Interface Engineering for Highly Efficient and Stable Perovskite Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	78
116	Discovery of Leadâ€Free Perovskites for Highâ€Performance Solar Cells via Machine Learning: Ultrabroadband Absorption, Low Radiative Combination, and Enhanced Thermal Conductivities. Advanced Science, 2022, 9, e2103648.	5.6	35
117	Managing interfacial properties of planar perovskite solar cells using Y3N@C80 endohedral metallofullerene. Science China Materials, 2022, 65, 2325-2334.	3.5	5
118	Electron transport layer assisted by nickel chloride hexahydrate for open-circuit voltage improvement in MAPbl <sub>3</sub> perovskite solar cells. RSC Advances, 2022, 12, 13820-13825.	1.7	0
119	Strategies for highâ€performance perovskite solar cells from materials, film engineering to carrier dynamics and photon management. InformaÄnÃ-Materiály, 2022, 4, .	8.5	27
120	Morphological and functional characterizations of SnO <sub>2</sub> electron extraction layer on transparent conductive oxides in lead-halide perovskite solar cells. Applied Physics Letters, 2022, 120, 191604.	1.5	1
121	Coâ€assembled Monolayers as Holeâ€Selective Contact for Highâ€Performance Inverted Perovskite Solar Cells with Optimized Recombination Loss and Longâ€Term Stability. Angewandte Chemie, 2022, 134, .	1.6	4
122	Complexation Engineering of Electron Transport Layers for Highâ€Performance Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	6
123	Coâ€assembled Monolayers as Holeâ€Selective Contact for Highâ€Performance Inverted Perovskite Solar Cells with Optimized Recombination Loss and Longâ€Term Stability. Angewandte Chemie - International Edition, 2022, 61, .	7.2	66
124	Simultaneous bottom-up double-layer synergistic optimization by multifunctional fused-ring acceptor with electron-deficient core for stable planar perovskite solar cells with approaching 24% efficiency. Nano Energy, 2022, 99, 107368.	8.2	10
125	Gadolinium-Doped Sno2 Electron Transfer Layer for Highly Efficient Planar Perovskite Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0
126	Progress toward understanding the fullerene-related chemical interactions in perovskite solar cells. Nano Research, 2022, 15, 7139-7153.	5.8	12
127	Tin oxide/reduced graphene oxide hybrid as a hole blocking layer for improving 2D/3D hetrostructured perovskite-based photovoltaics. Surfaces and Interfaces, 2022, 31, 102092.	1.5	5

#	Article	IF	CITATIONS
128	Non-Aqueous One-Pot SnO <sub>2</sub> Nanoparticle Inks and Their Use in Printable Perovskite Solar Cells. Chemistry of Materials, 2022, 34, 5535-5545.	3.2	7
129	Defects Passivation Strategy for Efficient and Stable Perovskite Solar Cells. Advanced Materials Interfaces, 2022, 9, .	1.9	13
130	A Smart Way to Prepare Solutionâ€Processed and Annealingâ€free PCBM Electron Transporting Layer for Perovskite Solar Cells. Advanced Sustainable Systems, 2022, 6, .	2.7	13
131	Robust Interfacial Modifier for Efficient Perovskite Solar Cells: Reconstruction of Energy Alignment at Buried Interface by Selfâ€Diffusion of Dopants. Advanced Functional Materials, 2022, 32, .	7.8	26
132	Hydrogen-iodide bonding between glycine and perovskite greatly improve moisture stability for binary PSCs. Organic Electronics, 2022, 108, 106573.	1.4	4
133	Synergistic bonding stabilized interface for perovskite solar cells with over 24% efficiency. Nano Energy, 2022, 100, 107518.	8.2	18
134	Optimal Solvents for Interfacial Solution Engineering of Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	6
135	Ultra-high moisture stability perovskite films, soaking in water over 360Âmin. Chemical Engineering Journal, 2022, 450, 138028.	6.6	5
137	PCBM as The Interlayer of SnO2/Perovskite for The High Performance and Stable Perovskite Solar Cells. , 0, 13, 135-139.		0
138	Multi-functional L-histidine self-assembled monolayers on SnO2 electron transport layer to boost photovoltaic performance of perovskite solar cells. Electrochimica Acta, 2022, 428, 140930.	2.6	5
139	Gadolinium-doped SnO2 electron transfer layer for highly efficient planar perovskite solar cells. Journal of Power Sources, 2022, 544, 231870.	4.0	17
140	Understanding the role of inorganic carrier transport layer materials and interfaces in emerging perovskite solar cells. Journal of Materials Chemistry C, 2022, 10, 15725-15780.	2.7	17
141	Fullerenes in Photovoltaics. , 2022, , 851-888.		0
142	Dual-layer synergetic optimization of high-efficiency planar perovskite solar cells using nitrogen-rich nitrogen carbide as an additive. Journal of Materials Chemistry A, 2022, 10, 21390-21400.	5.2	9
143	Interface engineering for achieving efficient and stable perovskite solar cells by Bphen-fullerene dimer. Chemical Engineering Journal, 2023, 452, 139412.	6.6	6
144	Graphene-based Nanocomposites for Electro-optic Devices. Current and Future Developments in Nanomaterials and Carbon Nanotubes, 2022, , 190-204.	0.1	0
145	Efficient and Stable Perovskite Solar Cells with a High Openâ€Circuit Voltage Over 1.2ÂV Achieved by a Dualâ€Side Passivation Layer. Advanced Materials, 2022, 34, .	11.1	20
146	Amidine thiourea as a multifunctional modifier of buried interface for effective perovskite solar cells with reduced lead leakage. Organic Electronics, 2022, 111, 106656.	1.4	5

#	Article	IF	CITATIONS
147	Defect passivation and electrical conductivity enhancement in perovskite solar cells using functionalized graphene quantum dots. Materials Futures, 2022, 1, 045101.	3.1	20
148	Grain Boundary and Buried Interface Suturing Enabled by Fullerene Derivatives for High-Performance Perovskite Solar Module. ACS Energy Letters, 2022, 7, 3958-3966.	8.8	19
149	Highâ€Performance Inverted Perovskite Solar Devices Enabled by a Polyfullerene Electron Transporting Material. Angewandte Chemie - International Edition, 2022, 61, .	7.2	13
150	Highâ€Performance Inverted Perovskite Solar Devices Enabled by a Polyfullerene Electron Transporting Material. Angewandte Chemie, 2022, 134, .	1.6	2
151	Molecular engineering of contact interfaces for high-performance perovskite solar cells. Nature Reviews Materials, 2023, 8, 89-108.	23.3	125
152	2-Fluoro-4-iodoaniline passivates the surface of perovskite films to enhance photovoltaic properties. Applied Surface Science, 2023, 612, 155787.	3.1	3
153	A Stable Aqueous SnO2 Nanoparticle Dispersion for Roll-to-Roll Fabrication of Flexible Perovskite Solar Cells. Coatings, 2022, 12, 1948.	1.2	2
155	Transition-metal-catalyzed synthesis of organophosphate-appended cyclobutanofullerenes from C60 and secondary propargylic phosphates. Tetrahedron Letters, 2023, 115, 154299.	0.7	1
156	Recent progress in perovskite solar cells: material science. Science China Chemistry, 2023, 66, 10-64.	4.2	53
157	Perylene Diimide Derivative Engineering for Covering Interfacial Defects in Indoor Perovskite Optoelectronics. Solar Rrl, 2023, 7, .	3.1	2
158	Surface Functionalization of Indium Tin Oxide Electrodes by Self-assembled Monolayers for Direct Assembly of Pre-synthesized SnO2 Nanocrystals as Electron Transport Layers. Electronic Materials Letters, 2023, 19, 267-277.	1.0	2
159	Synchronous amelioration of SnO2 surface aggregation and buried layer defects by sodium salts for high-efficiency and stable perovskite solar cells. Sustainable Energy and Fuels, 0, , .	2.5	1
160	Alkyl Chain Lengthâ€Dependent Amineâ€Induced Crystallization for Efficient Interface Passivation of Perovskite Solar Cells. Advanced Materials Interfaces, 2023, 10, .	1.9	3
161	Disentangling the effect of the hole-transporting layer, the bottom, and the top device on the fill factor in monolithic CIGSe-perovskite tandem solar cells by using spectroscopic and imaging tools. JPhys Energy, 2023, 5, 024014.	2.3	0
162	Simultaneous bottom-up double-layer synergistic engineering by multifunctional natural molecules for efficient and stable SnO2-based planar perovskite solar cells. Journal of Energy Chemistry, 2023, 80, 40-47.	7.1	4
163	High photoelectric conversion efficiency and stability of carbon-based perovskite solar cells based on sandwich-structured electronic layers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 666, 131326.	2.3	0
164	Lowâ€īemperature Processing Methods for Tin Oxide as Electron Transporting Layer in Scalable Perovskite Solar Cells. Solar Rrl, 2023, 7, .	3.1	1
165	Grapheneâ€Like Monoelemental 2D Materials for Perovskite Solar Cells. Advanced Energy Materials, 2023, 13, .	10.2	13

#	Article	IF	CITATIONS
166	Interfacial defect passivation by using diethyl phosphate salts for high-efficiency and stable perovskite solar cells. Journal of Materials Chemistry A, 2023, 11, 6556-6564.	5.2	6
167	Wearable perovskite solar cells by aligned liquid crystal elastomers. Nature Communications, 2023, 14,	5.8	22
168	Efficient and Stable Perovskite Solar Cells by Tailoring of Interfaces. Advanced Materials, 2023, 35, .	11.1	21
169	Chloroformamidine hydrochloride as a molecular linker towards efficient and stable perovskite solar cells. Journal of Materials Chemistry C, 2023, 11, 5039-5044.	2.7	3
170	Buried-in interface with two-terminal functional groups for perovskite-based photovoltaic solar cells. Advanced Composites and Hybrid Materials, 2023, 6, .	9.9	10
171	Foldable Holeâ€Transporting Materials for Merging Electronic States between Defective and Perfect Perovskite Sites. Advanced Materials, 2023, 35, .	11.1	12
172	Buried interface passivation strategies for high-performance perovskite solar cells. Journal of Materials Chemistry A, 2023, 11, 8573-8598.	5.2	10
173	Concise synthesis of low-cost fullerene derivatives as electron transport materials for efficient air-processed invert perovskite solar cells. Journal of Colloid and Interface Science, 2023, 642, 497-504.	5.0	1
174	SnO2:TiO2 hybrid nanocrystals as electron transport layer for high-efficiency and stable planar perovskite solar cells. Organic Electronics, 2023, 120, 106815.	1.4	3
178	Towards cost-efficient and stable perovskite solar cells and modules: utilization of self-assembled monolayers. Materials Chemistry Frontiers, 2023, 7, 3958-3985.	3.2	8
198	Challenges in the design and synthesis of self-assembling molecules as selective contacts in perovskite solar cells. Chemical Science, 0, , .	3.7	0