Tonggang Jiu

List of Publications by Year in Descending Order

59 papers	1,919 citations	22 h-index	43 g-index
61 ext. papers	2,254 ext. citations	8.9 avg, IF	4.93 L-index

#	Paper	IF	Citations
59	Graphdiyne-Based Materials in Solar Cells Applications **2022**, 287-314		
58	Growth of 2D passivation layer in FAPbI3 perovskite solar cells for high open-circuit voltage. *Nano Today*, **2022**, 42, 101357	17.9	4
57	Growth of 1D Nanorod Perovskite for Surface Passivation in FAPbI Perovskite Solar Cells. *Small*, **2021**, e2104100	11	7
56	Graphdiyne Oxide Modified NiOx for Enhanced Charge Extraction in Inverted Planar MAPbI3 Perovskite Solar Cells. *Chemical Research in Chinese Universities*, **2021**, 37, 1309	2.2	0
55	Control of the Surface Disorder by Ion-Exchange to Achieve High Open-Circuit Voltage in HC(NH) PbI Perovskite Solar Cell.. *Small Methods*, **2021**, 5, e2101079	12.8	3
54	Conjugated Polyelectrolyte Combined with Ionic Liquid as the Hole Transport Layer for Efficient Inverted Perovskite Solar Cells. *Journal of the Electrochemical Society*, **2021**, 168, 036503	3.9	0
53	Interfacial Carrier-Transfer Channel Optimization Based on Hydrogen Bonds for High-Performance Organic Solar Cells. *ACS Applied Energy Materials*, **2021**, 4, 3881-3890	6.1	2
52	Tris(pentafluorophenyl)borane-Modified P3CT-K as an Efficient Hole-Transport Layer for Inverted Planar MAPbI3 Perovskite Solar Cells. *Advanced Sustainable Systems*, **2021**, 5, 2100107	5.9	6
51	Improved interfacial property by small molecule ethanediamine for high performance inverted planar perovskite solar cells. *Journal of Energy Chemistry*, **2021**, 54, 467-474	12	5
50	Graphdiyne oxide doped SnO2 electron transport layer for high performance perovskite solar cells. *Materials Chemistry Frontiers*, **2021**, 5, 6913-6922	7.8	2
49	Solution-processed PbCdS nanocrystals as a novel hole transport material for inverted CH3NH3PbI3 perovskite solar cells. *Solar Energy*, **2021**, 216, 321-328	6.8	1
48	Non-planar tetrathiafulvalene derivative modified hole transporting layer for efficient organic solar cells with improved fill factor. *Solar Energy*, **2021**, 224, 883-888	6.8	1
47	Highly-improved performance of inverted planar perovskite solar cells by glucose modification. *Journal of Materials Chemistry C*, **2020**, 8, 5894-5903	7.1	10
46	Enhanced photocurrent in heterostructures formed between CHNHPbI perovskite films and graphdiyne. *Physical Chemistry Chemical Physics*, **2020**, 22, 6239-6246	3.6	6
45	Graphdiyne Derivative as Multifunctional Solid Additive in Binary Organic Solar Cells with 17.3% Efficiency and High Reproductivity. *Advanced Materials*, **2020**, 32, e1907604	24	245
44	Grain boundary passivation with triazine-graphdiyne to improve perovskite solar cell performance. *Science China Materials*, **2020**, 63, 2465-2476	7.1	17
43	The Possible Side Reaction in the Annealing Process of Perovskite Layers. *ACS Applied Materials & Interfaces*, **2020**, 12, 35043-35048	9.5	3

42	Simultaneous hole transport and defect passivation enabled by a dopant-free single polymer for efficient and stable perovskite solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 21036-21043	13	15
41	TTA as a potential hole transport layer for application in conventional polymer solar cells. *Journal of Energy Chemistry*, **2020**, 42, 210-216	12	8
40	Graphdiyne-Based Materials: Preparation and Application for Electrochemical Energy Storage. *Advanced Materials*, **2019**, 31, e1803202	24	68
39	Performance Enhancement of Conventional Polymer Solar Cells with TTF-py-Modified PEDOT:PSS Film as the Hole Transport Layer. *ACS Applied Energy Materials*, **2019**, 2, 6577-6583	6.1	7
38	Inverted MAPbI3 Perovskite Solar Cells with Graphdiyne Derivative-Incorporated Electron Transport Layers Exceeding 20% Efficiency. *Solar Rrl*, **2019**, 3, 1900241	7.1	26
37	Chemical modification: Toward solubility and processability of graphdiyne. *Nano Energy*, **2019**, 64, 103932	17.1	22
36	Graphdiyne Containing Atomically Precise N Atoms for Efficient Anchoring of Lithium Ion. *ACS Applied Materials & Interfaces*, **2019**, 11, 2608-2617	9.5	66
35	Graphdiyne-Doped P3CT-K as an Efficient Hole-Transport Layer for MAPbI Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 2626-2631	9.5	45
34	Highly efficient regular polymer solar cells based on Li-TFSI doping ZnO as electron-transporting interlayers. *Solar Energy*, **2018**, 169, 49-54	6.8	8
33	Improved electron transport in MAPbI3 perovskite solar cells based on dual doping graphdiyne. *Nano Energy*, **2018**, 46, 331-337	17.1	113
32	Solution prepared O-doped ZnS nanocrystals: Structure characterization, energy level engineering and interfacial application in polymer solar cells. *Solar Energy*, **2018**, 160, 353-359	6.8	6
31	Controllable Spatial Configuration on Cathode Interface for Enhanced Photovoltaic Performance and Device Stability. *ACS Applied Materials & Interfaces*, **2018**, 10, 17401-17408	9.5	10
30	Facile preparation and characterization of ZnCdS nanocrystals for interfacial applications in photovoltaic devices. *Journal of Colloid and Interface Science*, **2018**, 512, 353-360	9.3	22
29	The influence of ionic radius of interfacial molecule on device performances of polymer solar cells. *Solar Energy*, **2018**, 170, 906-912	6.8	3
28	Inverted CH3NH3PbI3 perovskite solar cells based on solution-processed V2O5 film combined with P3CT salt as hole transport layer. *Materials Today Energy*, **2018**, 9, 487-495	7	19
27	Highly Conjugated Three-Dimensional Covalent Organic Frameworks Based on Spirobifluorene for Perovskite Solar Cell Enhancement. *Journal of the American Chemical Society*, **2018**, 140, 10016-10024	16.4	111
26	Graphdiyne as a Host Active Material for Perovskite Solar Cell Application. *Nano Letters*, **2018**, 18, 6941-6947	12.7	84
25	Studies of Graphdiyne-ZnO Nanocomposite Material and Application in Polymer Solar Cells. *Solar Rrl*, **2018**, 2, 1800211	7.1	12

24	Triazine-graphdiyne: A new nitrogen-carbonous material and its application as an advanced rechargeable battery anode. *Carbon*, **2018**, 137, 442-450	10.4	52
23	Performance Enhancement of Inverted Perovskite Solar Cells Based on Smooth and Compact PCBM:SnO Electron Transport Layers. *ACS Applied Materials & Interfaces*, **2018**, 10, 20128-20135	9.5	29
22	Ternary CuZnS Nanocrystals: Synthesis, Characterization, and Interfacial Application in Perovskite Solar Cells. *Inorganic Chemistry*, **2018**, 57, 8375-8381	5.1	11
21	Synthesis of Chlorine-Substituted Graphdiyne and Applications for Lithium-Ion Storage. *Angewandte Chemie - International Edition*, **2017**, 56, 10740-10745	16.4	165
20	New method for the synthesis of a highly-conjugated acene material and its application in Perovskite solar cells. *Materials Chemistry Frontiers*, **2017**, 1, 2261-2264	7.8	6
19	Tetrathiafulvalene derivative as a new hole-transporting material for highly efficient perovskite solar cell. *Dyes and Pigments*, **2017**, 147, 113-119	4.6	30
18	Inverted polymer solar cells with enhanced fill factor by inserting the potassium stearate interfacial modification layer. *Applied Physics Letters*, **2016**, 108, 181602	3.4	14
17	Chlorobenzene vapor assistant annealing method for fabricating high quality perovskite films. *Organic Electronics*, **2016**, 34, 97-103	3.5	37
16	Polyelectrolyte based hole-transporting materials for high performance solution processed planar perovskite solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 15024-15029	13	83
15	Highly efficient electron transport obtained by doping PCBM with graphdiyne in planar-heterojunction perovskite solar cells. *Nano Letters*, **2015**, 15, 2756-62	11.5	286
14	Dithiol treatments enhancing the efficiency of hybrid solar cells based on PTB7 and CdSe nanorods. *Nano Research*, **2015**, 8, 3045-3053	10	5
13	High-performance inverted solar cells based on blend films of ZnO Naoparticles and TiO(2) nanorods as a cathode buffer layer. *ACS Applied Materials & Interfaces*, **2014**, 6, 4074-80	9.5	17
12	Preparation and characterization of MoO3 hole-injection layer for organic solar cell fabrication and optimization. *Solar Energy Materials and Solar Cells*, **2014**, 120, 603-609	6.4	44
11	Improving efficiency by hybrid TiO(2) nanorods with 1,10-phenanthroline as a cathode buffer layer for inverted organic solar cells. *ACS Applied Materials & Interfaces*, **2014**, 6, 739-44	9.5	29
10	Highly efficient inverted polymer solar cells using fullerene derivative modified TiO2 nanorods as the buffer layer. *RSC Advances*, **2014**, 4, 19529	3.7	13
9	Solvents induced ZnO nanoparticles aggregation associated with their interfacial effect on organic solar cells. *ACS Applied Materials & Interfaces*, **2014**, 6, 18172-9	9.5	31
8	Performance enhancement of inverted polymer solar cells with fullerene ester derivant-modified ZnO film as cathode buffer layer. *Solar Energy Materials and Solar Cells*, **2014**, 126, 36-41	6.4	27
7	Interface Modification of ZnO-Based Inverted PTB7:PC71BM Organic Solar Cells by Cesium Stearate and Simultaneous Enhancement of Device Parameters. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1331-1337	8.3	51

6	A Small-Molecule Zwitterionic Electrolyte without a Delocalized Unit as a Charge-Injection Layer for High-Performance PLEDs. *Angewandte Chemie*, **2013**, 125, 3501-3504	3.6	2
5	Molecular modeling of poly(p-phenylenevinylene): Synthesis and photophysical properties of oligomers. *Journal of Polymer Science Part A*, **2007**, 45, 911-924	2.5	15
4	Graphdiyne oxide modified nano CuO as inorganic hole transport layer for efficient and stable organic solar cells. *2D Materials*,	5.9	1
3	Interfacial Modification by Low-Temperature Anchoring Surface Uncoordinated Pb for Efficient FAPbI 3 Perovskite Solar Cells. *Advanced Sustainable Systems*,2100510	5.9	2
2	Graphdiyne oxide doping for aggregation control of hole-transport nanolayer in inverted perovskite solar cells. *Nano Research*,1	10	1
1	Graphdiyne oxide-accelerated charge carrier transfer and separation at the interface for efficient binary organic solar cells. *Science China Materials*,1	7.1	0