Junfeng Fang

List of Publications by Citations

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

122 papers	5,649 citations	35 h-index	73 g-index
127 ext. papers	6,750 ext. citations	10.8 avg, IF	5.94 L-index

#	Paper	IF	Citations
122	Efficient and stable large-area perovskite solar cells with inorganic charge extraction layers. *Science* , **2015**, 350, 944-8	33.3	1732
121	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
120	Conjugated zwitterionic polyelectrolyte as the charge injection layer for high-performance polymer light-emitting diodes. *Journal of the American Chemical Society*, **2011**, 133, 683-5	16.4	174
119	In-situ cross-linking strategy for efficient and operationally stable methylammoniun lead iodide solar cells. *Nature Communications*, **2018**, 9, 3806	17.4	159
118	Red-Carbon-Quantum-Dot-Doped SnO Composite with Enhanced Electron Mobility for Efficient and Stable Perovskite Solar Cells. *Advanced Materials*, **2020**, 32, e1906374	24	141
117	Naphthothiadiazole-Based Near-Infrared Emitter with a Photoluminescence Quantum Yield of 60% in Neat Film and External Quantum Efficiencies of up to 3.9% in Nondoped OLEDs. *Advanced Functional Materials*, **2017**, 27, 1606384	15.6	136
116	High-Performance Polymer Solar Cells with PCE of 10.42% via Al-Doped ZnO Cathode Interlayer. *Advanced Materials*, **2016**, 28, 7405-12	24	119
115	Identifying and alleviating electrochemical side-reactions in light-emitting electrochemical cells. *Journal of the American Chemical Society*, **2008**, 130, 4562-8	16.4	103
114	Efficient and Hysteresis-Free Perovskite Solar Cells Based on a Solution Processable Polar Fullerene Electron Transport Layer. *Advanced Energy Materials*, **2017**, 7, 1701144	21.8	97
113	Efficient Passivation with Lead Pyridine-2-Carboxylic for High-Performance and Stable Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1901852	21.8	95
112	Morphological Control for Highly Efficient Inverted Polymer Solar Cells Via the Backbone Design of Cathode Interlayer Materials. *Advanced Energy Materials*, **2014**, 4, 1400359	21.8	93
111	Constructing heterojunctions by surface sulfidation for efficient inverted perovskite solar cells.. *Science*, **2022**, 375, 434-437	33.3	90
110	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
109	Fullerene-Free Organic Solar Cells with Efficiency Over 12% Based on EDTAZnO Hybrid Cathode Interlayer. *Chemistry of Materials*, **2017**, 29, 4176-4180	9.6	78
108	The Main Progress of Perovskite Solar Cells in 2020-2021. *Nano-Micro Letters*, **2021**, 13, 152	19.5	78
107	Dual-Protection Strategy for High-Efficiency and Stable CsPbI2Br Inorganic Perovskite Solar Cells. *ACS Energy Letters*, **2020**, 5, 676-684	20.1	68
106	Recent Advance in Solution-Processed Organic Interlayers for High-Performance Planar Perovskite Solar Cells. *Advanced Science*, **2018**, 5, 1800159	13.6	64

105	Electron-Transport-Layer-Assisted Crystallization of Perovskite Films for High-Efficiency Planar Heterojunction Solar Cells. *Advanced Functional Materials*, **2018**, 28, 1706317	15.6	63
104	Dramatic Enhancement of Power Conversion Efficiency in Polymer Solar Cells by Conjugating Very Low Ratio of Triplet Iridium Complexes to PTB7. *Advanced Materials*, **2015**, 27, 3546-52	24	59
103	Improving Efficiency and Reproducibility of Perovskite Solar Cells through Aggregation Control in Polyelectrolytes Hole Transport Layer. *ACS Applied Materials & Interfaces*, **2017**, 9, 31357-31361	9.5	58
102	Inverted All-Inorganic CsPbI2Br Perovskite Solar Cells with Promoted Efficiency and Stability by Nickel Incorporation. *Chemistry of Materials*, **2019**, 31, 9032-9039	9.6	54
101	High performance polymer solar cells with a polar fullerene derivative as the cathode buffer layer. *Journal of Materials Chemistry A*, **2013**, 1, 12413	13	50
100	Spontaneous grain polymerization for efficient and stable perovskite solar cells. *Nano Energy*, **2019**, 58, 825-833	17.1	47
99	Regular Organic Solar Cells with Efficiency over 10% and Promoted Stability by Ligand- and Thermal Annealing-Free Al-Doped ZnO Cathode Interlayer. *Advanced Science*, **2017**, 4, 1700053	13.6	46
98	Donor�cceptor interface modification by zwitterionic conjugated polyelectrolytes in polymer photovoltaics. *Energy and Environmental Science*, **2013**, 6, 1589	35.4	46
97	Small Molecule Interlayers in Organic Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1702730	21.8	45
96	A Red Fluorescent Emitter with a Simultaneous Hybrid Local and Charge Transfer Excited State and Aggregation-Induced Emission for High-Efficiency, Low Efficiency Roll-Off OLEDs. *Advanced Optical Materials*, **2017**, 5, 1700145	8.1	39
95	Achieving over 21% efficiency in inverted perovskite solar cells by fluorinating a dopant-free hole transporting material. *Journal of Materials Chemistry A*, **2020**, 8, 6517-6523	13	39
94	On the Bias in Simulated ENSO SSTA Meridional Widths of CMIP3 Models. *Journal of Climate*, **2013**, 26, 3173-3186	4.4	39
93	Efficient methylammonium lead trihalide perovskite solar cells with chloroformamidinium chloride (Cl-FACl) as an additive. *Journal of Materials Chemistry A*, **2019**, 7, 8078-8084	13	38
92	Suppressing the ions-induced degradation for operationally stable perovskite solar cells. *Nano Energy*, **2019**, 64, 103962	17.1	36
91	Dithienosilole-bridged small molecules with different alkyl group substituents for organic solar cells exhibiting high open-circuit voltage. *Journal of Materials Chemistry A*, **2013**, 1, 7622	13	36
90	Chemical anti-corrosion strategy for stable inverted perovskite solar cells. *Science Advances*, **2020**, 6,	14.3	35
89	Understanding the operation of light-emitting electrochemical cells. *Applied Physics Letters*, **2008**, 93, 063503	3.4	35
88	Regular Energetics at Conjugated Electrolyte/Electrode Modifier for Organic Electronics and their Implications on Design Rules. *Advanced Materials Interfaces*, **2015**, 2, 1500204	4.6	33

87	Solution-processed hybrid cathode interlayer for inverted organic solar cells. *ACS Applied Materials & Interfaces*, **2013**, 5, 10428-32	9.5	31
86	16% efficient silicon/organic heterojunction solar cells using narrow band-gap conjugated polyelectrolytes based low resistance electron-selective contacts. *Nano Energy*, **2018**, 43, 117-123	17.1	31
85	Tetrathiafulvalene derivative as a new hole-transporting material for highly efficient perovskite solar cell. *Dyes and Pigments*, **2017**, 147, 113-119	4.6	30
84	The effect of external electric field on the performance of perovskite solar cells. *Organic Electronics* , **2015**, 18, 107-112	3.5	30
83	Tailoring In Situ Healing and Stabilizing Post-Treatment Agent for High-Performance Inverted CsPbI3 Perovskite Solar Cells with Efficiency of 16.67%. *ACS Energy Letters*, **2020**, 5, 3314-3321	20.1	30
82	Highly Foldable and Efficient Paper-Based Perovskite Solar Cells. *Solar Rrl*, **2019**, 3, 1800317	7.1	29
81	Ideal rear contact formed via employing a conjugated polymer for Si/PEDOT:PSS hybrid solar cells. *RSC Advances*, **2016**, 6, 16010-16017	3.7	29
80	A dopant-free polyelectrolyte hole-transport layer for high efficiency and stable planar perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 18898-18905	13	28
79	Origin of High Efficiency and Long-Term Stability in Ionic Liquid Perovskite Photovoltaic. *Research*, **2020**, 2020, 2616345	7.8	28
78	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
77	Solution-Processed Transparent Conducting Electrodes for Flexible Organic Solar Cells with 16.61% Efficiency. *Nano-Micro Letters*, **2021**, 13, 44	19.5	27
76	High-Performance All-Polymer Solar Cells with a High Fill Factor and a Broad Tolerance to the Donor/Acceptor Ratio. *ACS Applied Materials & Interfaces*, **2018**, 10, 38302-38309	9.5	26
75	A PTB7-based narrow band-gap conjugated polyelectrolyte as an efficient cathode interlayer in PTB7-based polymer solar cells. *Chemical Communications*, **2017**, 53, 2005-2008	5.8	25
74	Ultraflexible and biodegradable perovskite solar cells utilizing ultrathin cellophane paper substrates and TiO2/Ag/TiO2 transparent electrodes. *Solar Energy*, **2019**, 188, 158-163	6.8	25
73	Improved Device Performance of Polymer Solar Cells by Using a Thin Light-harvesting-Complex Modified ZnO Film as the Cathode Interlayer. *ACS Applied Materials & Interfaces*, **2015**, 7, 18904-8	9.5	25
72	Band Offset Engineering in ZnSnN2-Based Heterojunction for Low-Cost Solar Cells. *ACS Photonics*, **2018**, 5, 2094-2099	6.3	25
71	Liquid metal acetate assisted preparation of high-efficiency and stable inverted perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 14136-14144	13	24
70	Electrochemical doping during light emission in polymer light-emitting electrochemical cells. *Physical Review B*, **2008**, 78,	3.3	24

69	Effective Surface Treatment for High-Performance Inverted CsPbIBr Perovskite Solar Cells with Efficiency of 15.92. *Nano-Micro Letters*, **2020**, 12, 170	19.5	24
68	Solution-Processed MoOx Hole-Transport Layer with F4-TCNQ Modification for Efficient and Stable Inverted Perovskite Solar Cells. *ACS Applied Energy Materials*, **2019**, 2, 5862-5870	6.1	23
67	Synthesis and photovoltaic properties of solution-processable star-shaped small molecules with triphenylamine as the core and alkyl cyanoacetate or 3-ethylrhodanine as the end-group. *RSC Advances*, **2014**, 4, 5591	3.7	23
66	Neutral amine based alcohol-soluble interface materials for inverted polymer solar cells: realizing high performance and overcoming solvent erosion. *Chemical Communications*, **2015**, 51, 10182-5	5.8	22
65	Kirigami-Based Highly Stretchable Thin Film Solar Cells That Are Mechanically Stable for More than 1000 Cycles. *ACS Nano*, **2020**, 14, 1560-1568	16.7	22
64	A benzobis(thiadiazole)-based small molecule as a solution-processing electron extraction material in planar perovskite solar cells. *Journal of Materials Chemistry C*, **2017**, 5, 10777-10784	7.1	22
63	Energy level-modulated non-fullerene small molecule acceptors for improved VOC and efficiency of inverted perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 3336-3343	13	21
62	Synthesis of Cu3BiS3 and AgBiS2 crystallites with controlled morphology using hypocrellin template and their catalytic role in the polymerization of alkylsilane. *Journal of Materials Science*, **2012**, 47, 4159-4166	4.3	21
61	Realization of Foldable Polymer Solar Cells Using Ultrathin Cellophane Substrates and ZnO/Ag/ZnO Transparent Electrodes. *Solar Rrl*, **2018**, 2, 1800123	7.1	21
60	Cathode modification in planar hetero-junction perovskite solar cells through a small-molecule zwitterionic carboxylate. *Organic Electronics*, **2017**, 48, 204-210	3.5	20
59	Perylene Diimide-Based Zwitterion as the Cathode Interlayer for High-Performance Nonfullerene Polymer Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 14986-14992	9.5	20
58	Reducing energy loss and stabilising the perovskite/poly (3-hexylthiophene) interface through a polyelectrolyte interlayer. *Journal of Materials Chemistry A*, **2020**, 8, 6546-6554	13	19
57	Disodium edetate as a promising interfacial material for inverted organic solar cells and the device performance optimization. *ACS Applied Materials & Interfaces*, **2014**, 6, 20569-73	9.5	19
56	Metal oxide-free flexible organic solar cells with 0.1 M perchloric acid sprayed polymeric anodes. *Journal of Materials Chemistry A*, **2020**, 8, 21007-21015	13	19
55	Bias-Enhanced Visible-Rejection of GaN Schottky Barrier Ultraviolet Photodetectors. *IEEE Photonics Technology Letters*, **2015**, 27, 994-997	2.2	17
54	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	13	17
53	Insight into the Efficiency and Stability of All-Polymer Solar Cells Based on Two 2D-Conjugated Polymer Donors: Achieving High Fill Factor of 78. *ACS Applied Materials & Interfaces*, **2019**, 11, 43433-43440	9.5	16
52	Highly efficient photovoltaics and field-effect transistors based on copolymers of mono-fluorinated benzothiadiazole and quaterthiophene: synthesis and effect of the molecular weight on device performance. *Polymer Chemistry*, **2015**, 6, 6050-6057	4.9	15

51	Vacuum-Free, All-Solution, and All-Air Processed Organic Photovoltaics with over 11% Efficiency and Promoted Stability Using Layer-by-Layer Codoped Polymeric Electrodes. *Solar Rrl*, **2020**, 4, 1900543	7.1	15
50	Multichannel Strategies to Produce Stabilized Azaphenalene Diradicals: A Predictable Model to Generate Self-Doped Cathode Interfacial Layers for Organic Photovoltaics. *Advanced Functional Materials*, **2019**, 29, 1806125	15.6	15
49	Critical role of the external bias in improving the performance of polymer solar cells with a small molecule electrolyte interlayer. *Journal of Materials Chemistry A*, **2015**, 3, 504-508	13	14
48	Highly efficient inverted polymer solar cells using fullerene derivative modified TiO2 nanorods as the buffer layer. *RSC Advances*, **2014**, 4, 19529	3.7	13
47	Panchromatic "Dye-Doped" Polymer Solar Cells: From Femtosecond Energy Relays to Enhanced Photo-Response. *Journal of Physical Chemistry Letters*, **2013**, 4, 442-7	6.4	13
46	Humidity-Assisted Chlorination with Solid Protection Strategy for Efficient Air-Fabricated Inverted CsPbI3 Perovskite Solar Cells. *ACS Energy Letters*,3661-3668	20.1	13
45	Synergistic effects of the processing solvent and additive on the production of efficient all-polymer solar cells. *Nanoscale*, **2020**, 12, 4945-4952	7.7	12
44	Realizing High Performance Inverted Organic Solar Cells via a Nonconjugated Electrolyte Cathode Interlayer. *Journal of Physical Chemistry C*, **2016**, 120, 26244-26248	3.8	12
43	Realizing Highly Efficient Inverted Photovoltaic Cells by Combination of Nonconjugated Small-Molecule Zwitterions with Polyethylene Glycol. *ACS Applied Materials & Interfaces*, **2016**, 8, 18593-9	9.5	12
42	All annealing-free solution-processed highly flexible organic solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 5425-5433	13	12
41	Ultrasound Stimulation Modulates Voltage-Gated Potassium Currents Associated With Action Potential Shape in Hippocampal CA1 Pyramidal Neurons. *Frontiers in Pharmacology*, **2019**, 10, 544	5.6	11
40	Carboxylic ester-terminated fulleropyrrolidine as an efficient electron transport material for inverted perovskite solar cells. *Journal of Materials Chemistry C*, **2018**, 6, 6982-6987	7.1	11
39	Electrolytes as Cathode Interlayers in Inverted Organic Solar Cells: Influence of the Cations on Bias-Dependent Performance. *ACS Applied Materials & Interfaces*, **2017**, 9, 8426-8431	9.5	10
38	Enhancing the stability of perovskite solar cells through cross-linkable and hydrogen bonding multifunctional additives. *Journal of Materials Chemistry A*,	13	10
37	In situ grown silver bismuth sulfide nanorod arrays and their application to solar cells. *CrystEngComm*, **2019**, 21, 3137-3141	3.3	7
36	High-Performance Polymer Solar Cells with Zinc Sulfide-Phenanthroline Derivatives as the Hybrid Cathode Interlayers. *ACS Applied Materials & Interfaces*, **2016**, 8, 2688-93	9.5	7
35	Self-Doping a Hole-Transporting Layer Based on a Conjugated Polyelectrolyte Enables Efficient and Stable Inverted Perovskite Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 11724-11731	6.1	7
34	A conjugated ligand interfacial modifier for enhancing efficiency and operational stability of planar perovskite solar cells. *Chemical Engineering Journal*, **2021**, 412, 128680	14.7	7

33	Efficient light harvesting with a nanostructured organic electron-transporting layer in perovskite solar cells. *Nanoscale*, **2019**, 11, 9281-9286	7.7	6
32	Triazine-core-containing star-shaped compounds as cathode interlayers for efficient inverted polymer solar cells. *Journal of Materials Chemistry C*, **2016**, 4, 11278-11283	7.1	6
31	Naphthalene diimide based polymer as electron transport layer in inverted perovskite solar cells. *Organic Electronics*, **2020**, 87, 105959	3.5	6
30	Sulfonate anionic small molecule as a cathode interfacial material for highly efficient polymer solar cells. *RSC Advances*, **2016**, 6, 33523-33528	3.7	6
29	Barium acetate as an additive for high performance perovskite solar cells. *Journal of Materials Chemistry C*, **2019**, 7, 11411-11418	7.1	5
28	Heterologous expression of the trichostatin gene cluster and functional characterization of N-methyltransferase TsnB8. *Organic and Biomolecular Chemistry*, **2020**, 18, 3649-3653	3.9	5
27	High-Performance Organic-Silicon Heterojunction Solar Cells by Using Al-Doped ZnO as Cathode Interlayer. *Solar Rrl*, **2018**, 2, 1700223	7.1	5
26	Dithiol treatments enhancing the efficiency of hybrid solar cells based on PTB7 and CdSe nanorods. *Nano Research*, **2015**, 8, 3045-3053	10	5
25	A Universal Dopant-Free Polymeric Hole-Transporting Material for Efficient and Stable All-Inorganic and Organic-Inorganic Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2021**,	9.5	5
24	Highly Efficient Nonfullerene Acceptor with Sulfonyl-Based Ending Groups. *ACS Applied Materials & Interfaces*, **2020**, 12, 49659-49665	9.5	5
23	Benzobis(thiadiazole)-based small molecules as efficient electron transporting materials in perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2019**, 191, 437-443	6.4	5
22	Boosted efficiency of conductive metal oxide-free pervoskite solar cells using poly(3-(4-methylamincarboxylbutyl)thiophene) buffer layers. *Journal Physics D: Applied Physics*, **2020**, 53, 284001	3	4
21	CdSþhenanthroline derivative hybrid cathode interlayers for high performance inverted organic solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 297-302	13	4
20	Isolation, chromosomal location, and expression analysis of putative powdery mildew resistance genes in wheat (Triticum aestivum L.). *Euphytica*, **2007**, 155, 125-133	2.1	4
19	Complete genome sequence of Streptomyces sp. SCSIO 03032 isolated from Indian Ocean sediment, producing diverse bioactive natural products. *Marine Genomics*, **2021**, 55, 100803	1.9	4
18	In Situ Stabilized CsPbI 3 for Air-Fabricated Inverted Inorganic Perovskite Photovoltaics with Wide Humidity Operating Window. *Advanced Functional Materials*, **2022**, 32, 2111116	15.6	4
17	Influence of Fluorine Substitution on the Photovoltaic Performance of Wide Band Gap Polymer Donors for Polymer Solar Cells.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	3
16	Crystallization Control and Defect Passivation via a Cross-Linking Additive for High-Performance FAPbBr3 Perovskite Solar Cells. *Journal of Physical Chemistry C*, **2021**, 125, 12551-12559	3.8	3

15	Highly Foldable Perovskite Solar Cells Using Embedded Polyimide/Silver Nanowires Conductive Substrates. *Advanced Materials Interfaces*, **2022**, 9, 2101669	4.6	3
14	Assessment of toxicity reduction in ZnS substituted CdS:P3HT bulk heterojunction solar cells fabricated using a single-source precursor deposition. *Sustainable Energy and Fuels*, **2019**, 3, 948-955	5.8	2
13	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
12	Chromosome engineering of pollen wheat. *Science Bulletin*, **1999**, 44, 964-970		2
11	Photoconductive NiOx hole transport layer for efficient perovskite solar cells. *Chemical Engineering Journal*, **2022**, 435, 135140	14.7	2
10	Mutation of an atypical oxirane oxyanion hole improves regioselectivity of the □Fold epoxide hydrolase Alp1U. *Journal of Biological Chemistry*, **2020**, 295, 16987-16997	5.4	2
9	Parameters in planar quantum dot-polymer solar cell: Tuned by QD Eg, ligand exchange and fabrication process. *Organic Electronics*, **2019**, 69, 1-6	3.5	2
8	Structures and absolute configurations of phomalones from the coral-associated fungus Parengyodontium album sp. SCSIO 40430. *Organic and Biomolecular Chemistry*, **2021**, 19, 6030-6037	3.9	2
7	Realization of Foldable Polymer Solar Cells Using Ultrathin Cellophane Substrates and ZnO/Ag/ZnO Transparent Electrodes (Solar RRL 10□2018). *Solar Rrl*, **2018**, 2, 1870218	7.1	2
6	Radical Form of PbI: A New Defect Passivator for Efficient Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2021**, 13, 46627-46633	9.5	2
5	Heating-insulating and semitransparent inorganic perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2022**, 240, 111683	6.4	2
4	The study of colloidal lead bromide perovskite nanocrystals and its application in hybrid solar cells. *Applied Nanoscience (Switzerland)*, **2018**, 8, 715-721	3.3	1
3	Diameter- and Shape-Controlled ZnS/Si Nanocables and Si Nanotubes for SERS and Photocatalytic Applications. *Journal of Nanomaterials*, **2011**, 2011, 1-8	3.2	1
2	Novel Ag-Mesh Transparent Hybrid Electrodes for Highly Efficient and Mechanically Stable Flexible Perovskite Solar Cells. *Advanced Materials Interfaces*,2200483	4.6	1
1	Anomalous NH-Induced Resistance Enhancement in Halide Perovskite MAPbI Film and Gas Sensing Performance. *Journal of Physical Chemistry Letters*, **2021**, 12, 11339-11345	6.4	0