Junfeng Fang

List of Publications by Year in Descending Order

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	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
121	Constructing heterojunctions by surface sulfidation for efficient inverted perovskite solar cells.. *Science*, **2022**, 375, 434-437	33.3	90
120	Photoconductive NiOx hole transport layer for efficient perovskite solar cells. *Chemical Engineering Journal*, **2022**, 435, 135140	14.7	2
119	Heating-insulating and semitransparent inorganic perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2022**, 240, 111683	6.4	2
118	Highly Foldable Perovskite Solar Cells Using Embedded Polyimide/Silver Nanowires Conductive Substrates. *Advanced Materials Interfaces*, **2022**, 9, 2101669	4.6	3
117	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
116	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
115	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
114	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
113	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
112	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
111	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
110	All annealing-free solution-processed highly flexible organic solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 5425-5433	13	12
109	Solution-Processed Transparent Conducting Electrodes for Flexible Organic Solar Cells with 16.61% Efficiency. *Nano-Micro Letters*, **2021**, 13, 44	19.5	27
108	The Main Progress of Perovskite Solar Cells in 2020-2021. *Nano-Micro Letters*, **2021**, 13, 152	19.5	78
107	Radical Form of PbI: A New Defect Passivator for Efficient Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2021**, 13, 46627-46633	9.5	2
106	Chemical anti-corrosion strategy for stable inverted perovskite solar cells. *Science Advances*, **2020**, 6,	14.3	35

105	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
104	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
103	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
102	Dual-Protection Strategy for High-Efficiency and Stable CsPbI2Br Inorganic Perovskite Solar Cells. *ACS Energy Letters*, **2020**, 5, 676-684	20.1	68
101	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
100	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
99	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
98	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
97	Origin of High Efficiency and Long-Term Stability in Ionic Liquid Perovskite Photovoltaic. *Research*, **2020**, 2020, 2616345	7.8	28
96	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
95	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
94	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
93	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
92	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
91	Highly Efficient Nonfullerene Acceptor with Sulfonyl-Based Ending Groups. *ACS Applied Materials & Interfaces*, **2020**, 12, 49659-49665	9.5	5
90	Naphthalene diimide based polymer as electron transport layer in inverted perovskite solar cells. *Organic Electronics*, **2020**, 87, 105959	3.5	6
89	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
88	Highly Foldable and Efficient Paper-Based Perovskite Solar Cells. *Solar Rrl*, **2019**, 3, 1800317	7.1	29

87	Barium acetate as an additive for high performance perovskite solar cells. *Journal of Materials Chemistry C*, **2019**, 7, 11411-11418	7.1	5
86	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
85	Spontaneous grain polymerization for efficient and stable perovskite solar cells. *Nano Energy*, **2019**, 58, 825-833	17.1	47
84	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
83	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
82	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
81	Efficient light harvesting with a nanostructured organic electron-transporting layer in perovskite solar cells. *Nanoscale*, **2019**, 11, 9281-9286	7.7	6
80	In situ grown silver bismuth sulfide nanorod arrays and their application to solar cells. *CrystEngComm*, **2019**, 21, 3137-3141	3.3	7
79	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
78	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
77	Suppressing the ions-induced degradation for operationally stable perovskite solar cells. *Nano Energy*, **2019**, 64, 103962	17.1	36
76	Efficient Passivation with Lead Pyridine-2-Carboxylic for High-Performance and Stable Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1901852	21.8	95
75	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
74	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
73	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
72	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
71	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
70	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

69	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
68	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
67	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
66	Small Molecule Interlayers in Organic Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1702730	21.8	45
65	Electron-Transport-Layer-Assisted Crystallization of Perovskite Films for High-Efficiency Planar Heterojunction Solar Cells. *Advanced Functional Materials*, **2018**, 28, 1706317	15.6	63
64	High-Performance Organic-Silicon Heterojunction Solar Cells by Using Al-Doped ZnO as Cathode Interlayer. *Solar Rrl*, **2018**, 2, 1700223	7.1	5
63	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
62	Recent Advance in Solution-Processed Organic Interlayers for High-Performance Planar Perovskite Solar Cells. *Advanced Science*, **2018**, 5, 1800159	13.6	64
61	Band Offset Engineering in ZnSnN2-Based Heterojunction for Low-Cost Solar Cells. *ACS Photonics*, **2018**, 5, 2094-2099	6.3	25
60	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
59	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
58	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
57	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
56	In-situ cross-linking strategy for efficient and operationally stable methylammoniun lead iodide solar cells. *Nature Communications*, **2018**, 9, 3806	17.4	159
55	Realization of Foldable Polymer Solar Cells Using Ultrathin Cellophane Substrates and ZnO/Ag/ZnO Transparent Electrodes. *Solar Rrl*, **2018**, 2, 1800123	7.1	21
54	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
53	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
52	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

51	Fullerene-Free Organic Solar Cells with Efficiency Over 12% Based on EDTA‐ZnO Hybrid Cathode Interlayer. *Chemistry of Materials*, **2017**, 29, 4176-4180	9.6	78
50	Cathode modification in planar hetero-junction perovskite solar cells through a small-molecule zwitterionic carboxylate. *Organic Electronics*, **2017**, 48, 204-210	3.5	20
49	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
48	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
47	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
46	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
45	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
44	Tetrathiafulvalene derivative as a new hole-transporting material for highly efficient perovskite solar cell. *Dyes and Pigments*, **2017**, 147, 113-119	4.6	30
43	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
42	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
41	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
40	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
39	CdS‐phenanthroline derivative hybrid cathode interlayers for high performance inverted organic solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 297-302	13	4
38	High-Performance Polymer Solar Cells with PCE of 10.42% via Al-Doped ZnO Cathode Interlayer. *Advanced Materials*, **2016**, 28, 7405-12	24	119
37	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
36	Sulfonate anionic small molecule as a cathode interfacial material for highly efficient polymer solar cells. *RSC Advances*, **2016**, 6, 33523-33528	3.7	6
35	Bias-Enhanced Visible-Rejection of GaN Schottky Barrier Ultraviolet Photodetectors. *IEEE Photonics Technology Letters*, **2015**, 27, 994-997	2.2	17
34	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

33	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
32	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
31	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
30	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
29	Efficient and stable large-area perovskite solar cells with inorganic charge extraction layers. *Science* , **2015**, 350, 944-8	33.3	1732
28	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
27	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
26	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
25	Dithiol treatments enhancing the efficiency of hybrid solar cells based on PTB7 and CdSe nanorods. *Nano Research*, **2015**, 8, 3045-3053	10	5
24	The effect of external electric field on the performance of perovskite solar cells. *Organic Electronics* , **2015**, 18, 107-112	3.5	30
23	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
22	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
21	Highly efficient inverted polymer solar cells using fullerene derivative modified TiO2 nanorods as the buffer layer. *RSC Advances*, **2014**, 4, 19529	3.7	13
20	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
19	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
18	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
17	Solution-processed hybrid cathode interlayer for inverted organic solar cells. *ACS Applied Materials & Interfaces*, **2013**, 5, 10428-32	9.5	31
16	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

15	Donor□cceptor interface modification by zwitterionic conjugated polyelectrolytes in polymer photovoltaics. *Energy and Environmental Science*, **2013**, 6, 1589	35.4	46
14	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
13	On the Bias in Simulated ENSO SSTA Meridional Widths of CMIP3 Models. *Journal of Climate*, **2013**, 26, 3173-3186	4.4	39
12	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
11	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
10	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
9	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
8	Identifying and alleviating electrochemical side-reactions in light-emitting electrochemical cells. *Journal of the American Chemical Society*, **2008**, 130, 4562-8	16.4	103
7	Electrochemical doping during light emission in polymer light-emitting electrochemical cells. *Physical Review B*, **2008**, 78,	3.3	24
6	Understanding the operation of light-emitting electrochemical cells. *Applied Physics Letters*, **2008**, 93, 063503	3.4	35
5	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
4	Chromosome engineering of pollen wheat. *Science Bulletin*, **1999**, 44, 964-970		2
3	Humidity-Assisted Chlorination with Solid Protection Strategy for Efficient Air-Fabricated Inverted CsPbI3 Perovskite Solar Cells. *ACS Energy Letters*,3661-3668	20.1	13
2	Enhancing the stability of perovskite solar cells through cross-linkable and hydrogen bonding multifunctional additives. *Journal of Materials Chemistry A*,	13	10
1	Novel Ag-Mesh Transparent Hybrid Electrodes for Highly Efficient and Mechanically Stable Flexible Perovskite Solar Cells. *Advanced Materials Interfaces*,2200483	4.6	1