Tzung-Fang Guo

List of Publications by Year in Descending Order

83 papers	6,552 citations	28 h-index	80 g-index
87 ext. papers	7,207 ext. citations	7.8 avg, IF	5.82 L-index

#	Paper	IF	Citations
83	Characterize and Retard the Impact of the Bias-Induced Mobile Ions in CH 3 NH 3 PbBr 3 Perovskite Light-Emitting Diodes. *Advanced Optical Materials*, **2022**, 10, 2101439	8.1	1
82	Upconversion Plasmonic Lasing from an Organolead Trihalide Perovskite Nanocrystal with Low Threshold. *ACS Photonics*, **2021**, 8, 335-342	6.3	10
81	Lead-Free Organic-Perovskite Hybrid Quantum Wells for Highly Stable Light-Emitting Diodes. *ACS Nano*, **2021**, 15, 6316-6325	16.7	28
80	Effects of Choline Chloride in Lead Bromide Layer and Methylammonium Bromide Precursor on Perovskite Conversion and Optoelectronic Properties of Perovskite-Based Light-Emitting Diodes. *ACS Applied Electronic Materials*, **2021**, 3, 2035-2043	4	3
79	Pseudo-Halide Perovskite Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2100818	21.8	16
78	Low-temperature processed bipolar metal oxide charge transporting layers for highly efficient perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2021**, 221, 110870	6.4	5
77	Halide perovskite materials and devices. *MRS Bulletin*, **2020**, 45, 427-430	3.2	7
76	Conversion efficiency enhancement of methylammonium lead triiodide perovskite solar cells converted from thermally deposited lead iodide via thin methylammonium iodide interlayer. *Organic Electronics*, **2020**, 82, 105713	3.5	1
75	Synergistic Reinforcement of Built-In Electric Fields for Highly Efficient and Stable Perovskite Photovoltaics. *Advanced Functional Materials*, **2020**, 30, 1909755	15.6	29
74	High-Performance Perovskite-Based Light-Emitting Diodes from the Conversion of Amorphous Spin-Coated Lead Bromide with Phenethylamine Doping. *ACS Omega*, **2020**, 5, 8697-8706	3.9	3
73	Lead-Free Antimony-Based Light-Emitting Diodes through the Vapor-Anion-Exchange Method. *ACS Applied Materials & Interfaces*, **2019**, 11, 35088-35094	9.5	42
72	Improved conversion efficiency of perovskite solar cells converted from thermally deposited lead iodide with dimethyl sulfoxide-treated poly(3,4-ethylenedioxythiophene) poly(styrene sulfonate). *Organic Electronics*, **2019**, 73, 266-272	3.5	3
71	The impact at polar solvent treatment on p-contact layers (PEDOT:PSS or NiOx) of hybrid perovskite solar cells. *Organic Electronics*, **2019**, 73, 273-278	3.5	2
70	Magnetic field effect of the singlet fission reaction in tetracene-based diodes. *Organic Electronics*, **2018**, 56, 11-15	3.5	2
69	Modulating the line shape of magnetoconductance by varying the charge injection in polymer light-emitting diodes. *AIP Advances*, **2018**, 8, 025209	1.5	3
68	Efficient CH3NH3PbI3 perovskite/fullerene planar heterojunction hybrid solar cells with oxidized Ni/Au/Cu transparent electrode. *Applied Physics Letters*, **2018**, 112, 071103	3.4	9
67	Perovskite-based solar cells with inorganic inverted hybrid planar heterojunction structure. *AIP Advances*, **2018**, 8, 015109	1.5	15

66	Improvement efficiency of perovskite solar cells by hybrid electrospray and vapor-assisted solution technology. *Organic Electronics*, **2018**, 57, 221-225	3.5	5
65	Mapping Highly Efficient Mixed-cation Pseudohalide-perovskite Solar Cells with a Scanning Transmission X-ray Microscope. *Microscopy and Microanalysis*, **2018**, 24, 462-463	0.5	
64	Interfacial engineering of ZnO surface modified with poly-vinylpyrrolidone and p-aminobenzoic acid for high-performance perovskite solar cells. *Materials Chemistry and Physics*, **2018**, 219, 90-95	4.4	5
63	Highly Efficient 2D/3D Hybrid Perovskite Solar Cells via Low-Pressure Vapor-Assisted Solution Process. *Advanced Materials*, **2018**, 30, e1801401	24	106
62	The triplet-triplet annihilation process of triplet to singlet excitons to fluorescence in polymer light-emitting diodes. *Organic Electronics*, **2018**, 62, 505-510	3.5	15
61	A Review of Inorganic Hole Transport Materials for Perovskite Solar Cells. *Advanced Materials Interfaces*, **2018**, 5, 1800882	4.6	122
60	Enhancement of Inverted Polymer Solar Cells Performances Using Cetyltrimethylammonium-Bromide Modified ZnO. *Materials*, **2018**, 11,	3.5	16
59	Efficient inverted polymer solar cells via pyridine-based organic molecules as interfacial modification layer on sol-gel zinc oxide surface. *Organic Electronics*, **2018**, 63, 93-97	3.5	4
58	Electrospray technique in fabricating perovskite-based hybrid solar cells under ambient conditions. *RSC Advances*, **2017**, 7, 10985-10991	3.7	12
57	Large-area electrospray-deposited nanocrystalline CuXO hole transport layer for perovskite solar cells. *RSC Advances*, **2017**, 7, 46651-46656	3.7	20
56	Roller-Induced Bundling of Long Silver Nanowire Networks for Strong Interfacial Adhesion, Highly Flexible, Transparent Conductive Electrodes. *Scientific Reports*, **2017**, 7, 16662	4.9	9
55	Highly stable perovskite solar cells with all-inorganic selective contacts from microwave-synthesized oxide nanoparticles. *Journal of Materials Chemistry A*, **2017**, 5, 25485-25493	13	35
54	Robust and Recyclable Substrate Template with an Ultrathin Nanoporous Counter Electrode for Organic-Hole-Conductor-Free Monolithic Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 41845-41854	9.5	12
53	Improved air stability of perovskite solar cells via solution-processed metal oxide transport layers. *Nature Nanotechnology*, **2016**, 11, 75-81	28.7	1614
52	Low-Pressure Vapor-Assisted Solution Process for Thiocyanate-Based Pseudohalide Perovskite Solar Cells. *ChemSusChem*, **2016**, 9, 2620-2627	8.3	26
51	Oxidized Ni/Au Transparent Electrode in Efficient CH3 NH3 PbI3 Perovskite/Fullerene Planar Heterojunction Hybrid Solar Cells. *Advanced Materials*, **2016**, 28, 3290-7	24	50
50	Ultrafast Dynamics of Hole Injection and Recombination in Organometal Halide Perovskite Using Nickel Oxide as p-Type Contact Electrode. *Journal of Physical Chemistry Letters*, **2016**, 7, 1096-101	6.4	78
49	Recent Advances in the Inverted Planar Structure of Perovskite Solar Cells. *Accounts of Chemical Research*, **2016**, 49, 155-65	24.3	472

48	Low-Pressure Hybrid Chemical Vapor Growth for Efficient Perovskite Solar Cells and Large-Area Module. *Advanced Materials Interfaces*, **2016**, 3, 1500849	4.6	37
47	Amide-Functionalized Small Molecules as Solution-Processed Electron Injection Layers in Highly Efficient Polymer Light-Emitting Diodes. *Advanced Materials Interfaces*, **2016**, 3, 1500621	4.6	4
46	Improve Hole Collection by Interfacial Chemical Redox Reaction at a Mesoscopic NiO/CH3NH3PbI3 Heterojunction for Efficient Photovoltaic Cells. *Advanced Materials Interfaces*, **2016**, 3, 1600135	4.6	14
45	Research Update: Hybrid organic-inorganic perovskite (HOIP) thin films and solar cells by vapor phase reaction. *APL Materials*, **2016**, 4, 091509	5.7	26
44	NiO Electrode Interlayer and CH NH /CH NH PbBr Interface Treatment to Markedly Advance Hybrid Perovskite-Based Light-Emitting Diodes. *Advanced Materials*, **2016**, 28, 8687-8694	24	134
43	Inorganic p-type contact materials for perovskite-based solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 9011-9019	13	133
42	Perovskite-Based Solar Cells With Nickel-Oxidized Nickel Oxide Hole Transfer Layer. *IEEE Transactions on Electron Devices*, **2015**, 62, 1590-1595	2.9	23
41	Conversion efficiency improvement of inverted CH3NH3PbI3 perovskite solar cells with room temperature sputtered ZnO by adding the C60 interlayer. *Applied Physics Letters*, **2015**, 107, 253301	3.4	34
40	p-type Mesoscopic nickel oxide/organometallic perovskite heterojunction solar cells. *Scientific Reports*, **2014**, 4, 4756	4.9	333
39	Role of self-assembled tetraoctylammonium bromide on various conjugated polymers in polymer light-emitting diodes. *Journal of Materials Chemistry C*, **2014**, 2, 272-276	7.1	6
38	High voltage and efficient bilayer heterojunction solar cells based on an organic-inorganic hybrid perovskite absorber with a low-cost flexible substrate. *Physical Chemistry Chemical Physics*, **2014**, 16, 6033-40	3.6	79
37	Phase formation, morphology evolution and tunable bandgap of Sn1−xSbxSe nanocrystals. *CrystEngComm*, **2014**, 16, 1786-1792	3.3	15
36	Significance of ions with an ordered arrangement for enhancing the electron injection/extraction in polymer optoelectronic devices. *Journal of Materials Chemistry C*, **2014**, 2, 4805-4811	7.1	8
35	Switch the n-type to ambipolar transfer characteristics by illumination in n-type pentacene-based organic field-effect transistors. *Organic Electronics*, **2014**, 15, 3805-3810	3.5	1
34	Modulations in line shapes of magnetoconductance curves for diodes of pentacene:fullerene charge transfer complexes. *Organic Electronics*, **2014**, 15, 3076-3081	3.5	2
33	Femtosecond excitonic relaxation dynamics of perovskite on mesoporous films of Al2O3 and NiO nanoparticles. *Angewandte Chemie - International Edition*, **2014**, 53, 9339-42	16.4	54
32	Low-temperature sputtered nickel oxide compact thin film as effective electron blocking layer for mesoscopic NiO/CH3NH3PbI3 perovskite heterojunction solar cells. *ACS Applied Materials & Interfaces*, **2014**, 6, 11851-8	9.5	270
31	The origins in the transformation of ambipolar to n-type pentacene-based organic field-effect transistors. *Organic Electronics*, **2014**, 15, 1759-1766	3.5	2

30	Role of Solution-Processable Polyethylenimine Electrode Interlayer in Fabricating Air-Stable Polymer Light-Emitting Diodes. *Israel Journal of Chemistry*, **2014**, 54, 935-941	3.4	1
29	Nickel oxide electrode interlayer in CH3 NH3 PbI3 perovskite/PCBM planar-heterojunction hybrid solar cells. *Advanced Materials*, **2014**, 26, 4107-13	24	588
28	Manipulating the Hysteresis in Poly(vinyl alcohol)-Dielectric Organic Field-Effect Transistors Toward Memory Elements. *Advanced Functional Materials*, **2013**, 23, 4206-4214	15.6	98
27	Enhanced performance of polymer solar cells using solution-processed tetra-n-alkyl ammonium bromides as electron extraction layers. *Journal of Materials Chemistry A*, **2013**, 1, 2582	13	34
26	Antagonistic responses between magnetoconductance and magnetoelectroluminescence in polymer light-emitting diodes. *Organic Electronics*, **2013**, 14, 1376-1382	3.5	13
25	CH3NH3PbI3 perovskite/fullerene planar-heterojunction hybrid solar cells. *Advanced Materials*, **2013**, 25, 3727-32	24	1189
24	Magnetoconductance responses of triplet polaron pair charge reaction in hyperfine coupling regime. *Applied Physics Letters*, **2013**, 103, 253304	3.4	6
23	The metal interlayer in the charge generation layer of tandem organic light-emitting diodes. *Journal of Applied Physics*, **2013**, 114, 154512	2.5	13
22	Benzo[k]fluoranthene-based linear acenes for efficient deep blue organic light-emitting devices. *Journal of Materials Chemistry*, **2012**, 22, 11032		18
21	Identifying the magnetoconductance responses by the induced charge transfer complex states in pentacene-based diodes. *Applied Physics Letters*, **2012**, 101, 053307	3.4	5
20	Chicken albumen dielectrics in organic field-effect transistors. *Advanced Materials*, **2011**, 23, 4077-81	24	147
19	The Roles of Poly(Ethylene Oxide) Electrode Buffers in Efficient Polymer Photovoltaics. *Advanced Energy Materials*, **2011**, 1, 1192-1198	21.8	28
18	An ionic terfluorene derivative for saturated deep-blue solid state light-emitting electrochemical cells. *Journal of Materials Chemistry*, **2011**, 21, 4175		45
17	Poly(ethylene oxide)-functionalized Al cathodes of tunable electron-injection capabilities for efficient polymer light-emitting diodes. *Journal of Materials Chemistry*, **2011**, 21, 18840		13
16	An ambipolar to n-type transformation in pentacene-based organic field-effect transistors. *Organic Electronics*, **2011**, 12, 509-515	3.5	5
15	Magnetoconductance responses in organic charge-transfer-complex molecules. *Applied Physics Letters*, **2011**, 99, 073307	3.4	21
14	Selective manipulation of microparticles using polymer-based optically induced dielectrophoretic devices. *Applied Physics Letters*, **2010**, 96, 113302	3.4	16
13	The magneto conductance responses in polymer photovoltaic devices. *Organic Electronics*, **2010**, 11, 677-685	3.5	7

12	The polymer gate dielectrics and source-drain electrodes on n-type pentacene-based organic field-effect transistors. *Organic Electronics*, **2010**, 11, 1613-1619	3.5	18
11	Optically-induced dielectrophoresis using polymer materials for biomedical applications **2009**,		2
10	An inverted polymer photovoltaic cell with increased air stability obtained by employing novel hole/electron collecting layers. *Journal of Materials Chemistry*, **2009**, 19, 1643		126
9	White-emissive tandem-type hybrid organic/polymer diodes with (0.33, 0.33) chromaticity coordinates. *Optics Express*, **2009**, 17, 21205-15	3.3	18
8	Manipulation of Biosamples and Microparticles using Optical Images on Polymer Devices **2009**,		3
7	Sulfonated poly(diphenylamine) as a novel hole-collecting layer in polymer photovoltaic cells. *Journal of Materials Chemistry*, **2008**, 18, 4478		50
6	Single-Layered Hybrid DBPPV-CdSe/ZnS Quantum-Dot Light-Emitting Diodes. *IEEE Photonics Technology Letters*, **2008**, 20, 282-284	2.2	22
5	Modulations of photoinduced magnetoconductance for polymer diodes. *Applied Physics Letters*, **2008**, 92, 153303	3.4	20
4	Doping of phthalocyanine films: structural reorganization versus acceptor effect. *Journal of Materials Science: Materials in Electronics*, **2008**, 19, 500-504	2.1	
3	Organic-Oxide Cathode Buffer Layer in Fabricating High-Performance Polymer Light-Emitting Diodes. *Advanced Functional Materials*, **2008**, 18, 3036-3042	15.6	42
2	Influence of polymer gate dielectrics on n-channel conduction of pentacene-based organic field-effect transistors. *Journal of Applied Physics*, **2007**, 101, 124505	2.5	16
1	Self-assembled monolayer-modified Ag anode for top-emitting polymer light-emitting diodes. *Applied Physics Letters*, **2006**, 89, 233513	3.4	29