Tzung-Fang Guo

List of Publications by Year
in descending order

86 papers	7,808 citations	159585 30 h-index	60623 81 g-index
87 all docs	87 docs citations	87 times ranked	9248 citing authors

#	Article	IF	Citations
1	Improved air stability of perovskite solar cells via solution-processed metal oxide transport layers. Nature Nanotechnology, 2016, 11, 75-81.	31.5	1,890
2	CH₃NH₃PbI₃ Perovskite/Fullerene Planarâ€Heterojunction Hybrid Solar Cells. Advanced Materials, 2013, 25, 3727-3732.	21.0	1,352
3	Nickel Oxide Electrode Interlayer in CH₃NH₃PbI₃ Perovskite/PCBM Planarâ€Heterojunction Hybrid Solar Cells. Advanced Materials, 2014, 26, 4107-4113.	21.0	646
4	Recent Advances in the Inverted Planar Structure of Perovskite Solar Cells. Accounts of Chemical Research, 2016, 49, 155-165.	15.6	559
5	p-type Mesoscopic Nickel Oxide/Organometallic Perovskite Heterojunction Solar Cells. Scientific Reports, 2014, 4, 4756.	3.3	371
6	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, 11851-11858.	8.0	319
7	A Review of Inorganic Hole Transport Materials for Perovskite Solar Cells. Advanced Materials Interfaces, 2018, 5, 1800882.	3.7	200
8	Chicken Albumen Dielectrics in Organic Fieldâ€Effect Transistors. Advanced Materials, 2011, 23, 4077-4081.	21.0	177
9	Highly Efficient 2D/3D Hybrid Perovskite Solar Cells via Lowâ€Pressure Vaporâ€Assisted Solution Process. Advanced Materials, 2018, 30, e1801401.	21.0	154
10	NiO<i>_x</i> Electrode Interlayer and CH₃NH₂/CH₃NH₃PbBr₃ Interface Treatment to Markedly Advance Hybrid Perovskiteâ€Based Lightâ€Emitting Diodes. Advanced Materials, 2016, 28, 8687-8694.	21.0	147
11	Inorganic p-type contact materials for perovskite-based solar cells. Journal of Materials Chemistry A, 2015, 3, 9011-9019.	10.3	143
12	An inverted polymer photovoltaic cell with increased air stability obtained by employing novel hole/electron collecting layers. Journal of Materials Chemistry, 2009, 19, 1643.	6.7	129
13	Manipulating the Hysteresis in Poly(vinyl alcohol)â€Dielectric Organic Fieldâ€Effect Transistors Toward Memory Elements. Advanced Functional Materials, 2013, 23, 4206-4214.	14.9	113
14	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, 1096-1101.	4.6	97
15	High voltage and efficient bilayer heterojunction solar cells based on an organicâ€“inorganic hybrid perovskite absorber with a low-cost flexible substrate. Physical Chemistry Chemical Physics, 2014, 16, 6033-6040.	2.8	86
16	Lead-Free Antimony-Based Light-Emitting Diodes through the Vaporâ€“Anion-Exchange Method. ACS Applied Materials & Interfaces, 2019, 11, 35088-35094.	8.0	74
17	Lead-Free Organicâ€“Perovskite Hybrid Quantum Wells for Highly Stable Light-Emitting Diodes. ACS Nano, 2021, 15, 6316-6325.	14.6	73
18	Femtosecond Excitonic Relaxation Dynamics of Perovskite on Mesoporous Films of Al₂O₃ and NiO Nanoparticles. Angewandte Chemie - International Edition, 2014, 53, 9339-9342.	13.8	57

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19	Oxidized Ni/Au Transparent Electrode in Efficient CH₃NH₃PbI₃ Perovskite/Fullerene Planar Heterojunction Hybrid Solar Cells. Advanced Materials, 2016, 28, 3290-3297.	21.0	57
20	Pseudoâ€Halide Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2100818.	19.5	56
21	Sulfonated poly(diphenylamine) as a novel hole-collecting layer in polymer photovoltaic cells. Journal of Materials Chemistry, 2008, 18, 4478.	6.7	53
22	Lowâ€Pressure Hybrid Chemical Vapor Growth for Efficient Perovskite Solar Cells and Largeâ€Area Module. Advanced Materials Interfaces, 2016, 3, 1500849.	3.7	51
23	An ionic terfluorene derivative for saturated deep-blue solid state light-emitting electrochemical cells. Journal of Materials Chemistry, 2011, 21, 4175.	6.7	48
24	Synergistic Reinforcement of Builtâ€In Electric Fields for Highly Efficient and Stable Perovskite Photovoltaics. Advanced Functional Materials, 2020, 30, 1909755.	14.9	47
25	Organicâ€Oxide Cathode Buffer Layer in Fabricating Highâ€Performance Polymer Lightâ€Emitting Diodes. Advanced Functional Materials, 2008, 18, 3036-3042.	14.9	43
26	Highly stable perovskite solar cells with all-inorganic selective contacts from microwave-synthesized oxide nanoparticles. Journal of Materials Chemistry A, 2017, 5, 25485-25493.	10.3	41
27	Conversion efficiency improvement of inverted CH3NH3PbI3 perovskite solar cells with room temperature sputtered ZnO by adding the C60 interlayer. Applied Physics Letters, 2015, 107, .	3.3	40
28	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.	10.3	36
29	Self-assembled monolayer-modified Ag anode for top-emitting polymer light-emitting diodes. Applied Physics Letters, 2006, 89, 233513.	3.3	33
30	Research Update: Hybrid organic-inorganic perovskite (HOIP) thin films and solar cells by vapor phase reaction. APL Materials, 2016, 4, .	5.1	33
31	Lowâ€Pressure Vaporâ€Assisted Solution Process for Thiocyanateâ€Based Pseudohalide Perovskite Solar Cells. ChemSusChem, 2016, 9, 2620-2627.	6.8	30
32	Large-area electrospray-deposited nanocrystalline Cu_XO hole transport layer for perovskite solar cells. RSC Advances, 2017, 7, 46651-46656.	3.6	29
33	Single-Layered Hybrid DBPPV-CdSeâ€"ZnS Quantum-Dot Light-Emitting Diodes. IEEE Photonics Technology Letters, 2008, 20, 282-284.	2.5	28
34	The Roles of Poly(Ethylene Oxide) Electrode Buffers in Efficient Polymer Photovoltaics. Advanced Energy Materials, 2011, 1, 1192-1198.	19.5	28
35	Perovskite-Based Solar Cells With Nickel-Oxidized Nickel Oxide Hole Transfer Layer. IEEE Transactions on Electron Devices, 2015, 62, 1590-1595.	3.0	28
36	Upconversion Plasmonic Lasing from an Organolead Trihalide Perovskite Nanocrystal with Low Threshold. ACS Photonics, 2021, 8, 335-342.	6.6	26

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37	The polymer gate dielectrics and source-drain electrodes on n-type pentacene-based organic field-effect transistors. Organic Electronics, 2010, 11, 1613-1619.	2.6	23
38	Magnetoconductance responses in organic charge-transfer-complex molecules. Applied Physics Letters, 2011, 99, .	3.3	23
39	Modulations of photoinduced magnetoconductance for polymer diodes. Applied Physics Letters, 2008, 92, 153303.	3.3	22
40	Benzo[k]fluoranthene-based linear acenes for efficient deep blue organic light-emitting devices. Journal of Materials Chemistry, 2012, 22, 11032.	6.7	22
41	Selective manipulation of microparticles using polymer-based optically induced dielectrophoretic devices. Applied Physics Letters, 2010, 96, 113302.	3.3	21
42	Halide perovskite materials and devices. MRS Bulletin, 2020, 45, 427-430.	3.5	21
43	Perovskite-based solar cells with inorganic inverted hybrid planar heterojunction structure. AIP Advances, 2018, 8, .	1.3	20
44	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	19
45	Antagonistic responses between magnetoconductance and magnetoelectroluminescence in polymer light-emitting diodes. Organic Electronics, 2013, 14, 1376-1382.	2.6	19
46	Phase formation, morphology evolution and tunable bandgap of Sn1âˆ'xSbxSe nanocrystals. CrystEngComm, 2014, 16, 1786-1792.	2.6	19
47	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.	8.0	19
48	White-emissive tandem-type hybrid organic/polymer diodes with (033, 033) chromaticity coordinates. Optics Express, 2009, 17, 21205.	3.4	18
49	Improve Hole Collection by Interfacial Chemical Redox Reaction at a Mesoscopic NiO/CH₃NH₃PbI₃ Heterojunction for Efficient Photovoltaic Cells. Advanced Materials Interfaces, 2016, 3, 1600135.	3.7	18
50	Electrospray technique in fabricating perovskite-based hybrid solar cells under ambient conditions. RSC Advances, 2017, 7, 10985-10991.	3.6	18
51	Enhancement of Inverted Polymer Solar Cells Performances Using Cetyltrimethylammonium-Bromide Modified ZnO. Materials, 2018, 11, 378.	2.9	18
52	Efficient CH3NH3PbI3 perovskite/fullerene planar heterojunction hybrid solar cells with oxidized Ni/Au/Cu transparent electrode. Applied Physics Letters, 2018, 112, .	3.3	16
53	The triplet-triplet annihilation process of triplet to singlet excitons to fluorescence in polymer light-emitting diodes. Organic Electronics, 2018, 62, 505-510.	2.6	16
54	The metal interlayer in the charge generation layer of tandem organic light-emitting diodes. Journal of Applied Physics, 2013, 114, .	2.5	15

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55	Roller-Induced Bundling of Long Silver Nanowire Networks for Strong Interfacial Adhesion, Highly Flexible, Transparent Conductive Electrodes. Scientific Reports, 2017, 7, 16662.	3.3	15
56	Poly(ethylene oxide)-functionalized Al cathodes of tunable electron-injection capabilities for efficient polymer light-emitting diodes. Journal of Materials Chemistry, 2011, 21, 18840.	6.7	13
57	Low-temperature processed bipolar metal oxide charge transporting layers for highly efficient perovskite solar cells. Solar Energy Materials and Solar Cells, 2021, 221, 110870.	6.2	12
58	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.	4.0	11
59	The magneto conductance responses in polymer photovoltaic devices. Organic Electronics, 2010, 11, 677-685.	2.6	8
60	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.	5.5	8
61	Identifying the magnetoconductance responses by the induced charge transfer complex states in pentacene-based diodes. Applied Physics Letters, 2012, 101, 053307.	3.3	7
62	Magnetoconductance responses of triplet polaron pair charge reaction in hyperfine coupling regime. Applied Physics Letters, 2013, 103, 253304.	3.3	7
63	Role of self-assembled tetraoctylammonium bromide on various conjugated polymers in polymer light-emitting diodes. Journal of Materials Chemistry C, 2014, 2, 272-276.	5.5	7
64	Improvement efficiency of perovskite solar cells by hybrid electrospray and vapor-assisted solution technology. Organic Electronics, 2018, 57, 221-225.	2.6	7
65	Manipulation of Biosamples and Microparticles using Optical Images on Polymer Devices. , 2009, , .		6
66	An ambipolar to n-type transformation in pentacene-based organic field-effect transistors. Organic Electronics, 2011, 12, 509-515.	2.6	6
67	Optically-induced dielectrophoresis using polymer materials for biomedical applications. , 2009, , .		5
68	Amideâ€Functionalized Small Molecules as Solutionâ€Processed Electron Injection Layers in Highly Efficient Polymer Lightâ€Emitting Diodes. Advanced Materials Interfaces, 2016, 3, 1500621.	3.7	5
69	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.	2.6	5
70	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.	2.6	5
71	Characterize and Retard the Impact of the Biasâ€Induced Mobile Ions in CH₃NH₃PbBr₃ Perovskite Lightâ€Emitting Diodes. Advanced Optical Materials, 2022, 10, .	7.3	5
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.	2.6	4

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73	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.	3.5	4
74	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	4
75	The origins in the transformation of ambipolar to n-type pentacene-based organic field-effect transistors. Organic Electronics, 2014, 15, 1759-1766.	2.6	3
76	Magnetic field effect of the singlet fission reaction in tetracene-based diodes. Organic Electronics, 2018, 56, 11-15.	2.6	3
77	Modulating the line shape of magnetoconductance by varying the charge injection in polymer light-emitting diodes. AIP Advances, 2018, 8, 025209.	1.3	3
78	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.	2.6	2
79	Modulations in line shapes of magnetoconductance curves for diodes of pentacene:fullerene charge transfer complexes. Organic Electronics, 2014, 15, 3076-3081.	2.6	2
80	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.	2.6	2
81	Fabrication of highly transparent CsPbBr3 quantum-dot thin film via bath coating for light emission applications. Ceramics International, 2022, 48, 15729-15736.	4.8	2
82	Role of Solutionâ€Processable Polyethylenimine Electrode Interlayer in Fabricating Airâ€Stable Polymer Lightâ€Emitting Diodes. Israel Journal of Chemistry, 2014, 54, 935-941.	2.3	1
83	Doping of phthalocyanine films: structural reorganization versus acceptor effect. Journal of Materials Science: Materials in Electronics, 2008, 19, 500-504.	2.2	0
84	Fabrication and characterization of hybrid DBPPV-CdSe/ZnS quantum dot light-emitting diodes. , 2008, , .		0
85	Separation and manipulation of micro-particles using optical images on flexible polymer devices. , 2011, , .		0
86	Mapping Highly Efficient Mixed-cation Pseudohalide-perovskite Solar Cells with a Scanning Transmission X-ray Microscope. Microscopy and Microanalysis, 2018, 24, 462-463.	0.4	0