Xizu Wang

List of Publications by Year
in descending order

70 papers	3,127 citations	201658 27 h-index	161844 54 g-index
70 all docs	70 docs citations	70 times ranked	5145 citing authors

#	Article	IF	Citations
1	Identification of catalytic sites for oxygen reduction and oxygen evolution in N-doped graphene materials: Development of highly efficient metal-free bifunctional electrocatalyst. Science Advances, 2016, 2, e1501122.	10.3	1,078
2	Localized Electron Density Engineering for Stabilized B-Î³ CsSnI₃-Based Perovskite Solar Cells with Efficiencies >10%. ACS Energy Letters, 0, , 1480-1489.	17.4	125
3	Enhancement of thermoelectric performance of PEDOT:PSS films by post-treatment with a superacid. RSC Advances, 2018, 8, 18334-18340.	3.6	118
4	Ultra-high Seebeck coefficient and low thermal conductivity of a centimeter-sized perovskite single crystal acquired by a modified fast growth method. Journal of Materials Chemistry C, 2017, 5, 1255-1260.	5.5	101
5	Degradation mechanisms in organic solar cells: Localized moisture encroachment and cathode reaction. Solar Energy Materials and Solar Cells, 2012, 104, 1-6.	6.2	93
6	Significant Enhancement in the Seebeck Coefficient and Power Factor of p-Type Poly(3,4-ethylenedioxythiophene):Poly(styrenesulfonate) through the Incorporation of n-Type MXene. ACS Applied Materials & Interfaces, 2020, 12, 13013-13020.	8.0	82
7	Cesium Carbonate Functionalized Graphene Quantum Dots as Stable Electron-Selective Layer for Improvement of Inverted Polymer Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 1092-1099.	8.0	77
8	Modulation of the doping level of PEDOT:PSS film by treatment with hydrazine to improve the Seebeck coefficient. RSC Advances, 2020, 10, 1786-1792.	3.6	77
9	Enhanced Thermoelectric Performance of PEDOT:PSS Films by Sequential Postâ€Treatment with Formamide. Macromolecular Materials and Engineering, 2018, 303, 1700429.	3.6	69
10	Graphene quantum dots-incorporated cathode buffer for improvement of inverted polymer solar cells. Solar Energy Materials and Solar Cells, 2013, 117, 214-218.	6.2	64
11	Tailoring the phase transition temperature to achieve high-performance cubic GeTe-based thermoelectrics. Journal of Materials Chemistry A, 2020, 8, 18880-18890.	10.3	61
12	Achieving high thermoelectric quality factor toward high figure of merit in GeTe. Materials Today Physics, 2020, 14, 100239.	6.0	61
13	High-performance thermoelectric materials based on ternary TiO2/CNT/PANI composites. Physical Chemistry Chemical Physics, 2018, 20, 9411-9418.	2.8	55
14	Enhancement of the performance of organic solar cells by electrospray deposition with optimal solvent system. Solar Energy Materials and Solar Cells, 2014, 121, 119-125.	6.2	49
15	Bottom-Up Engineering Strategies for High-Performance Thermoelectric Materials. Nano-Micro Letters, 2021, 13, 119.	27.0	48
16	Elimination of Burn-in Open-Circuit Voltage Degradation by ZnO Surface Modification in Organic Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 1608-1615.	8.0	45
17	Effective enhancement of thermoelectric and mechanical properties of germanium telluride <i>via</i> rhenium-doping. Journal of Materials Chemistry C, 2020, 8, 16940-16948.	5.5	38
18	Transparent flexible thin-film pâ€“n junction thermoelectric module. Npj Flexible Electronics, 2020, 4, .	10.7	37

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19	Improved Alignment of PEDOT:PSS Induced by in-situ Crystallization of â€œGreenâ€•Dimethylsulfone Molecules to Enhance the Polymer Thermoelectric Performance. Frontiers in Chemistry, 2019, 7, 783.	3.6	36
20	Enhanced Thermoelectric Performance of Nanocrystalline Indium Tin Oxide Pellets by Modulating the Density and Nanoporosity Via Spark Plasma Sintering. ACS Applied Nano Materials, 2020, 3, 10156-10165.	5.0	35
21	Improved Thermoelectric Properties and Environmental Stability of Conducting PEDOT:PSS Films Post-treated With Imidazolium Ionic Liquids. Frontiers in Chemistry, 2019, 7, 870.	3.6	35
22	Origin of High Thermoelectric Performance in Earth-Abundant Phosphideâ€“Tetrahedrite. ACS Applied Materials & Interfaces, 2020, 12, 9150-9157.	8.0	35
23	Realizing zT Values of 2.0 in Cubic GeTe. ChemNanoMat, 2021, 7, 476-482.	2.8	35
24	Enhanced thermoelectric performance of poly(3,4â€ethylenedioxythiophene):poly(4â€styrenesulfonate) (PEDOT:PSS) with longâ€term humidity stability via sequential treatment with trifluoroacetic acid. Polymer International, 2020, 69, 84-92.	3.1	33
25	Rapid UV-Curable Form-Stable Polyethylene-Glycol-Based Phase Change Material. ACS Applied Polymer Materials, 2022, 4, 2747-2756.	4.4	33
26	Surface modification of microencapsulated phase change materials with nanostructures for enhancement of their thermal conductivity. Materials Chemistry and Physics, 2022, 277, 125438.	4.0	32
27	Enhanced absorbance and electron collection in inverted organic solar cells: Optical admittance and transient photocurrent analyses. Organic Electronics, 2014, 15, 1306-1311.	2.6	31
28	Effect of substituents in sulfoxides on the enhancement of thermoelectric properties of PEDOT:PSS: experimental and modelling evidence. Molecular Systems Design and Engineering, 2020, 5, 976-984.	3.4	29
29	High performance optoelectronic device based on semitransparent organic photovoltaic cell integrated with organic light-emitting diode. Organic Electronics, 2011, 12, 1429-1433.	2.6	26
30	Pinhole-free mixed perovskite film for bending durable mixed perovskite solar cells. Solar Energy Materials and Solar Cells, 2018, 175, 111-117.	6.2	26
31	Investigation of Interface Properties for ClAlPc/C₆₀ Heterojunction-Based Inverted Organic Solar Cell. Journal of Physical Chemistry C, 2012, 116, 2521-2526.	3.1	25
32	Effects of DamkhÃ¶ler number of evaporation on the morphology of active layer and the performance of organic heterojunction solar cells fabricated by electrospray method. Solar Energy Materials and Solar Cells, 2015, 134, 140-147.	6.2	25
33	Pure Blueâ€Light Emissive Poly(oligofluorenes) with Bifunctional POSS in the Main Chain. Macromolecular Rapid Communications, 2014, 35, 801-806.	3.9	24
34	Organic photovoltaic power conversion efficiency improved by AC electric field alignment during fabrication. Applied Physics Letters, 2011, 99, 053305.	3.3	23
35	Efficient Semitransparent Bulk-Heterojunction Organic Photovoltaic Cells With High-Performance Low Processing Temperature Indiumâ€“Tin Oxide Top Electrode. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1685-1689.	2.9	21
36	Efficient, large area organic photovoltaic modules with active layers processed with non-halogenated solvents in air. Organic Electronics, 2017, 43, 55-63.	2.6	21

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37	Sodium formaldehyde sulfoxylate, an ionic-type, water-soluble reducing reagent to effectively improve seebeck coefficient of PEDOT:PSS film. Organic Electronics, 2020, 81, 105682.	2.6	21
38	Electrical property modified hole transport layer (PEDOT:PSS) enhance the efficiency of perovskite solar cells: Hybrid co-solvent post-treatment. Organic Electronics, 2020, 78, 105582.	2.6	20
39	Flexible elemental thermoelectrics with ultra-high power density. Materials Today Energy, 2022, 25, 100964.	4.7	20
40	A highly flexible form-stable silicone-octadecane PCM composite for heat harvesting. Materials Today Advances, 2022, 14, 100227.	5.2	20
41	Fully Printable Organic and Perovskite Solar Cells with Transfer-Printed Flexible Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 18730-18738.	8.0	19
42	Binary treatment of PEDOT:PSS films with nitric acid and imidazolium-based ionic liquids to improve the thermoelectric properties. Materials Advances, 2020, 1, 3233-3242.	5.4	18
43	The benzyl viologen radical cation: an effective n-dopant for poly(naphthalenediimide-bithiophene). Journal of Materials Chemistry A, 2020, 8, 18916-18924.	10.3	18
44	Simultaneous enhancements in the Seebeck coefficient and conductivity of PEDOT:PSS by blending ferroelectric BaTiO₃ nanoparticles. Journal of Materials Chemistry A, 2021, 9, 16952-16960.	10.3	16
45	Performance enhancement in organic photovoltaic devices using plasma-polymerized fluorocarbon-modified Ag nanoparticles. Organic Electronics, 2011, 12, 1943-1947.	2.6	14
46	Aqueous Synthesis, Doping, and Processing of n-Type Ag₂Se for High Thermoelectric Performance at Near-Room-Temperature. Inorganic Chemistry, 2022, 61, 6451-6458.	4.0	14
47	Photoresponsive Thermoelectric Materials Derived from Fullerene-C₆₀ PEDOT Hybrid Polymers. ACS Applied Energy Materials, 2020, 3, 6726-6734.	5.1	13
48	Gallium-Doped Zinc Oxide Nanostructures for Tunable Transparent Thermoelectric Films. ACS Applied Nano Materials, 2022, 5, 8631-8639.	5.0	13
49	Soluble bipolar star-shaped molecule as highly stable and efficient blue light emitter. RSC Advances, 2015, 5, 15399-15406.	3.6	12
50	Crowning of dibenzosilole with a naphthalenediimide functional group to prepare an electron acceptor for organic solar cells. Dyes and Pigments, 2015, 120, 314-321.	3.7	12
51	A high work function anode interfacial layer via mild temperature thermal decomposition of a C60F36 thin film on ITO. Journal of Materials Chemistry C, 2013, 1, 1491.	5.5	11
52	An Electronâ€Accepting Chromophore Based on Fluorene and Naphthalenediimide Building Blocks for Solutionâ€Processable Bulk Heterojunction Devices. Asian Journal of Organic Chemistry, 2015, 4, 800-807.	2.7	11
53	Growth and in-plane undulations of GaAs/Ge superlattices on [001]-oriented Ge and GaAs substrates: formation of regular 3D island-in-network nanostructures. Journal of Materials Chemistry C, 2018, 6, 13059-13068.	5.5	9
54	Ultrathin Film Broadband Terahertz Antireflection Coating Based on Impedance Matching Method. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-8.	2.9	8

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55	Low band-gap weak donorâ€“strong acceptor conjugated polymer for organic solar cell. RSC Advances, 2015, 5, 98876-98879.	3.6	7
56	A dopantâ€free polymer as holeâ€transporting material for highly efficient and stable perovskite solar cells. Progress in Photovoltaics: Research and Applications, 2018, 26, 994-1002.	8.1	7
57	Organic photovoltaic initial stage degradation analysis using impedance spectroscopy. Synthetic Metals, 2015, 202, 63-67.	3.9	6
58	Organic photovoltaic annealing process analysis using impedance spectroscopy. Solar Energy, 2017, 144, 367-375.	6.1	6
59	Nitrogen-mediated aligned growth of hexagonal BN films for reliable high-performance InSe transistors. Journal of Materials Chemistry C, 2020, 8, 4421-4431.	5.5	5
60	Dual nanostructures in poly (3-hexylthiophene) based organic photovoltaics under alternative current electric field. Thin Solid Films, 2012, 520, 5770-5774.	1.8	4
61	Simultaneously enhancement of quantum efficiency and color purity by molecular design in star-shaped solution-processed blue emitters. Organic Electronics, 2016, 37, 14-23.	2.6	4
62	Dielectric dispersion and superior thermal characteristics in isotope-enriched hexagonal boron nitride thin films: evaluation as thermally self-dissipating dielectrics for GaN transistors. Journal of Materials Chemistry C, 2020, 8, 9558-9568.	5.5	4
63	Enhancement of the performance of planar perovskite solar cells by active-layer surface/interface modification with optimal mixed solvent-antisolvent post-treatment. Organic Electronics, 2022, 100, 106349.	2.6	4
64	Determination of dominant recombination site in perovskite solar cells through illuminationâ€sideâ€dependent impedance spectroscopy. Progress in Photovoltaics: Research and Applications, 0, , .	8.1	4
65	Integration of transmissible organic electronic devices for sensor application. , 2013, , .		1
66	Prolonged lifetime of polymer solar cells with amphiphilic monolayers modified cathodes. Organic Electronics, 2017, 49, 368-374.	2.6	1
67	Low-temperature processed, stable n-i-p perovskite solar cells with indene-C60-bisadduct as electron transport material. Journal of Materials Science: Materials in Electronics, 2021, 32, 12872-12880.	2.2	1
68	A simple green route to blue thermoelectric PEDOT: PSS. Applied Physics Letters, 2021, 119, 223904.	3.3	1
69	Synthesis and optical and electronic properties of one-dimensional sulfoxonium-based hybrid metal halide (CH₃)₃SOPbI₃. Chemical Communications, 2021, 57, 5790-5793.	4.1	0
70	Highly Efficient IR Transparent Perovskite Solar Cells. , 2017, , .		0