Wei Zhang

List of Publications by Year
in descending order

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54	2,556	279798	189892
papers	citations	23 h-index	50 g-index

54	54	54	4125
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Charge Photogeneration and Recombination in Fluorine-Substituted Polymer Solar Cells. Frontiers in Chemistry, 2022, 10, 846898.	3.6	1
2	Photoinduced Polaron Formation in a Polymerized Electron-Acceptor Semiconductor. Journal of Physical Chemistry Letters, 2022, 13, 5143-5150.	4.6	2
3	Comparative study of charge characteristics in PCPDTBT:fullerenes solar cells. Chemical Physics, 2021, 540, 111004.	1.9	7
4	Ground- and excited-state characteristics in photovoltaic polymer N2200. RSC Advances, 2021, 11, 20191-20199.	3.6	15
5	Charge photogeneration and recombination in ternary polymer solar cells based on compatible acceptors. Journal of Materials Science, 2021, 56, 14181-14195.	3.7	8
6	In situ passivation of Ga_xIn_(1â^'x)P nanowires using radial Al_yIn_(1â^'y)P shells grown by MOVPE. Nanotechnology, 2021, 32, 425705.	2.6	3
7	Influence of thermal annealing on the charge generation and transport in PM6-based non-fullerene solar cells. Journal of Materials Science: Materials in Electronics, 2021, 32, 22879-22889.	2.2	1
8	Excited-state properties of Y-series small molecule semiconductors. Dyes and Pigments, 2021, 192, 109431.	3.7	17
9	Emerging light-emitting diodes for next-generation data communications. Nature Electronics, 2021, 4, 559-572.	26.0	102
10	The piezotronic effect on carrier recombination processes in InGaN/GaN multiple quantum wells microwire. Nano Energy, 2021, 87, 106145.	16.0	8
11	Reducing energy loss via tuning energy levels of polymer acceptors for efficient all-polymer solar cells. Science China Chemistry, 2020, 63, 1785-1792.	8.2	32
12	Recycled indium tin oxide transparent conductive electrode for polymer solar cells. Journal of Materials Science, 2020, 55, 11403-11410.	3.7	18
13	Carrier Recombination Processes in GaAs Wafers Passivated by Wet Nitridation. ACS Applied Materials & Interfaces, 2020, 12, 28360-28367.	8.0	21
14	Core unit engineering of star-shaped acceptor polymers for all-polymer solar cells. Solar Energy, 2020, 207, 199-208.	6.1	3
15	Effect of hydrogen chloride etching on carrier recombination processes of indium phosphide nanowires. Nanoscale, 2019, 11, 18550-18558.	5.6	13
16	Effect of Post-Thermal Annealing on the Performance and Charge Photogeneration Dynamics of PffBT4T-2OD/PC71BM Solar Cells. Polymers, 2019, 11, 408.	4.5	20
17	Synergistic effects of copolymerization and fluorination on acceptor polymers for efficient and stable all-polymer solar cells. Journal of Materials Chemistry C, 2019, 7, 14130-14140.	5.5	24
18	Tracking coherent population transfer and thermal population relaxation in condensed system by broad-band transient grating spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 075101.	1.5	2

#	Article	IF	Citations
19	Polymerâ€Passivated Inorganic Cesium Lead Mixedâ€Halide Perovskites for Stable and Efficient Solar Cells with High Openâ€Circuit Voltage over 1.3 V. Advanced Materials, 2018, 30, 1705393.	21.0	401
20	Effect of [6,6]-phenyl C61-butyric acid methyl ester phase on the charge generation of poly(3-hexylthiophene)-based polymer solar cells. Journal of Power Sources, 2018, 390, 87-92.	7.8	9
21	8.0% Efficient Allâ€Polymer Solar Cells with High Photovoltage of 1.1 V and Internal Quantum Efficiency near Unity. Advanced Energy Materials, 2018, 8, 1700908.	19.5	81
22	Ternary organic solar cells with enhanced open circuit voltage. Nano Energy, 2017, 37, 24-31.	16.0	96
23	High-photovoltage all-polymer solar cells based on a diketopyrrolopyrroleâ€“isoindigo acceptor polymer. Journal of Materials Chemistry A, 2017, 5, 11693-11700.	10.3	54
24	Highâ€Performance and Stable Allâ€Polymer Solar Cells Using Donor and Acceptor Polymers with Complementary Absorption. Advanced Energy Materials, 2017, 7, 1602722.	19.5	90
25	9.0% power conversion efficiency from ternary all-polymer solar cells. Energy and Environmental Science, 2017, 10, 2212-2221.	30.8	200
26	Ternary Organic Solar Cells with Minimum Voltage Losses. Advanced Energy Materials, 2017, 7, 1700390.	19.5	55
27	Carrier Recombination Processes in Gallium Indium Phosphide Nanowires. Nano Letters, 2017, 17, 4248-4254.	9.1	20
28	Dependence of Excitedâ€State Properties of a Lowâ€Bandgap Photovoltaic Copolymer on Sideâ€Chain Substitution and Solvent. ChemSusChem, 2016, 9, 1623-1633.	6.8	6
29	Enhancement of photovoltaic performance by two-step dissolution processed photoactive blend in polymer solar cells. Science China Materials, 2016, 59, 842-850.	6.3	6
30	Different emissive states in the bulk and at the surface of methylammonium lead bromide perovskite revealed by two-photon micro-spectroscopy and lifetime measurements. APL Photonics, 2016, 1, .	5.7	39
31	High Performance All-Polymer Solar Cells by Synergistic Effects of Fine-Tuned Crystallinity and Solvent Annealing. Journal of the American Chemical Society, 2016, 138, 10935-10944.	13.7	401
32	Confinement effects on Brillouin scattering in semiconductor nanowire photonic crystal. Physical Review B, 2016, 94, .	3.2	7
33	GaAsP Nanowires Grown by Aerotaxy. Nano Letters, 2016, 16, 5701-5707.	9.1	36
34	Low Band Gap Polymer Solar Cells With Minimal Voltage Losses. Advanced Energy Materials, 2016, 6, 1600148.	19.5	84
35	High Excitation Intensity Opens a New Trapping Channel in Organicâ€Inorganic Hybrid Perovskite Nanoparticles. ACS Energy Letters, 2016, 1, 1154-1161.	17.4	81
36	Recombination dynamics in aerotaxy-grown Zn-doped GaAs nanowires. Nanotechnology, 2016, 27, 455704.	2.6	16

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37	Exciton Binding Energy and the Nature of Emissive States in Organometal Halide Perovskites. Journal of Physical Chemistry Letters, 2015, 6, 2969-2975.	4.6	211
38	Carrier Recombination Dynamics in Sulfur-Doped InP Nanowires. Nano Letters, 2015, 15, 7238-7244.	9.1	26
39	Photon upconversion in degenerately sulfur doped InP nanowires. Nanoscale, 2015, 7, 20503-20509.	5.6	1
40	Characterization and Distribution of Poly(3â€hexylthiophene) Phases in an Annealed Blend Film. ChemPhysChem, 2014, 15, 935-941.	2.1	6
41	Charge Photogeneration Dynamics of Poly(3-hexylthiophene) Blend with Covalently-Linked Fullerene Derivative in Low Fraction. Journal of Physical Chemistry C, 2014, 118, 21377-21384.	3.1	9
42	Ultrafast Charge Transfer from CdSe Quantum Dots to p-Type NiO: Hole Injection vs Hole Trapping. Journal of Physical Chemistry C, 2014, 118, 18462-18471.	3.1	73
43	Side-chain effects on the solution-phase conformations and charge photogeneration dynamics of low-bandgap copolymers. Journal of Chemical Physics, 2013, 139, 124904.	3.0	25
44	Mechanism of Primary Charge Photogeneration in Polyfluorene Copolymer/Fullerene Blends and Influence of the Donor/Acceptor Lowest Unoccupied Molecular Orbital Level Offset. Journal of Physical Chemistry C, 2013, 117, 735-749.	3.1	24
45	Spectroelectrochemical characterization of anionic and cationic polarons in poly(3-hexylthiophene)/fullerene blend. Effects of morphology and interface. Synthetic Metals, 2013, 169, 41-47.	3.9	11
46	Manipulating Backbone Structure to Enhance Low Band Gap Polymer Photovoltaic Performance. Advanced Energy Materials, 2013, 3, 930-937.	19.5	62
47	Influence of Fullerene Multiadducts on the Morphology and Charge Photogeneration of Their Photovoltaic Blends with Poly(3-hexylthiophene). Journal of Physical Chemistry C, 2013, 117, 25898-25907.	3.1	13
48	Subnanosecond charge photogeneration and recombination in polyfluorene copolymer-fullerene solar cell: Effects of electric field. Optics Express, 2013, 21, A241.	3.4	2
49	Subnanosecond Charge Recombination Dynamics in P3HT/PC61BM Films. Molecules, 2012, 17, 13923-13936.	3.8	2
50	Primary Dynamics of Exciton and Charge Photogeneration in Solvent Vapor Annealed P3HT/PCBM Films. Journal of Physical Chemistry C, 2012, 116, 4298-4310.	3.1	70
51	White-light continuum probed femtosecond time-resolved absorption spectroscopic measurement of Î²-carotene under high pressure. Chemical Physics Letters, 2012, 532, 47-51.	2.6	12
52	Effect of End Groups on the Raman Spectra of Lycopene and Î²-Carotene under High Pressure. Molecules, 2011, 16, 1973-1980.	3.8	28
53	Effect of Pressure on Absorption Spectra of Lycopene in n-Hexane and CS 2 Solvents. Chinese Physics Letters, 2010, 27, 013301.	3.3	2
54	Polymer-Passivated Inorganic Cesium Lead Halide Perovskites for High-Voltage and High-Efficiency Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0