

Wei Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1861516/publications.pdf>

Version: 2024-02-01

54
papers

2,556
citations

279798

23
h-index

189892

50
g-index

54
all docs

54
docs citations

54
times ranked

4125
citing authors

#	ARTICLE	IF	CITATIONS
1	High Performance All-Polymer Solar Cells by Synergistic Effects of Fine-Tuned Crystallinity and Solvent Annealing. <i>Journal of the American Chemical Society</i> , 2016, 138, 10935-10944.	13.7	401
2	Polymerâ€Passivated Inorganic Cesium Lead Mixedâ€Halide Perovskites for Stable and Efficient Solar Cells with High Openâ€Circuit Voltage over 1.3 V. <i>Advanced Materials</i> , 2018, 30, 1705393.	21.0	401
3	Exciton Binding Energy and the Nature of Emissive States in Organometal Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2969-2975.	4.6	211
4	9.0% power conversion efficiency from ternary all-polymer solar cells. <i>Energy and Environmental Science</i> , 2017, 10, 2212-2221.	30.8	200
5	Emerging light-emitting diodes for next-generation data communications. <i>Nature Electronics</i> , 2021, 4, 559-572.	26.0	102
6	Ternary organic solar cells with enhanced open circuit voltage. <i>Nano Energy</i> , 2017, 37, 24-31.	16.0	96
7	Highâ€Performance and Stable Allâ€Polymer Solar Cells Using Donor and Acceptor Polymers with Complementary Absorption. <i>Advanced Energy Materials</i> , 2017, 7, 1602722.	19.5	90
8	Low Band Gap Polymer Solar Cells With Minimal Voltage Losses. <i>Advanced Energy Materials</i> , 2016, 6, 1600148.	19.5	84
9	High Excitation Intensity Opens a New Trapping Channel in Organicâ€Inorganic Hybrid Perovskite Nanoparticles. <i>ACS Energy Letters</i> , 2016, 1, 1154-1161.	17.4	81
10	8.0% Efficient Allâ€Polymer Solar Cells with High Photovoltage of 1.1 V and Internal Quantum Efficiency near Unity. <i>Advanced Energy Materials</i> , 2018, 8, 1700908.	19.5	81
11	Ultrafast Charge Transfer from CdSe Quantum Dots to p-Type NiO: Hole Injection vs Hole Trapping. <i>Journal of Physical Chemistry C</i> , 2014, 118, 18462-18471.	3.1	73
12	Primary Dynamics of Exciton and Charge Photogeneration in Solvent Vapor Annealed P3HT/PCBM Films. <i>Journal of Physical Chemistry C</i> , 2012, 116, 4298-4310.	3.1	70
13	Manipulating Backbone Structure to Enhance Low Band Gap Polymer Photovoltaic Performance. <i>Advanced Energy Materials</i> , 2013, 3, 930-937.	19.5	62
14	Ternary Organic Solar Cells with Minimum Voltage Losses. <i>Advanced Energy Materials</i> , 2017, 7, 1700390.	19.5	55
15	High-photovoltage all-polymer solar cells based on a diketopyrrolopyrroleâ€isoindigo acceptor polymer. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11693-11700.	10.3	54
16	Different emissive states in the bulk and at the surface of methylammonium lead bromide perovskite revealed by two-photon micro-spectroscopy and lifetime measurements. <i>APL Photonics</i> , 2016, 1, .	5.7	39
17	GaAsP Nanowires Grown by Aerotaxy. <i>Nano Letters</i> , 2016, 16, 5701-5707.	9.1	36
18	Reducing energy loss via tuning energy levels of polymer acceptors for efficient all-polymer solar cells. <i>Science China Chemistry</i> , 2020, 63, 1785-1792.	8.2	32

#	ARTICLE	IF	CITATIONS
19	Effect of End Groups on the Raman Spectra of Lycopene and β -Carotene under High Pressure. <i>Molecules</i> , 2011, 16, 1973-1980.	3.8	28
20	Carrier Recombination Dynamics in Sulfur-Doped InP Nanowires. <i>Nano Letters</i> , 2015, 15, 7238-7244.	9.1	26
21	Side-chain effects on the solution-phase conformations and charge photogeneration dynamics of low-bandgap copolymers. <i>Journal of Chemical Physics</i> , 2013, 139, 124904.	3.0	25
22	Mechanism of Primary Charge Photogeneration in Polyfluorene Copolymer/Fullerene Blends and Influence of the Donor/Acceptor Lowest Unoccupied Molecular Orbital Level Offset. <i>Journal of Physical Chemistry C</i> , 2013, 117, 735-749.	3.1	24
23	Synergistic effects of copolymerization and fluorination on acceptor polymers for efficient and stable all-polymer solar cells. <i>Journal of Materials Chemistry C</i> , 2019, 7, 14130-14140.	5.5	24
24	Carrier Recombination Processes in GaAs Wafers Passivated by Wet Nitridation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 28360-28367.	8.0	21
25	Carrier Recombination Processes in Gallium Indium Phosphide Nanowires. <i>Nano Letters</i> , 2017, 17, 4248-4254.	9.1	20
26	Effect of Post-Thermal Annealing on the Performance and Charge Photogeneration Dynamics of PffBT4T-2OD/PC71BM Solar Cells. <i>Polymers</i> , 2019, 11, 408.	4.5	20
27	Recycled indium tin oxide transparent conductive electrode for polymer solar cells. <i>Journal of Materials Science</i> , 2020, 55, 11403-11410.	3.7	18
28	Excited-state properties of Y-series small molecule semiconductors. <i>Dyes and Pigments</i> , 2021, 192, 109431.	3.7	17
29	Recombination dynamics in aerotaxy-grown Zn-doped GaAs nanowires. <i>Nanotechnology</i> , 2016, 27, 455704.	2.6	16
30	Ground- and excited-state characteristics in photovoltaic polymer N2200. <i>RSC Advances</i> , 2021, 11, 20191-20199.	3.6	15
31	Influence of Fullerene Multiadducts on the Morphology and Charge Photogeneration of Their Photovoltaic Blends with Poly(3-hexylthiophene). <i>Journal of Physical Chemistry C</i> , 2013, 117, 25898-25907.	3.1	13
32	Effect of hydrogen chloride etching on carrier recombination processes of indium phosphide nanowires. <i>Nanoscale</i> , 2019, 11, 18550-18558.	5.6	13
33	White-light continuum probed femtosecond time-resolved absorption spectroscopic measurement of β -carotene under high pressure. <i>Chemical Physics Letters</i> , 2012, 532, 47-51.	2.6	12
34	Spectroelectrochemical characterization of anionic and cationic polarons in poly(3-hexylthiophene)/fullerene blend. Effects of morphology and interface. <i>Synthetic Metals</i> , 2013, 169, 41-47.	3.9	11
35	Charge Photogeneration Dynamics of Poly(3-hexylthiophene) Blend with Covalently-Linked Fullerene Derivative in Low Fraction. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21377-21384.	3.1	9
36	Effect of [6,6]-phenyl C61-butyric acid methyl ester phase on the charge generation of poly(3-hexylthiophene)-based polymer solar cells. <i>Journal of Power Sources</i> , 2018, 390, 87-92.	7.8	9

#	ARTICLE	IF	CITATIONS
37	Charge photogeneration and recombination in ternary polymer solar cells based on compatible acceptors. <i>Journal of Materials Science</i> , 2021, 56, 14181-14195.	3.7	8
38	The piezotronic effect on carrier recombination processes in InGaN/GaN multiple quantum wells microwire. <i>Nano Energy</i> , 2021, 87, 106145.	16.0	8
39	Confinement effects on Brillouin scattering in semiconductor nanowire photonic crystal. <i>Physical Review B</i> , 2016, 94, .	3.2	7
40	Comparative study of charge characteristics in PCPDTBT:fullerenes solar cells. <i>Chemical Physics</i> , 2021, 540, 111004.	1.9	7
41	Characterization and Distribution of Poly(3-hexylthiophene) Phases in an Annealed Blend Film. <i>ChemPhysChem</i> , 2014, 15, 935-941.	2.1	6
42	Dependence of Excited-State Properties of a Low-Bandgap Photovoltaic Copolymer on Side-Chain Substitution and Solvent. <i>ChemSusChem</i> , 2016, 9, 1623-1633.	6.8	6
43	Enhancement of photovoltaic performance by two-step dissolution processed photoactive blend in polymer solar cells. <i>Science China Materials</i> , 2016, 59, 842-850.	6.3	6
44	Core unit engineering of star-shaped acceptor polymers for all-polymer solar cells. <i>Solar Energy</i> , 2020, 207, 199-208.	6.1	3
45	In situ passivation of Ga _x In _(1-x) P nanowires using radial Al _y In _(1-y) P shells grown by MOVPE. <i>Nanotechnology</i> , 2021, 32, 425705.	2.6	3
46	Effect of Pressure on Absorption Spectra of Lycopene in n-Hexane and CS ₂ Solvents. <i>Chinese Physics Letters</i> , 2010, 27, 013301.	3.3	2
47	Subnanosecond Charge Recombination Dynamics in P3HT/PC61BM Films. <i>Molecules</i> , 2012, 17, 13923-13936.	3.8	2
48	Subnanosecond charge photogeneration and recombination in polyfluorene copolymer-fullerene solar cell: Effects of electric field. <i>Optics Express</i> , 2013, 21, A241.	3.4	2
49	Tracking coherent population transfer and thermal population relaxation in condensed system by broad-band transient grating spectroscopy. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018, 51, 075101.	1.5	2
50	Photoinduced Polaron Formation in a Polymerized Electron-Acceptor Semiconductor. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 5143-5150.	4.6	2
51	Photon upconversion in degenerately sulfur doped InP nanowires. <i>Nanoscale</i> , 2015, 7, 20503-20509.	5.6	1
52	Influence of thermal annealing on the charge generation and transport in PM6-based non-fullerene solar cells. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 22879-22889.	2.2	1
53	Charge Photogeneration and Recombination in Fluorine-Substituted Polymer Solar Cells. <i>Frontiers in Chemistry</i> , 2022, 10, 846898.	3.6	1
54	Polymer-Passivated Inorganic Cesium Lead Halide Perovskites for High-Voltage and High-Efficiency Solar Cells. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0