Hongtao Zhang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/11129870/publications.pdf

Version: 2024-02-01

55 papers	3,547 citations	186209 28 h-index	155592 55 g-index
56 all docs	56 docs citations	56 times ranked	4133 citing authors

#	Article	IF	Citations
1	Chemical Design for Both Molecular and Morphology Optimization toward Highâ€Performance Lithiumâ€Ion Batteries Cathode Material Based on Covalent Organic Framework. Advanced Functional Materials, 2022, 32, 2107703.	7.8	47
2	A 2D covalent organic framework with ultra-large interlayer distance as high-rate anode material for lithium-ion batteries. Nano Research, 2022, 15, 9779-9784.	5.8	27
3	One polymer with three charge states for two types of lithium-ion batteries with different characteristics as needed. Energy Storage Materials, 2022, 47, 141-148.	9.5	16
4	Improving current and mitigating energy loss in ternary organic photovoltaics enabled by two well-compatible small molecule acceptors. Science China Chemistry, 2021, 64, 608-615.	4.2	13
5	Flexible Highâ€Performance and Solutionâ€Processed Organic Photovoltaics with Robust Mechanical Stability. Advanced Functional Materials, 2021, 31, 2010000.	7.8	29
6	Bandgap Engineering of an Aryl-Fused Tetrathianaphthalene for Visible-Blind Organic Field-Effect Transistors. Frontiers in Chemistry, 2021, 9, 698246.	1.8	2
7	High performance Li-ion capacitor fabricated with dual graphene-based materials. Nanotechnology, 2021, 32, 015403.	1.3	32
8	A 3D cross-linked graphene-based honeycomb carbon composite withÂexcellent confinement effect of organic cathode material for lithium-ion batteries. Carbon, 2020, 157, 656-662.	5.4	98
9	A Li-rich layered-spinel cathode material for high capacity and high rate lithium-ion batteries fabricated via a gas-solid reaction. Science China Materials, 2020, 63, 2435-2442.	3.5	17
10	Side chain engineering investigation of non-fullerene acceptors for photovoltaic device with efficiency over 15%. Science China Chemistry, 2020, 63, 1799-1806.	4.2	25
11	A nonfullerene acceptor incorporating a dithienopyran fused backbone for organic solar cells with efficiency over 14%. Nano Energy, 2020, 75, 104988.	8.2	27
12	An oxygen heterocycle-fused fluorene based non-fullerene acceptor for high efficiency organic solar cells. Materials Chemistry Frontiers, 2020, 4, 3594-3601.	3.2	15
13	An acceptorâ€“donorâ€“acceptor type non-fullerene acceptor with an asymmetric backbone for high performance organic solar cells. Journal of Materials Chemistry C, 2020, 8, 6293-6298.	2.7	12
14	Achieving an Efficient and Stable Morphology in Organic Solar Cells Via Fine-Tuning the Side Chains of Small-Molecule Acceptors. Chemistry of Materials, 2020, 32, 2593-2604.	3.2	91
15	Achieving organic solar cells with efficiency over 14% based on a non-fullerene acceptor incorporating a cyclopentathiophene unit fused backbone. Journal of Materials Chemistry A, 2020, 8, 5194-5199.	5.2	21
16	An all small molecule organic solar cell based on a porphyrin donor and a non-fullerene acceptor with complementary and broad absorption. Dyes and Pigments, 2020, 176, 108250.	2.0	20
17	All-Small-Molecule Organic Solar Cells Based on a Fluorinated Small Molecule Donor With High Open-Circuit Voltage of 1.07 V. Frontiers in Chemistry, 2020, 8, 329.	1.8	15
18	The rational and effective design of nonfullerene acceptors guided by a semi-empirical model for an organic solar cell with an efficiency over 15%. Journal of Materials Chemistry A, 2020, 8, 9726-9732.	5.2	54

#	Article	IF	Citations
19	Polymeric Graphene Bulk Materials with a 3D Crossâ€Linked Monolithic Graphene Network. Advanced Materials, 2019, 31, e1802403.	11.1	74
20	A facile gaseous sulfur treatment strategy for Li-rich and Ni-rich cathode materials with high cycling and rate performance. Nano Energy, 2019, 63, 103887.	8.2	82
21	Super-elasticity of three-dimensionally cross-linked graphene materials all the way to deep cryogenic temperatures. Science Advances, 2019, 5, eaav2589.	4.7	84
22	Facile Synthesis of Carbonâ€Coated Li₃VO₄ Anode Material and its Application in Full Cells. Energy Technology, 2018, 6, 2074-2081.	1.8	29
23	Efficient carbazole-based small-molecule organic solar cells with an improved fill factor. RSC Advances, 2018, 8, 4867-4871.	1.7	11
24	Two Thieno[3,2â€•b]thiopheneâ€Based Small Molecules as Bifunctional Photoactive Materials for Organic Solar Cells. Solar Rrl, 2018, 2, 1700179.	3.1	12
25	Effects of alkyl chains on intermolecular packing and device performance in small molecule based organic solar cells. Dyes and Pigments, 2017, 141, 262-268.	2.0	11
26	A series of dithienobenzodithiophene based small molecules for highly efficient organic solar cells. Science China Chemistry, 2017, 60, 552-560.	4.2	16
27	Solution-processed organic tandem solar cells with power conversion efficiencies >12%. Nature Photonics, 2017, 11, 85-90.	15.6	510
28	Small Molecules with Asymmetric 4-Alkyl-8-alkoxybenzo[1,2-b:4,5-bâ€²]dithiophene as the Central Unit for High-Performance Solar Cells with High Fill Factors. Chemistry of Materials, 2017, 29, 3694-3703.	3.2	28
29	Small-Molecule Acceptor Based on the Heptacyclic Benzodi(cyclopentadithiophene) Unit for Highly Efficient Nonfullerene Organic Solar Cells. Journal of the American Chemical Society, 2017, 139, 4929-4934.	6.6	459
30	Developing high-performance small molecule organic solar cells via a large planar structure and an electron-withdrawing central unit. Chemical Communications, 2017, 53, 451-454.	2.2	22
31	A simple small molecule as the acceptor for fullerene-free organic solar cells. Science China Chemistry, 2017, 60, 366-369.	4.2	29
32	A-D-A-type small molecular acceptor with one hexyl-substituted thiophene as Ï€ bridge for fullerene-free organic solar cells. Science China Materials, 2017, 60, 49-56.	3.5	10
33	An A-D-A Type Small-Molecule Electron Acceptor with End-Extended Conjugation for High Performance Organic Solar Cells. Chemistry of Materials, 2017, 29, 7908-7917.	3.2	139
34	Design and synthesis of low band gap non-fullerene acceptors for organic solar cells with impressively high Jsc over 21 mA cm_2. Science China Materials, 2017, 60, 819-828.	3.5	29
35	New small-molecule acceptors based on hexacyclic naphthalene(cyclopentadithiophene) for efficient non-fullerene organic solar cells. Journal of Materials Chemistry A, 2017, 5, 17204-17210.	5.2	75
36	A New Nonfullerene Electron Acceptor with a Ladder Type Backbone for Highâ€Performance Organic Solar Cells. Advanced Materials, 2017, 29, 1604964.	11.1	289

#	Article	IF	Citations
37	Evaluation of Small Molecules as Front Cell Donor Materials for Highâ€Efficiency Tandem Solar Cells. Advanced Materials, 2016, 28, 7008-7012.	11.1	43
38	Photocontrol of charge injection/extraction at electrode/semiconductor interfaces for high-photoresponsivity organic transistors. Journal of Materials Chemistry C, 2016, 4, 5289-5296.	2.7	29
39	Nonfullerene Small Molecular Acceptors with a Three-Dimensional (3D) Structure for Organic Solar Cells. Chemistry of Materials, 2016, 28, 6770-6778.	3.2	57
40	A simple small molecule as an acceptor for fullerene-free organic solar cells with efficiency near 8%. Journal of Materials Chemistry A, 2016, 4, 10409-10413.	5.2	104
41	Fullerene-free small molecule organic solar cells with a high open circuit voltage of 1.15 V. Chemical Communications, 2016, 52, 465-468.	2.2	79
42	Synergistic Photomodulation of Capacitive Coupling and Charge Separation Toward Functional Organic Fieldâ€Effect Transistors with High Responsivity. Advanced Electronic Materials, 2015, 1, 1500159.	2.6	28
43	Synthesis of well-defined easily crosslinkable azobenzene side-chain liquid crystalline polymers via reversible additionâ€“fragmentation chain transfer polymerization and photomechanical properties of their post-crosslinked fibers. European Polymer Journal, 2015, 69, 592-604.	2.6	26
44	Dithienosilole-Based Small-Molecule Organic Solar Cells with an Efficiency over 8%: Investigation of the Relationship between the Molecular Structure and Photovoltaic Performance. Chemistry of Materials, 2015, 27, 6077-6084.	3.2	92
45	Small Molecules Based on Alkyl/Alkylthio-thieno[3,2-b]thiophene-Substituted Benzo[1,2-b:4,5-bâ€²]dithiophene for Solution-Processed Solar Cells with High Performance. Chemistry of Materials, 2015, 27, 8414-8423.	3.2	71
46	Easily crosslinkable side-chain azobenzene polymers for fast and persistent fixation of surface relief gratings. New Journal of Chemistry, 2015, 39, 1410-1420.	1.4	17
47	Efficient one-pot synthesis of uniform, surface-functionalized, and â€œlivingâ€•polymer microspheres by reverse atom transfer radical precipitation polymerization. European Polymer Journal, 2014, 54, 95-108.	2.6	19
48	Well-Defined Hydrophilic Molecularly Imprinted Polymer Microspheres for Efficient Molecular Recognition in Real Biological Samples by Facile RAFT Coupling Chemistry. Biomacromolecules, 2014, 15, 1663-1675.	2.6	68
49	Synthesis of Reactive Azobenzene Main-Chain Liquid Crystalline Polymers via Michael Addition Polymerization and Photomechanical Effects of Their Supramolecular Hydrogen-Bonded Fibers. Macromolecules, 2013, 46, 7650-7660.	2.2	75
50	Efficient synthesis of monodisperse, highly crosslinked, and â€œlivingâ€•functional polymer microspheres by the ambient temperature iniferterâ€•induced â€œlivingâ€•radical precipitation polymerization. Journal of Polymer Science Part A, 2013, 51, 1983-1998.	2.5	29
51	Efficient Synthesis of Molecularly Imprinted Polymers with Enzyme Inhibition Potency by the Controlled Surface Imprinting Approach. ACS Macro Letters, 2013, 2, 566-570.	2.3	69
52	Organic Semiconductors: Solutionâ€Crystallized Organic Semiconductors with High Carrier Mobility and Air Stability (Adv. Mater. 41/2012). Advanced Materials, 2012, 24, 5518-5518.	11.1	1
53	Light-driven photochromism-induced reversible switching in P3HTâ€“spiropyran hybrid transistors. Journal of Materials Chemistry, 2012, 22, 4261-4265.	6.7	75
54	TiO2-decorated graphenes as efficient photoswitches with high oxygen sensitivity. Chemical Science, 2011, 2, 1860.	3.7	59

#	ARTICLE	IF	CITATIONS
55	Interface Engineering of Semiconductor/Dielectric Heterojunctions toward Functional Organic Thin-Film Transistors. Nano Letters, 2011, 11, 4939-4946.	4.5	135