Zhiqun He

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3354331/publications.pdf

Version: 2024-02-01

101	1,741	394421	330143
papers	citations	19 h-index	37 g-index

105	105	105	2521
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Anomalously large interface charge in polarity-switchable photovoltaic devices: an indication of mobile ions in organicâ€“inorganic halide perovskites. Energy and Environmental Science, 2015, 8, 1256-1260.	30.8	202
2	Dynamic interface charge governing the currentâ€“voltage hysteresis in perovskite solar cells. Physical Chemistry Chemical Physics, 2015, 17, 9613-9618.	2.8	88
3	Organicâ€“Inorganic Perovskite Lightâ€Emitting Electrochemical Cells with a Large Capacitance. Advanced Functional Materials, 2015, 25, 7226-7232.	14.9	87
4	Efficient organic solar cells using copper(I) iodide (CuI) hole transport layers. Applied Physics Letters, 2015, 106, .	3.3	73
5	A Mesogenic Triphenyleneâ^'Peryleneâ^'Triphenylene Triad. Organic Letters, 2011, 13, 764-767.	4.6	71
6	Employing liquid crystal material as regulator to enhance performance of photomultiplication type polymer photodetectors. Chemical Engineering Journal, 2022, 427, 131802.	12.7	71
7	The efficient blue photoluminescence of pyrazolo-[3,4-b]-quinoline derivatives and the energy transfer in polymer matrices. Journal of Luminescence, 2000, 86, 1-14.	3.1	68
8	Modeling and simulation of bulk heterojunction polymer solar cells. Solar Energy Materials and Solar Cells, 2014, 127, 67-86.	6.2	60
9	Electroluminescence from novel pyrazole-based polymer systems. Journal of Materials Chemistry, 1999, 9, 339-342.	6.7	56
10	Smart Strategy: Transparent Hole-Transporting Polymer as a Regulator to Optimize Photomultiplication-type Polymer Photodetectors. ACS Applied Materials & Interfaces, 2021, 13, 21565-21572.	8.0	55
11	Synthesis of Crown Ether-Linked Discotic Triphenylenes. Organic Letters, 2010, 12, 472-475.	4.6	44
12	An integrated 16/spl times/16 PVDF pyroelectric sensor array. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2000, 47, 1413-1420.	3.0	33
13	Expanded Porphyrin-like Structures Based on Twinned Triphenylenes. Journal of Organic Chemistry, 2013, 78, 9505-9511.	3.2	32
14	Red non-doped electroluminescent dyes based on arylamino fumaronitrile derivatives. Dyes and Pigments, 2010, 85, 86-92.	3.7	26
15	Secondary Grain Growth in Organicâ€“Inorganic Perovskite Films with Ethylamine Hydrochloride Additives for Highly Efficient Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 20026-20034.	8.0	25
16	The driving force for homeotropic alignment of a triphenylene derivative in a hexagonal columnar mesophase on single substrates. Thin Solid Films, 2010, 518, 1973-1979.	1.8	24
17	Tailoring a dynamic crystalline process during the conversion of lead-halide perovskite layer to achieve high performance solar cells. Journal of Materials Chemistry A, 2018, 6, 24793-24804.	10.3	24
18	Homeotropic alignment through charge-transfer-induced columnar mesophase formation in an unsymmetrically substituted triphenylene derivative. Pure and Applied Chemistry, 2010, 82, 1993-2003.	1.9	21

#	Article	IF	Citations
19	Improved synthesis of monohydroxytriphenylenes (MHTs)â€"important precursors to discotic liquid crystal families. Tetrahedron Letters, 2011, 52, 77-79.	1.4	21
20	Interface Engineering of 2D/3D Perovskite Heterojunction Improves Photovoltaic Efficiency and Stability. Solar Rrl, 2021, 5, 2100072.	5.8	21
21	Electronic and magnetic properties of 3d-metal trioxides superhalogen cluster-doped monolayer MoS2: A first-principles study. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 1651-1656.	2.1	20
22	Effective approach for reducing the migration of ions and improving the stability of organicâ€"inorganic perovskite solar cells. Journal of Alloys and Compounds, 2018, 741, 489-494.	5.5	20
23	Synthesis and preliminary photovoltaic behavior study of a soluble polyimide containing ruthenium complexes. Polymer Chemistry, 2010, 1, 1048.	3.9	19
24	Efficient electrophosphorescence based on 2-(9,9-diethylfluoren-2-yl)-5-trifluoromethylpyridine iridium complexes. Synthetic Metals, 2010, 160, 354-360.	3.9	19
25	Effect of doping on the short-circuit current and open-circuit voltage of polymer solar cells. Journal of Applied Physics, 2014, 116, .	2.5	19
26	Electron drift mobility in polystyrene doped with bispyrazolopyridine derivatives. Applied Physics Letters, 2002, 81, 969-971.	3.3	17
27	A Ï€-Extended Donorâ€"Acceptorâ€"Donor Triphenylene Twin Linked via a Pyrazine Bridge. Organic Letters, 2015, 17, 3286-3289.	4.6	17
28	Structural, electronic, and magnetic properties of 3D metal trioxide and tetraoxide superhalogen cluster-doped monolayer BN. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 2300-2306.	2.1	17
29	A discotic triphenylene dimer as organic hole transporting material for electroluminescence devices. Journal of Luminescence, 2007, 122-123, 942-945.	3.1	16
30	C60-assisted crystal engineering for perovskite solar cells with enhanced efficiency and stability. Organic Electronics, 2018, 63, 276-282.	2.6	15
31	Ratiometric thermal sensing based on dual emission of YBO3:Ce3+, Tb3+. Journal of Alloys and Compounds, 2020, 833, 155011.	5.5	15
32	A Color Stable Blue Light-Emitting Device Using a Pyrazolo[3,4-b]Quinoline Derivative as an Emitter. IEEE Photonics Technology Letters, 2008, 20, 1781-1783.	2.5	14
33	Multifunctional electroluminescent material based on dimesitylboron and Î±-naphthylamino fluorene bridge. Synthetic Metals, 2011, 161, 2323-2328.	3.9	14
34	Manipulating hybrid structures of polymer/a-Si for thin film solar cells. Applied Physics Letters, 2014, 104, .	3.3	14
35	Molecular interactions and functionalities of an organic additive in a perovskite semiconducting device: a case study towards high performance solar cells. Journal of Materials Chemistry A, 2022, 10, 2876-2887.	10.3	14
36	Exploring Electron Transporting Layer in Combination with a Polyelectrolyte for nâ€iâ€p Perovskite Solar Cells. Advanced Materials Interfaces, 2020, 7, 2000412.	3.7	13

#	Article	IF	Citations
37	Synthesis and light-emitting properties of 2-(N-phenyl-Î±-naphthylamino) and 2-dimesitylboron-7-(N-phenyl-Î±-naphthylamino)-9,9-diethylfluorene. Science in China Series B: Chemistry, 2009, 52, 952-960.	0.8	12
38	Spatially separated charge densities of electrons and holes in organic-inorganic halide perovskites. Journal of Applied Physics, 2015, 117, 074901.	2.5	12
39	Electron transporting organic materials with an exceptional large scale homeotropic molecular orientation. Physical Chemistry Chemical Physics, 2016, 18, 8554-8560.	2.8	12
40	Preliminary photovoltaic response from a polymer containing p-vinylenephenylene amine backbone. Solar Energy Materials and Solar Cells, 2007, 91, 1289-1298.	6.2	11
41	Thin-layer photoluminescence and electroluminescence observed from pyrazoloquinoline-doped polymer matrices. Journal of Luminescence, 2007, 122-123, 605-609.	3.1	11
42	Non-doped redâ€“greenâ€“blue electroluminescent devices based on fluorenyl and phenanthryl phenylamino derivatives. Thin Solid Films, 2014, 562, 299-306.	1.8	11
43	Understanding the phase behavior from multiple-step isothermally crystallized poly(3-hexylthiophene)s. Polymer, 2016, 98, 61-69.	3.8	11
44	Synthesis and investigation on liquid crystal and optical properties of dyads based on triphenylene and perylene. RSC Advances, 2017, 7, 17030-17037.	3.6	11
45	Synthesis and investigation on optoelectronic properties of mesogenic triphenyleneâ€“perylene dyads linked by ethynylphenyl bridges. New Journal of Chemistry, 2018, 42, 3211-3221.	2.8	11
46	Enlarging crystal grains with ionic liquid to enhance the performance of perovskite solar cells. Organic Electronics, 2020, 84, 105805.	2.6	11
47	Optimization of a SnO₂-Based Electron Transport Layer Using Zirconium Acetylacetonate for Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 54579-54588.	8.0	11
48	On spherulitic forms in an aromatic polyesteramide. Polymer, 2000, 41, 1157-1165.	3.8	10
49	Observation of disorder effects on charged carrier mobility in triphenylene-based discotic materials. Journal of Luminescence, 2007, 122-123, 931-935.	3.1	10
50	Photoluminescence and Electroluminescence from a Hybrid of Lumogen Red in Nanoporous-Silica. Journal of Nanoscience and Nanotechnology, 2008, 8, 1336-1340.	0.9	10
51	Synthesis and liquid crystal properties of triphenylene liquid crystals bearing polymerisable acrylate and methacrylate groups. Liquid Crystals, 2011, 38, 943-955.	2.2	10
52	A convenient one-step reaction leading to a key discotic intermediate: mono-hydroxy-triphenylene at multi-gram scale. Tetrahedron Letters, 2015, 56, 700-705.	1.4	10
53	Additional Organicâ€Solventâ€Rinsing Process to Enhance Perovskite Photovoltaic Performance. Advanced Electronic Materials, 2019, 5, 1900244.	5.1	10
54	Controlled Crystallization of CsRbâ€Based Multiâ€Cation Perovskite Using a Blended Sequential Process for Highâ€Performance Solar Cells. Solar Rrl, 2021, 5, 2100050.	5.8	10

#	Article	IF	Citations
55	Exploring Reversible Quenching of Fluorescence from a Pyrazolo[3,4â€b]quinoline Derivative by Protonation. ChemPhysChem, 2010, 11, 2623-2629.	2.1	9
56	A preliminary development in hybrid a-silicon/polymer solar cells. Renewable Energy, 2014, 63, 145-152.	8.9	9
57	A preliminary investigation into hybrid photovoltaic cells with organic phthalocyanines and amorphous silicon heterojunction. Journal Physics D: Applied Physics, 2015, 48, 195102.	2.8	9
58	Exploring photophysical processes in a ternary-blended polymer solar cell. Polymer, 2018, 153, 398-407.	3.8	9
59	Non-doped red or blue electroluminescent materials based on fluorenyl-triarylamines with fumaronitrile or fluorene bridge. Thin Solid Films, 2012, 520, 2794-2799.	1.8	8
60	Stable orange and white electrophosphorescence based on spirobifluorenyltrifluoromethylpyridine iridium complexes. Synthetic Metals, 2015, 210, 214-222.	3.9	8
61	Solution-processable phosphorescence based on iridium-cored small molecules with the trifluoromethyl group. Optical Materials, 2015, 42, 137-143.	3.6	8
62	Influence of side-chain bearing units on the phase behaviour of a series of copoly(ester ether)s. European Polymer Journal, 1996, 32, 735-746.	5.4	7
63	Study of mesogenic properties and molecular conformation from a heterogeneous tetramer with a triphenylene centre core and three cyanobiphenyl tails. Journal of Molecular Liquids, 2008, 138, 93-99.	4.9	7
64	Electronic and magnetic properties of MnF3(4) superhalogen cluster-sandwiched bilayer graphene: First-principles calculations. Computational Materials Science, 2016, 124, 316-322.	3.0	7
65	Effects of surface morphology on the ionic capacitance and performance of perovskite solar cells. Japanese Journal of Applied Physics, 2017, 56, 090305.	1.5	7
66	Improved fill factor in inverted planar perovskite solar cells with zirconium acetate as the hole-and-ion-blocking layer. Physical Chemistry Chemical Physics, 2018, 20, 7395-7400.	2.8	7
67	Crystallization of random aromatic copolyesters containing flexible spacer chains and side-groups. Polymer, 1994, 35, 1322-1325.	3.8	6
68	Phase behaviour and non-periodic crystallisation of random aromatic copolyesters and their side chain bearing systems. Polymer, 2001, 42, 5351-5363.	3.8	6
69	Laminating Fabrication of Bifacial Organic-Inorganic Perovskite Solar Cells. International Journal of Photoenergy, 2020, 2020, 1-8.	2.5	6
70	Towards Color Stable Blue Primary for Displays: Suppress Field-Dependent Color Change in a Multilayered Electroluminescent Device. Journal of Display Technology, 2011, 7, 96-104.	1.2	5
71	Orange and white electrophosphorescence based on triphenylamine-fluorenyl trifluoromethylpyridine iridium complexes. Synthetic Metals, 2016, 215, 95-103.	3.9	5
72	Perovskite Passivation with a Bifunctional Molecule 1,2â€Benzisothiazolinâ€3â€One for Efficient and Stable Planar Solar Cells. Solar Rrl, 2021, 5, 2100472.	5.8	5

#	Article	IF	Citations
73	Multifunctional Organic Additive for Improving the Open Circuit Voltage of Perovskite Solar Cells. Solar Rrl, 0, , .	5.8	5
74	Enhancing performance of organic-inorganic perovskite solar cells using super halogen additive. Organic Electronics, 2022, 108, 106548.	2.6	5
75	Optical properties of BBOT-doped silica films prepared via solâ€“gel processing. Journal of Luminescence, 2007, 122-123, 268-271.	3.1	4
76	Trap-induced light enhancement from a polymer light emitting device. Applied Physics Letters, 2013, 103, 043306.	3.3	4
77	Spirobifluorene and biphenylaminophenyl fluorene with dimesitylboron as multifunctional electroluminescent materials. Optical Materials, 2015, 50, 154-161.	3.6	4
78	CH₃NH₃I post-treatment improves the performance of perovskite solar cells via eliminating the impure phases. Functional Materials Letters, 2017, 10, 1750049.	1.2	4
79	Exploring photocurrent output from donor/acceptor bulk-heterojunctions by monitoring exciton quenching. Chinese Physics B, 2015, 24, 063301.	1.4	3
80	Exploring alkylthiol additives in PBDB-T:ITIC blended active layers for solar cell applications*. Chinese Physics B, 2019, 28, 088802.	1.4	3
81	Bright all-solution-processed CsPbBr3 perovskite light emitting diodes optimized by quaternary ammonium salt. Current Applied Physics, 2021, 31, 60-67.	2.4	3
82	High performance polymers prepared by transformation of processable polyamides. Polymer, 1994, 35, 2218-2221.	3.8	2
83	Nanotubes and Columnar Phase Formation from a Polymer/Discotic Molecule Composite Induced by Geometric Confinement. Molecular Crystals and Liquid Crystals, 2009, 512, 179/[2025]-187/[2033].	0.9	2
84	Effect of Crystallinity of Fullerene Derivatives on Doping Density in the Organic Bulk Heterojunction Layer in Polymer Solar Cells. Chinese Physics Letters, 2015, 32, 056801.	3.3	2
85	Discotic liquid crystals with aggregation-induced emission properties based on tetraphenylethylene and triphenylene derivatives. Molecular Crystals and Liquid Crystals, 0, , 1-12.	0.9	2
86	8â€Hydroxyquinoline Metal Complexes as Cathode Interfacial Materials in Inverted Planar Perovskite Solar Cells. Advanced Materials Interfaces, 2021, 8, 2100506.	3.7	2
87	Recent Developments of Azatriphenylene Materials as n-Type Organic Semiconductors. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2014, 30, 1001-1016.	4.9	1
88	Solid Electrolytes: Organic-Inorganic Perovskite Light-Emitting Electrochemical Cells with a Large Capacitance (Adv. Funct. Mater. 46/2015). Advanced Functional Materials, 2015, 25, 7243-7243.	14.9	1
89	Non-doped red-green-blue electroluminescence for fumaronitrile and fluorene bridge with pyrenyl or phenanthrylamino group. Thin Solid Films, 2016, 619, 166-173.	1.8	1
90	Perovskite Solar Cells: Additional Organicâ€Solventâ€Rinsing Process to Enhance Perovskite Photovoltaic Performance (Adv. Electron. Mater. 10/2019). Advanced Electronic Materials, 2019, 5, 1970053.	5.1	1

#	Article	IF	Citations
91	Non-doped long-wave red electroluminescence for fumaronitrile with fluorenyl or biphenyl group. Optical Materials, 2020, 108, 110425.	3.6	1
92	Formation and Suppression of Multi-Component Exciplex in White Organic Light Emitting Devices. Guangxue Xuebao/Acta Optica Sinica, 2014, 34, 0823002.	1.2	1
93	Effect of multiple temperature-step annealing on the performances of polymer solar cells. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 048801.	0.5	1
94	Tuning Molecular Interaction in Polymer Solar Cells via a Multifunctional Discotic Component to Enhance Photovoltaic Response. Solar Rrl, 0, , 2200101.	5.8	1
95	A DIONE APPROACH TO MODIFY THE OPTICAL AND MESOPHASE PROPERTIES OF DISCOTIC TRIPHENYLENE DERIVATIVES. Functional Materials Letters, 2011, 04, 345-349.	1.2	0
96	Optimization of a poly(p -phenylene benzobisoxazole)-based light-emitting device with a complex cathode structure. Chinese Physics B, 2013, 22, 117805.	1.4	0
97	Enhancement of polymer photovoltaic performances by doping with modified carbon black nanoparticles. Applied Physics A: Materials Science and Processing, 2015, 120, 601-607.	2.3	0
98	Perovskite Solar Cells: Exploring Electron Transporting Layer in Combination with a Polyelectrolyte for nâ€iâ€p Perovskite Solar Cells (Adv. Mater. Interfaces 17/2020). Advanced Materials Interfaces, 2020, 7, 2070094.	3.7	0
99	Towards Color Stable Three-band White Organic Light-emitting Diodes. Chinese Journal of Luminescence, 2012, 33, 1095-1100.	0.5	0
100	Improved Performance of Hybrid White Organic Light-emitting Diodes via Adjusting The Mixing Ratio in Spacer Layer. Chinese Journal of Luminescence, 2015, 36, 685-691.	0.5	0
101	Tuning Molecular Interaction in Polymer Solar Cells via a Multifunctional Discotic Component to Enhance Photovoltaic Response. Solar Rrl, 2022, 6, .	5.8	0