

Zhiqun He

List of Publications by Year in descending order

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101
papers

1,741
citations

394421

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105
docs citations

105
times ranked

2521
citing authors

#	ARTICLE	IF	CITATIONS
1	Employing liquid crystal material as regulator to enhance performance of photomultiplication type polymer photodetectors. <i>Chemical Engineering Journal</i> , 2022, 427, 131802.	12.7	71
2	Molecular interactions and functionalities of an organic additive in a perovskite semiconducting device: a case study towards high performance solar cells. <i>Journal of Materials Chemistry A</i> , 2022, 10, 2876-2887.	10.3	14
3	Enhancing performance of organic-inorganic perovskite solar cells using super halogen additive. <i>Organic Electronics</i> , 2022, 108, 106548.	2.6	5
4	Tuning Molecular Interaction in Polymer Solar Cells via a Multifunctional Discotic Component to Enhance Photovoltaic Response. <i>Solar Rrl</i> , 2022, 6, .	5.8	0
5	Controlled Crystallization of CsRb-Based Multi-Cation Perovskite Using a Blended Sequential Process for High-Performance Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2100050.	5.8	10
6	Interface Engineering of 2D/3D Perovskite Heterojunction Improves Photovoltaic Efficiency and Stability. <i>Solar Rrl</i> , 2021, 5, 2100072.	5.8	21
7	Smart Strategy: Transparent Hole-Transporting Polymer as a Regulator to Optimize Photomultiplication-type Polymer Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 21565-21572.	8.0	55
8	8-Hydroxyquinoline Metal Complexes as Cathode Interfacial Materials in Inverted Planar Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100506.	3.7	2
9	Perovskite Passivation with a Bifunctional Molecule 1,2-Benzisothiazolin-3-One for Efficient and Stable Planar Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2100472.	5.8	5
10	Bright all-solution-processed CsPbBr ₃ perovskite light emitting diodes optimized by quaternary ammonium salt. <i>Current Applied Physics</i> , 2021, 31, 60-67.	2.4	3
11	Optimization of a SnO ₂ -Based Electron Transport Layer Using Zirconium Acetylacetonate for Efficient and Stable Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 54579-54588.	8.0	11
12	Laminating Fabrication of Bifacial Organic-Inorganic Perovskite Solar Cells. <i>International Journal of Photoenergy</i> , 2020, 2020, 1-8.	2.5	6
13	Perovskite Solar Cells: Exploring Electron Transporting Layer in Combination with a Polyelectrolyte for n-i-p Perovskite Solar Cells (<i>Adv. Mater. Interfaces</i> 17/2020). <i>Advanced Materials Interfaces</i> , 2020, 7, 2070094.	3.7	0
14	Non-doped long-wave red electroluminescence for fumaronitrile with fluorenyl or biphenyl group. <i>Optical Materials</i> , 2020, 108, 110425.	3.6	1
15	Exploring Electron Transporting Layer in Combination with a Polyelectrolyte for n-i-p Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000412.	3.7	13
16	Ratiometric thermal sensing based on dual emission of YBO ₃ :Ce ³⁺ , Tb ³⁺ . <i>Journal of Alloys and Compounds</i> , 2020, 833, 155011.	5.5	15
17	Secondary Grain Growth in Organic-Inorganic Perovskite Films with Ethylamine Hydrochloride Additives for Highly Efficient Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 20026-20034.	8.0	25
18	Enlarging crystal grains with ionic liquid to enhance the performance of perovskite solar cells. <i>Organic Electronics</i> , 2020, 84, 105805.	2.6	11

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19	Additional Organic Solvent Rinsing Process to Enhance Perovskite Photovoltaic Performance. <i>Advanced Electronic Materials</i> , 2019, 5, 1900244.	5.1	10
20	Exploring alkylthiol additives in PBDB-T:ITIC blended active layers for solar cell applications*. <i>Chinese Physics B</i> , 2019, 28, 088802.	1.4	3
21	Perovskite Solar Cells: Additional Organic Solvent Rinsing Process to Enhance Perovskite Photovoltaic Performance (<i>Adv. Electron. Mater.</i> 10/2019). <i>Advanced Electronic Materials</i> , 2019, 5, 1970053.	5.1	1
22	Improved fill factor in inverted planar perovskite solar cells with zirconium acetate as the hole-and-ion-blocking layer. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 7395-7400.	2.8	7
23	Synthesis and investigation on optoelectronic properties of mesogenic triphenylene perylene dyads linked by ethynylphenyl bridges. <i>New Journal of Chemistry</i> , 2018, 42, 3211-3221.	2.8	11
24	Effective approach for reducing the migration of ions and improving the stability of organic-inorganic perovskite solar cells. <i>Journal of Alloys and Compounds</i> , 2018, 741, 489-494.	5.5	20
25	Tailoring a dynamic crystalline process during the conversion of lead-halide perovskite layer to achieve high performance solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24793-24804.	10.3	24
26	C60-assisted crystal engineering for perovskite solar cells with enhanced efficiency and stability. <i>Organic Electronics</i> , 2018, 63, 276-282.	2.6	15
27	Exploring photophysical processes in a ternary-blended polymer solar cell. <i>Polymer</i> , 2018, 153, 398-407.	3.8	9
28	Synthesis and investigation on liquid crystal and optical properties of dyads based on triphenylene and perylene. <i>RSC Advances</i> , 2017, 7, 17030-17037.	3.6	11
29	Effects of surface morphology on the ionic capacitance and performance of perovskite solar cells. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 090305.	1.5	7
30	CH ₃ NH ₃ I post-treatment improves the performance of perovskite solar cells via eliminating the impure phases. <i>Functional Materials Letters</i> , 2017, 10, 1750049.	1.2	4
31	Non-doped red-green-blue electroluminescence for fumaronitrile and fluorene bridge with pyrenyl or phenanthrylamino group. <i>Thin Solid Films</i> , 2016, 619, 166-173.	1.8	1
32	Structural, electronic, and magnetic properties of 3D metal trioxide and tetraoxide superhalogen cluster-doped monolayer BN. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2016, 380, 2300-2306.	2.1	17
33	Electronic and magnetic properties of MnF ₃ (4) superhalogen cluster-sandwiched bilayer graphene: First-principles calculations. <i>Computational Materials Science</i> , 2016, 124, 316-322.	3.0	7
34	Understanding the phase behavior from multiple-step isothermally crystallized poly(3-hexylthiophene)s. <i>Polymer</i> , 2016, 98, 61-69.	3.8	11
35	Orange and white electrophosphorescence based on triphenylamine-fluorenyl trifluoromethylpyridine iridium complexes. <i>Synthetic Metals</i> , 2016, 215, 95-103.	3.9	5
36	Electron transporting organic materials with an exceptional large scale homeotropic molecular orientation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 8554-8560.	2.8	12

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37	Organic-Inorganic Perovskite Light-Emitting Electrochemical Cells with a Large Capacitance. <i>Advanced Functional Materials</i> , 2015, 25, 7226-7232.	14.9	87
38	Solid Electrolytes: Organic-Inorganic Perovskite Light-Emitting Electrochemical Cells with a Large Capacitance (<i>Adv. Funct. Mater.</i> 46/2015). <i>Advanced Functional Materials</i> , 2015, 25, 7243-7243.	14.9	1
39	Stable orange and white electrophosphorescence based on spirobifluorenyltrifluoromethylpyridine iridium complexes. <i>Synthetic Metals</i> , 2015, 210, 214-222.	3.9	8
40	A convenient one-step reaction leading to a key discotic intermediate: mono-hydroxy-triphenylene at multi-gram scale. <i>Tetrahedron Letters</i> , 2015, 56, 700-705.	1.4	10
41	Anomalously large interface charge in polarity-switchable photovoltaic devices: an indication of mobile ions in organic-inorganic halide perovskites. <i>Energy and Environmental Science</i> , 2015, 8, 1256-1260.	30.8	202
42	Dynamic interface charge governing the current-voltage hysteresis in perovskite solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 9613-9618.	2.8	88
43	Spatially separated charge densities of electrons and holes in organic-inorganic halide perovskites. <i>Journal of Applied Physics</i> , 2015, 117, 074901.	2.5	12
44	Exploring photocurrent output from donor/acceptor bulk-heterojunctions by monitoring exciton quenching. <i>Chinese Physics B</i> , 2015, 24, 063301.	1.4	3
45	Efficient organic solar cells using copper(I) iodide (CuI) hole transport layers. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	73
46	A Ñ-Extended Donor-Acceptor-Donor Triphenylene Twin Linked via a Pyrazine Bridge. <i>Organic Letters</i> , 2015, 17, 3286-3289.	4.6	17
47	Enhancement of polymer photovoltaic performances by doping with modified carbon black nanoparticles. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 120, 601-607.	2.3	0
48	Effect of Crystallinity of Fullerene Derivatives on Doping Density in the Organic Bulk Heterojunction Layer in Polymer Solar Cells. <i>Chinese Physics Letters</i> , 2015, 32, 056801.	3.3	2
49	Solution-processable phosphorescence based on iridium-cored small molecules with the trifluoromethyl group. <i>Optical Materials</i> , 2015, 42, 137-143.	3.6	8
50	A preliminary investigation into hybrid photovoltaic cells with organic phthalocyanines and amorphous silicon heterojunction. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 195102.	2.8	9
51	Spirobifluorene and biphenylaminophenyl fluorene with dimesitylboron as multifunctional electroluminescent materials. <i>Optical Materials</i> , 2015, 50, 154-161.	3.6	4
52	Improved Performance of Hybrid White Organic Light-emitting Diodes via Adjusting The Mixing Ratio in Spacer Layer. <i>Chinese Journal of Luminescence</i> , 2015, 36, 685-691.	0.5	0
53	Recent Developments of Azatriphenylene Materials as Ñ-Type Organic Semiconductors. <i>Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica</i> , 2014, 30, 1001-1016.	4.9	1
54	Manipulating hybrid structures of polymer-Si for thin film solar cells. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	14

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55	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
56	Modeling and simulation of bulk heterojunction polymer solar cells. Solar Energy Materials and Solar Cells, 2014, 127, 67-86.	6.2	60
57	Non-doped red "green" blue electroluminescent devices based on fluorenyl and phenanthryl phenylamino derivatives. Thin Solid Films, 2014, 562, 299-306.	1.8	11
58	A preliminary development in hybrid a-silicon/polymer solar cells. Renewable Energy, 2014, 63, 145-152.	8.9	9
59	Electronic and magnetic properties of 3d-metal trioxides superhalogen cluster-doped monolayer MoS ₂ : A first-principles study. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 1651-1656.	2.1	20
60	Formation and Suppression of Multi-Component Exciplex in White Organic Light Emitting Devices. Guangxue Xuebao/Acta Optica Sinica, 2014, 34, 0823002.	1.2	1
61	Effect of multiple temperature-step annealing on the performances of polymer solar cells. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 048801.	0.5	1
62	Expanded Porphyrin-like Structures Based on Twinned Triphenylenes. Journal of Organic Chemistry, 2013, 78, 9505-9511.	3.2	32
63	Trap-induced light enhancement from a polymer light emitting device. Applied Physics Letters, 2013, 103, 043306.	3.3	4
64	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
65	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
66	Towards Color Stable Three-band White Organic Light-emitting Diodes. Chinese Journal of Luminescence, 2012, 33, 1095-1100.	0.5	0
67	A Mesogenic Triphenylene~Perylene~Triphenylene Triad. Organic Letters, 2011, 13, 764-767.	4.6	71
68	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
69	Synthesis and liquid crystal properties of triphenylene liquid crystals bearing polymerisable acrylate and methacrylate groups. Liquid Crystals, 2011, 38, 943-955.	2.2	10
70	Multifunctional electroluminescent material based on dimesitylboron and 1,8-naphthylamino fluorene bridge. Synthetic Metals, 2011, 161, 2323-2328.	3.9	14
71	Improved synthesis of monohydroxytriphenylenes (MHTs) "important precursors to discotic liquid crystal families. Tetrahedron Letters, 2011, 52, 77-79.	1.4	21
72	A DIONE APPROACH TO MODIFY THE OPTICAL AND MESOPHASE PROPERTIES OF DISCOTIC TRIPHENYLENE DERIVATIVES. Functional Materials Letters, 2011, 04, 345-349.	1.2	0

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73	Homeotropic alignment through charge-transfer-induced columnar mesophase formation in an unsymmetrically substituted triphenylene derivative. <i>Pure and Applied Chemistry</i> , 2010, 82, 1993-2003.	1.9	21
74	Exploring Reversible Quenching of Fluorescence from a Pyrazolo[3,4- <i>b</i>]quinoline Derivative by Protonation. <i>ChemPhysChem</i> , 2010, 11, 2623-2629.	2.1	9
75	The driving force for homeotropic alignment of a triphenylene derivative in a hexagonal columnar mesophase on single substrates. <i>Thin Solid Films</i> , 2010, 518, 1973-1979.	1.8	24
76	Red non-doped electroluminescent dyes based on arylamino fumaronitrile derivatives. <i>Dyes and Pigments</i> , 2010, 85, 86-92.	3.7	26
77	Synthesis and preliminary photovoltaic behavior study of a soluble polyimide containing ruthenium complexes. <i>Polymer Chemistry</i> , 2010, 1, 1048.	3.9	19
78	Synthesis of Crown Ether-Linked Discotic Triphenylenes. <i>Organic Letters</i> , 2010, 12, 472-475.	4.6	44
79	Efficient electrophosphorescence based on 2-(9,9-diethylfluoren-2-yl)-5-trifluoromethylpyridine iridium complexes. <i>Synthetic Metals</i> , 2010, 160, 354-360.	3.9	19
80	Synthesis and light-emitting properties of 2-(N-phenyl-1-naphthylamino) and 2-dimesitylboron-7-(N-phenyl-1-naphthylamino)-9,9-diethylfluorene. <i>Science in China Series B: Chemistry</i> , 2009, 52, 952-960.	0.8	12
81	Nanotubes and Columnar Phase Formation from a Polymer/Discotic Molecule Composite Induced by Geometric Confinement. <i>Molecular Crystals and Liquid Crystals</i> , 2009, 512, 179/[2025]-187/[2033].	0.9	2
82	Study of mesogenic properties and molecular conformation from a heterogeneous tetramer with a triphenylene centre core and three cyanobiphenyl tails. <i>Journal of Molecular Liquids</i> , 2008, 138, 93-99.	4.9	7
83	A Color Stable Blue Light-Emitting Device Using a Pyrazolo[3,4- <i>b</i>]Quinoline Derivative as an Emitter. <i>IEEE Photonics Technology Letters</i> , 2008, 20, 1781-1783.	2.5	14
84	Photoluminescence and Electroluminescence from a Hybrid of Lumogen Red in Nanoporous-Silica. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 1336-1340.	0.9	10
85	Preliminary photovoltaic response from a polymer containing p-vinylphenylene amine backbone. <i>Solar Energy Materials and Solar Cells</i> , 2007, 91, 1289-1298.	6.2	11
86	Optical properties of BBOT-doped silica films prepared via sol-gel processing. <i>Journal of Luminescence</i> , 2007, 122-123, 268-271.	3.1	4
87	Thin-layer photoluminescence and electroluminescence observed from pyrazoloquinoline-doped polymer matrices. <i>Journal of Luminescence</i> , 2007, 122-123, 605-609.	3.1	11
88	Observation of disorder effects on charged carrier mobility in triphenylene-based discotic materials. <i>Journal of Luminescence</i> , 2007, 122-123, 931-935.	3.1	10
89	A discotic triphenylene dimer as organic hole transporting material for electroluminescence devices. <i>Journal of Luminescence</i> , 2007, 122-123, 942-945.	3.1	16
90	Electron drift mobility in polystyrene doped with bispyrazolopyridine derivatives. <i>Applied Physics Letters</i> , 2002, 81, 969-971.	3.3	17

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91	Phase behaviour and non-periodic crystallisation of random aromatic copolyesters and their side chain bearing systems. <i>Polymer</i> , 2001, 42, 5351-5363.	3.8	6
92	On spherulitic forms in an aromatic polyesteramide. <i>Polymer</i> , 2000, 41, 1157-1165.	3.8	10
93	The efficient blue photoluminescence of pyrazolo-[3,4-b]-quinoline derivatives and the energy transfer in polymer matrices. <i>Journal of Luminescence</i> , 2000, 86, 1-14.	3.1	68
94	An integrated 16/spl times/16 PVDF pyroelectric sensor array. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2000, 47, 1413-1420.	3.0	33
95	Electroluminescence from novel pyrazole-based polymer systems. <i>Journal of Materials Chemistry</i> , 1999, 9, 339-342.	6.7	56
96	Influence of side-chain bearing units on the phase behaviour of a series of copoly(ester ether)s. <i>European Polymer Journal</i> , 1996, 32, 735-746.	5.4	7
97	High performance polymers prepared by transformation of processable polyamides. <i>Polymer</i> , 1994, 35, 2218-2221.	3.8	2
98	Crystallization of random aromatic copolyesters containing flexible spacer chains and side-groups. <i>Polymer</i> , 1994, 35, 1322-1325.	3.8	6
99	Discotic liquid crystals with aggregation-induced emission properties based on tetraphenylethylene and triphenylene derivatives. <i>Molecular Crystals and Liquid Crystals</i> , 0, , 1-12.	0.9	2
100	Tuning Molecular Interaction in Polymer Solar Cells via a Multifunctional Discotic Component to Enhance Photovoltaic Response. <i>Solar Rrl</i> , 0, , 2200101.	5.8	1
101	Multifunctional Organic Additive for Improving the Open Circuit Voltage of Perovskite Solar Cells. <i>Solar Rrl</i> , 0, , .	5.8	5