Guankui Long

List of Publications by Year
in descending order

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101	12,296	53660 45	31759 101
papers	citations	h-index	g-index

106	106	106	13414
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Series of Simple Oligomer-like Small Molecules Based on Oligothiophenes for Solution-Processed Solar Cells with High Efficiency. Journal of the American Chemical Society, 2015, 137, 3886-3893.	6.6	788
2	Small-molecule solar cells with efficiency over 9%. Nature Photonics, 2015, 9, 35-41.	15.6	769
3	Solution-Processed and High-Performance Organic Solar Cells Using Small Molecules with a Benzodithiophene Unit. Journal of the American Chemical Society, 2013, 135, 8484-8487.	6.6	675
4	Solution-Processed Organic Solar Cells Based on Dialkylthiol-Substituted Benzodithiophene Unit with Efficiency near 10%. Journal of the American Chemical Society, 2014, 136, 15529-15532.	6.6	670
5	High Performance Photovoltaic Applications Using Solution-Processed Small Molecules. Accounts of Chemical Research, 2013, 46, 2645-2655.	7.6	624
6	Porous 3D graphene-based bulk materials with exceptional high surface area and excellent conductivity for supercapacitors. Scientific Reports, 2013, 3, 1408.	1.6	582
7	Small Molecules Based on Benzo[1,2-b:4,5-bâ€²]dithiophene Unit for High-Performance Solution-Processed Organic Solar Cells. Journal of the American Chemical Society, 2012, 134, 16345-16351.	6.6	563
8	Suppression of atomic vacancies via incorporation of isovalent small ions to increase the stability of halide perovskite solar cells in ambient air. Nature Energy, 2018, 3, 648-654.	19.8	552
9	Color-stable highly luminescent sky-blue perovskite light-emitting diodes. Nature Communications, 2018, 9, 3541.	5.8	536
10	Three-dimensionally bonded spongy graphene material with super compressive elasticity and near-zero Poissonâ€™s ratio. Nature Communications, 2015, 6, 6141.	5.8	458
11	Chiral-perovskite optoelectronics. Nature Reviews Materials, 2020, 5, 423-439.	23.3	445
12	Spin control in reduced-dimensional chiral perovskites. Nature Photonics, 2018, 12, 528-533.	15.6	371
13	Solution Processable Rhodanineâ€Based Small Molecule Organic Photovoltaic Cells with a Power Conversion Efficiency of 6.1%. Advanced Energy Materials, 2012, 2, 74-77.	10.2	303
14	Controlling the Effective Surface Area and Pore Size Distribution of sp² Carbon Materials and Their Impact on the Capacitance Performance of These Materials. Journal of the American Chemical Society, 2013, 135, 5921-5929.	6.6	291
15	Highâ€Performance Solar Cells using a Solutionâ€Processed Small Molecule Containing Benzodithiophene Unit. Advanced Materials, 2011, 23, 5387-5391.	11.1	271
16	Graphene â€“ A Promising Material for Organic Photovoltaic Cells. Advanced Materials, 2011, 23, 5342-5358.	11.1	242
17	Optimization of porous FeNi3/N-GN composites with superior microwave absorption performance. Chemical Engineering Journal, 2018, 345, 441-451.	6.6	237
18	Pushing Up Lithium Storage through Nanostructured Polyazaacene Analogues as Anode. Angewandte Chemie - International Edition, 2015, 54, 7354-7358.	7.2	234

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19	Spinâ€Coated Small Molecules for High Performance Solar Cells. Advanced Energy Materials, 2011, 1, 771-775.	10.2	233
20	Fineâ€Tuning the Energy Levels of a Nonfullerene Smallâ€Molecule Acceptor to Achieve a High Shortâ€Circuit Current and a Power Conversion Efficiency over 12% in Organic Solar Cells. Advanced Materials, 2018, 30, 1704904.	11.1	214
21	A Planar Small Molecule with Dithienosilole Core for High Efficiency Solution-Processed Organic Photovoltaic Cells. Chemistry of Materials, 2011, 23, 4666-4668.	3.2	210
22	A perylene diimide (PDI)-based small molecule with tetrahedral configuration as a non-fullerene acceptor for organic solar cells. Journal of Materials Chemistry C, 2015, 3, 4698-4705.	2.7	180
23	Pushing up the efficiency of planar perovskite solar cells to 18.2% with organic small molecules as the electron transport layer. Journal of Materials Chemistry A, 2017, 5, 7339-7344.	5.2	170
24	Synthesis, Structure, and Airâ€stable Nâ€type Fieldâ€Effect Transistor Behaviors of Functionalized Octaazanonaceneâ€8,19â€dione. Angewandte Chemie - International Edition, 2015, 54, 6292-6296.	7.2	143
25	Graphene quantum dots as the hole transport layer material for high-performance organic solar cells. Physical Chemistry Chemical Physics, 2013, 15, 18973.	1.3	113
26	Efficient solution processed bulk-heterojunction solar cells based a donorâ€“acceptor oligothiophene. Journal of Materials Chemistry, 2010, 20, 2464.	6.7	103
27	Polymer photovoltaic devices with transparent graphene electrodes produced by spin-casting. Carbon, 2010, 48, 3308-3311.	5.4	100
28	A LiFSIâ€“LiTFSI binary-salt electrolyte to achieve high capacity and cycle stability for a Liâ€“S battery. Chemical Communications, 2014, 50, 14647-14650.	2.2	100
29	Efficient small molecule bulk heterojunction solar cells with high fill factors via introduction of Ï€-stacking moieties as end group. Journal of Materials Chemistry A, 2013, 1, 1801-1809.	5.2	96
30	4-Diphenylamino-phenyl substituted pyrazine: nonlinear optical switching by protonation. Journal of Materials Chemistry C, 2015, 3, 9191-9196.	2.7	93
31	Switching charge-transfer characteristics from p-type to n-type through molecular â€œdopingâ€• (co-crystallization). Chemical Science, 2016, 7, 3851-3856.	3.7	89
32	Boosting the performance of organic cathodes through structure tuning. Journal of Materials Chemistry A, 2018, 6, 12985-12991.	5.2	87
33	Lowing the energy loss of organic solar cells by molecular packing engineering via multiple molecular conjugation extension. Science China Chemistry, 2022, 65, 1362-1373.	4.2	79
34	Pyreneâ€Containing Twistarene: Twelve Benzene Rings Fused in a Row. Angewandte Chemie - International Edition, 2018, 57, 13555-13559.	7.2	76
35	Solvent Accommodation: Functionalities Can Be Tailored Through Co-Crystallization Based on 1:1 Coronene-F‹sub›4‹/sub›TCNQ Charge-Transfer Complex. ACS Applied Materials & Interfaces, 2017, 9, 1183-1188.	4.0	72
36	Impact of dye end groups on acceptorâ€“donorâ€“acceptor type molecules for solution-processed photovoltaic cells. Journal of Materials Chemistry, 2012, 22, 9173.	6.7	69

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37	Investigation of Quinquethiophene Derivatives with Different End Groups for High Open Circuit Voltage Solar Cells. Advanced Energy Materials, 2013, 3, 639-646.	10.2	65
38	Theoretical Prediction of Chiral 3D Hybrid Organicâ€“Inorganic Perovskites. Advanced Materials, 2019, 31, e1807628.	11.1	64
39	Low Density of Conduction and Valence Band States Contribute to the High Open-Circuit Voltage in Perovskite Solar Cells. Journal of Physical Chemistry C, 2017, 121, 1455-1462.	1.5	57
40	Ultrashort laser pulse doubling by metal-halide perovskite multiple quantum wells. Nature Communications, 2020, 11, 3361.	5.8	57
41	Solution-processable graphene mesh transparent electrodes for organic solar cells. Nano Research, 2013, 6, 478-484.	5.8	53
42	Perovskite metasurfaces with large superstructural chirality. Nature Communications, 2022, 13, 1551.	5.8	51
43	Interface engineering boosts electrochemical performance by fabricating CeO2@CoP Schottky conjunction for hybrid supercapacitors. Electrochimica Acta, 2020, 337, 135817.	2.6	50
44	From non-detectable to decent: replacement of oxygen with sulfur in naphthalene diimide boosts electron transport in organic thin-film transistors (OTFT). Journal of Materials Chemistry C, 2015, 3, 8219-8224.	2.7	49
45	Solution-processable thiadiazoloquinoxaline-based donorâ€“acceptor small molecules for thin-film transistors. Journal of Materials Chemistry C, 2016, 4, 3809-3814.	2.7	47
46	Ultrathin and Highly Crumpled/Porous CoP Nanosheet Arrays Anchored on Graphene Boosts the Capacitance and Their Synergistic Effect toward High-Performance Battery-Type Hybrid Supercapacitors. ACS Applied Materials & Interfaces, 2021, 13, 26373-26383.	4.0	46
47	Enhancing bifunctionality of CoN nanowires by Mn doping for long-lasting Zn-air batteries. Science China Chemistry, 2020, 63, 890-896.	4.2	41
48	Impact of the Electronâ€Transport Layer on the Performance of Solutionâ€Processed Smallâ€Molecule Organic Solar Cells. ChemSusChem, 2014, 7, 2358-2364.	3.6	40
49	New Insights into the Correlation between Morphology, Excited State Dynamics, and Device Performance of Small Molecule Organic Solar Cells. Advanced Energy Materials, 2016, 6, 1600961.	10.2	34
50	Synthesis, structure, physical properties and OLED application of pyrazineâ€“triphenylamine fused conjugated compounds. RSC Advances, 2015, 5, 63080-63086.	1.7	33
51	Open-circuit voltage up to 1.07V for solution processed small molecule based organic solar cells. Organic Electronics, 2014, 15, 2285-2294.	1.4	32
52	Full Characterization and Photoelectrochemical Behavior of Pyreneâ€fused Octaazadecacene and Tetraazaoctacene. Chemistry - an Asian Journal, 2016, 11, 482-485.	1.7	28
53	Pyreneâ€Containing Twistarene: Twelve Benzene Rings Fused in a Row. Angewandte Chemie, 2018, 130, 13743-13747.	1.6	27
54	Improved efficiency of solution processed small molecules organic solar cells using thermal annealing. Organic Electronics, 2013, 14, 1562-1569.	1.4	26

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55	A Colorimetric and Fluorimetric Chemodosimeter for Copper Ion Based on the Conversion of Dihydropyrazine to Pyrazine. Chemistry - an Asian Journal, 2016, 11, 136-140.	1.7	26
56	Agent-assisted VSSe ternary alloy single crystals as an efficient stable electrocatalyst for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 15714-15721.	5.2	26
57	Fusing N-heteroacene analogues into one â€œkinkedâ€•molecule with slipped two-dimensional ladder-like packing. Chemical Science, 2016, 7, 1309-1313.	3.7	24
58	N-Heteroheptacenequinone and N-heterononacenequinone: synthesis, physical properties, crystal structures and photoelectrochemical behaviors. Journal of Materials Chemistry C, 2015, 3, 9877-9884.	2.7	23
59	Different donorâ€“acceptor structures of dithiafulvalene-fused semiconducting polymers with different band gaps. Chemical Communications, 2011, 47, 10401.	2.2	22
60	Theoretical investigation on two-dimensional non-traditional carbon materials employing three-membered ring and four-membered ring as building blocks. Carbon, 2015, 95, 1033-1038.	5.4	22
61	Effectiveness of External Electric Field Treatment of Conjugated Polymers in Bulk-Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 32282-32291.	4.0	22
62	Nucleation Control-Triggering Cocrystal Polymorphism of Charge-Transfer Complexes Differing in Physical and Electronic Properties. ACS Applied Materials & Interfaces, 2020, 12, 19718-19726.	4.0	21
63	Impact of fluorinated end groups on the properties of acceptorâ€“donorâ€“acceptor type oligothiophenes for solution-processed photovoltaic cells. Journal of Materials Chemistry C, 2014, 2, 1337-1345.	2.7	19
64	The substituent group effect on the morphology and memory performance of phenazine derivatives. Journal of Materials Chemistry C, 2015, 3, 3167-3172.	2.7	19
65	Effect of graphene thickness on the morphology evolution of hierarchical NiCoO2 architectures and their superior supercapacitance performance. Ceramics International, 2018, 44, 4875-4882.	2.3	19
66	Supramolecular Design of Donorâ€“Acceptor Complexes via Heteroatom Replacement toward Structure and Electrical Transporting Property Tailoring. ACS Applied Materials & Interfaces, 2019, 11, 1109-1116.	4.0	19
67	Can Isotope Effects Enable Organic Solar Cells to Achieve Smaller Non-Radiative Energy Losses and Why?. Chemistry of Materials, 2022, 34, 6009-6025.	3.2	19
68	The Evidence for Fullerene Aggregation in Highâ€Performance Smallâ€Molecule Solar Cells by Molecular Dynamics Simulation. Advanced Electronic Materials, 2015, 1, 1500217.	2.6	18
69	Molecular Origin of Donor- and Acceptor-Rich Domain Formation in Bulk-Heterojunction Solar Cells with an Enhanced Charge Transport Efficiency. Journal of Physical Chemistry C, 2017, 121, 5864-5870.	1.5	18
70	Synthesis, Photophysical Properties and Twoâ€Photon Absorption Study of Tetraazachryseneâ€based Nâ€Heteroacenes. Chemistry - an Asian Journal, 2019, 14, 1807-1813.	1.7	18
71	A novel heteroacene 2-(perfluorophenyl)-1H-imidazo[4,5-b]phenazine for selective sensing of picric acid. RSC Advances, 2016, 6, 37929-37932.	1.7	17
72	What are the practical limits for the specific surface area and capacitance of bulk sp2 carbon materials?. Science China Chemistry, 2016, 59, 225-230.	4.2	17

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73	Towards predicting the power conversion efficiencies of organic solar cells from donor and acceptor molecule structures. Journal of Materials Chemistry C, 2018, 6, 3276-3287.	2.7	17
74	A novel Dâ€“ Ï€ â€“A small molecule with N -heteroacene as acceptor moiety for photovoltaic application. Dyes and Pigments, 2015, 122, 231-237.	2.0	16
75	Synthesis, crystal structures and photophysical properties of novel boron-containing derivatives of phenalene with bright solid-state luminescence. Dyes and Pigments, 2014, 106, 197-204.	2.0	15
76	â€œDopingâ€•pentacene with sp²-phosphorus atoms: towards high performance ambipolar semiconductors. Physical Chemistry Chemical Physics, 2016, 18, 3173-3178.	1.3	15
77	Enhancement of Performance and Mechanism Studies of All-Solution Processed Small-Molecule based Solar Cells with an Inverted Structure. ACS Applied Materials & Interfaces, 2015, 7, 21245-21253.	4.0	12
78	Realization of Inâ€Plane Polarized Light Detection Based on Bulk Photovoltaic Effect in A Polar Van Der Waals Crystal. Small, 2022, 18, e2200011.	5.2	12
79	Synthesis and Photovoltaic Properties of a Poly(2,7â€carbazole) Derivative Based on Dithienosilole and Benzothiadiazole. Macromolecular Chemistry and Physics, 2011, 212, 1109-1114.	1.1	11
80	A Concise Method for Synthesizing 1,4,8,11â€Tetraazaâ€6,13â€dioxapentacene Derivatives. Asian Journal of Organic Chemistry, 2013, 2, 852-856.	1.3	10
81	U-Shaped Helical Azaarenes: Synthesis, Structures, and Properties. Journal of Organic Chemistry, 2020, 85, 291-295.	1.7	10
82	Cocrystal engineering of molecular rearrangement: a â€œturn-onâ€•approach for high-performance N-type organic semiconductors. Journal of Materials Chemistry C, 0, , .	2.7	10
83	High-efficiency solution-processed small-molecule solar cells featuring gold nanoparticles. Journal of Materials Chemistry A, 2014, 2, 19988-19993.	5.2	9
84	Singlet fission dynamics and optical spectra of pentacene and its derivatives. Physical Chemistry Chemical Physics, 2021, 23, 12654-12667.	1.3	8
85	Synthesis of New Conjugated CNPPV Derivatives Containing Different Lengths of Oligothiophene Units for Organic Solar Cells. Macromolecular Chemistry and Physics, 2010, 211, 2503-2509.	1.1	7
86	IsothianaphtheneâBased Conjugated Polymers for Organic Photovoltaic Cells. Macromolecular Chemistry and Physics, 2012, 213, 1596-1603.	1.1	7
87	Optical and transport properties of single crystal rubrene: A theoretical study. Chemical Physics, 2016, 481, 198-205.	0.9	7
88	A Direct Method to Access Substituted Pyreno[4,5â€:9,10â€â€²] difuran and its Analogues. Asian Journal of Organic Chemistry, 2018, 7, 2213-2217.	1.3	6
89	Preparation and electrochemistry properties of trifunctional 1,9-dithiophenalenylium salt and its neutral radical with benzene spacer. Tetrahedron, 2013, 69, 6890-6896.	1.0	5
90	Bromination of Isothianaphthene Derivatives towards the Application in Organic Electronics. Chinese Journal of Chemistry, 2013, 31, 1391-1396.	2.6	5

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91	Synthesis and aggregation-induced fluorescence emission properties of boron-containing derivatives that respond to viscous alcohols. New Journal of Chemistry, 2014, 38, 6088-6094.	1.4	5
92	Unveiling the Molecular Symmetry Dependence of Exciton Dissociation Processes in Small-Molecular Heterojunctions. Journal of Physical Chemistry C, 2018, 122, 26851-26856.	1.5	5
93	Helical mesoscopic crystals based on an achiral charge-transfer complex with controllable untwisting/breaking. Chemical Communications, 2021, 57, 10031-10034.	2.2	5
94	Optically Driven Giant Superbunching from a Single Perovskite Quantum Dot. Advanced Optical Materials, 0, , 2100879.	3.6	4
95	Imideâ€Fused Diazatetracenes: Synthesis, Characterization, and Application in Perovskite Solar Cells. Chemistry - A European Journal, 2020, 26, 4220-4225.	1.7	4
96	Synthesis, characterization and photophysical studies of a novel polycyclic diborane. New Journal of Chemistry, 2019, 43, 564-568.	1.4	3
97	Conjugated Extension of Non-Fullerene Acceptors Enables Efficient Organic Solar Cells with Optoelectronic Response over 1000 nm. ACS Applied Energy Materials, 2022, 5, 4664-4672.	2.5	3
98	Polaron dynamics of Blochâ€“Zener oscillations in an extended Holstein model. New Journal of Physics, 2021, 23, 123020.	1.2	3
99	Device characterization and optimization of small molecule organic solar cells assisted by modelling simulation of the currentâ€“voltage characteristics. Physical Chemistry Chemical Physics, 2015, 17, 19261-19267.	1.3	2
100	Influence of Hexagonal Boron Nitride on Electronic Structure of Graphene. Molecules, 2022, 27, 3740.	1.7	2
101	Graphene for Transparent Electrodes and Organic Electronic Devices. Green Energy and Technology, 2013, , 81-102.	0.4	0