

Mingliang Sun

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

116
papers

1,996
citations

25
h-index

39
g-index

117
ext. papers

2,274
ext. citations

6.8
avg, IF

4.93
L-index

#	Paper	IF	Citations
116	Near-infrared nonfullerene acceptors with halogenated terminated fused tris(thienothiophene) for efficient polymer solar cells. <i>Solar Energy</i> , 2022 , 231, 433-439	6.8	
115	Enhancing organic photovoltaic performance with 3D-transport dual nonfullerene acceptors. <i>Journal of Materials Chemistry A</i> , 2022 , 10, 1948-1955	13	2
114	Challenges of Prelithiation Strategies for Next Generation High Energy Lithium-Ion Batteries. <i>Energy Storage Materials</i> , 2022 , 47, 297-297	19.4	5
113	A green all-organic heterostructure functionalized by self-assembled fullerene small molecule with enhanced photocatalytic activity. <i>Applied Surface Science</i> , 2022 , 585, 152738	6.7	0
112	Simple benzothiadiazole-based small molecules as additives for efficient organic solar cells. <i>Organic Electronics</i> , 2022 , 101, 106424	3.5	2
111	Metal free benzothiadiazole-diketopyrrolopyrrole-based conjugated polymer/g-CN photocatalyst for enhanced sterilization and degradation in visible to near-infrared region. <i>Journal of Colloid and Interface Science</i> , 2022 , 608, 103-113	9.3	4
110	Incorporation of a classical visible non-fullerene acceptor into host binary blend enable ternary high-performance semitransparent polymer solar cells. <i>Chemical Engineering Journal</i> , 2022 , 427, 132048	14.7	5
109	Multi-armed imide-based molecules promote interfacial charge transfer for efficient organic solar cells. <i>Chemical Engineering Journal</i> , 2022 , 441, 135894	14.7	1
108	2D Benzodithiophene based conjugated polymer/g-C ₃ N ₄ heterostructures with enhanced photocatalytic activity: Synergistic effect of antibacterial carbazole side chain and main chain copolymerization. <i>Applied Catalysis B: Environmental</i> , 2022 , 312, 121401	21.8	1
107	Fabricating binary cathode interface layer by effective molecular electrostatic potential and interfacial dipole to optimize electron transport and improve organic solar cell. <i>Chemical Engineering Journal</i> , 2022 , 137209	14.7	1
106	Addition of 2D Ti ₃ C ₂ T _x to Enhance Photocurrent in Diodes for High-Efficiency Organic Solar Cells. <i>Solar Rrl</i> , 2021 , 5, 2100127	7.1	6
105	Recent progress in emerging 2D layered materials for organic solar cells. <i>Solar Energy</i> , 2021 , 218, 621-638	14.8	3
104	Fabrication and Characterization of FA x Cs _{1-x} PbI ₃ Polycrystal Perovskite Solar Cells. <i>Solar Rrl</i> , 2021 , 5, 2100166	7.1	2
103	Low-bandgap conjugated polymers based on benzodipyrrolidone with reliable unipolar electron mobility exceeding 1 cm ² V ⁻¹ s ⁻¹ . <i>Science China Chemistry</i> , 2021 , 64, 1219-1227	7.9	7
102	Progress and trends of photodynamic therapy: From traditional photosensitizers to AIE-based photosensitizers. <i>Photodiagnosis and Photodynamic Therapy</i> , 2021 , 34, 102254	3.5	12
101	Ternary copolymerization strategy reducing the cost of benzodithiophene-benzodithiophenedione polymer, retaining high photovoltaic performance. <i>Polymer International</i> , 2021 , 70, 443-449	3.3	0
100	Low surface energy self-polishing polymer grafted MWNTs for antibacterial coating and controlled-release property of Cu ₂ O. <i>Journal of Applied Polymer Science</i> , 2021 , 138, 50267	2.9	1

99	Naphtho[2,3-c]thiophene-4,9-dione based polymers for efficient fullerene solar cells. <i>Polymer</i> , 2021 , 212, 123184	3.9	3
98	Subtle Side Chain Triggers Unexpected Two-Channel Charge Transport Property Enabling 80% Fill Factors and Efficient Thick-Film Organic Photovoltaics. <i>Innovation(China)</i> , 2021 , 2, 100090	17.8	19
97	Ester-substituted copolymer-based ternary semitransparent polymer solar cells with enhanced FF and PCE. <i>Polymer</i> , 2021 , 229, 123973	3.9	1
96	Aminonaphthalimide-Based Molecular Cathode Interlayers for As-Cast Organic Solar Cells. <i>ChemSusChem</i> , 2021 , 14, 4783-4792	8.3	4
95	Design of simple-structure wide-bandgap conjugated polymers based on BDT for efficient non-fullerene solar cells. <i>Dyes and Pigments</i> , 2021 , 194, 109604	4.6	1
94	Effects of brominated terminal groups on the performance of fused-ring electron acceptors in organic solar cells. <i>Dyes and Pigments</i> , 2021 , 194, 109652	4.6	0
93	Random terpolymers for high-performance semitransparent polymer solar cells. <i>Dyes and Pigments</i> , 2021 , 195, 109680	4.6	2
92	V enhancement of thienobenzofuran and benzotriazole backboned photovoltaic polymer by side chain sulfuration or fluoridation. <i>Dyes and Pigments</i> , 2021 , 184, 108775	4.6	1
91	Alkoxyphenyl or alkylphenyl side-chained Thieno[2,3-f]benzofuran polymer for efficient non-fullerene solar cells. <i>Materials Today Energy</i> , 2020 , 16, 100381	7	3
90	Small Organic Molecule Based Photoelectrodes for Efficient Photoelectrochemical Cathodic Protection. <i>ACS Applied Electronic Materials</i> , 2020 , 2, 4012-4022	4	8
89	Ester-Substituted Pentathiophene Copolymer-Based Sky-Blue Semitransparent Solar Cells for Building Windows. <i>ACS Applied Energy Materials</i> , 2020 , 3, 915-922	6.1	10
88	Halogenation on terminal groups of ITIC based electron acceptors as an effective strategy for efficient polymer solar cells. <i>Solar Energy</i> , 2020 , 195, 429-435	6.8	13
87	Bulky electron donating side chain enhances the open-circuit voltage of benzodithiophene photovoltaic polymers. <i>Materials Today Energy</i> , 2020 , 18, 100568	7	2
86	Asymmetric ITIC acceptor for asymmetric benzodithiophene polymer solar cells. <i>Dyes and Pigments</i> , 2020 , 183, 108727	4.6	2
85	Synergistic effect of side-chain and backbone engineering in thieno[2,3-f]benzofuran-based conjugated polymers for high performance non-fullerene organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 958-964	13	39
84	A Simple Phenyl Group Introduced at the Tail of Alkyl Side Chains of Small Molecular Acceptors: New Strategy to Balance the Crystallinity of Acceptors and Miscibility of Bulk Heterojunction Enabling Highly Efficient Organic Solar Cells. <i>Advanced Materials</i> , 2019 , 31, e1807832	24	150
83	Carbazole side-chained benzodithiophene based two-dimensional D-A conjugated photovoltaic polymers. <i>Dyes and Pigments</i> , 2019 , 170, 107548	4.6	7
82	A medium-band-gap polymer based alkoxy-substituted benzoxadiazole moiety for efficient polymer solar cells. <i>Polymer</i> , 2019 , 168, 1-7	3.9	1

81	Thiophene copolymer for 1 V high open-circuit voltage semitransparent photovoltaic devices. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 10868-10875	7.1	10
80	Fuse the π -Bridge to Acceptor Moiety of Donor- π -Acceptor Conjugated Polymer: Enabling an All-Round Enhancement in Photovoltaic Parameters of Nonfullerene Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 31087-31095	9.5	18
79	High lithium anodic performance of flower-like carbon nanoflakes derived from MOF based on double ligands. <i>Journal of Alloys and Compounds</i> , 2019 , 806, 520-528	5.7	4
78	Terpolymer Strategy toward High-Efficiency Polymer Solar Cells: Integrating Symmetric Benzodithiophene and Asymmetrical Thieno[2,3-f]benzofuran Segments. <i>Chemistry of Materials</i> , 2019 , 31, 6163-6173	9.6	39
77	1 V high open-circuit voltage fluorinated alkoxybiphenyl side-chained benzodithiophene based photovoltaic polymers. <i>Synthetic Metals</i> , 2019 , 257, 116182	3.6	1
76	Thieno[2,3-f]benzofuran based donor-acceptor polymer for fullerene-free solar cells. <i>European Polymer Journal</i> , 2019 , 120, 109205	5.2	3
75	The regulation of π -bridge of indacenodithiophene-based donor- π -acceptor conjugated polymers toward efficient polymer solar cells. <i>Dyes and Pigments</i> , 2019 , 162, 43-51	4.6	23
74	Single-Component Oligomer Nanoparticle-Based Size-Dependent Dual-Emission Modulation. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 4199-4205	3.8	2
73	Fusing Benzo[c][1,2,5]oxadiazole Unit with Thiophene for Constructing Wide-bandgap High-performance IDT-based Polymer Solar Cell Donor Material. <i>Macromolecular Rapid Communications</i> , 2018 , 39, e1700782	4.8	1
72	Weakening the Aggregations of Polymer Chains toward Efficient Non-Fullerene Polymer Solar Cells. <i>Macromolecular Rapid Communications</i> , 2018 , 39, e1800446	4.8	5
71	Rational design of asymmetric benzodithiophene based photovoltaic polymers for efficient solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 948-956	13	33
70	Modifying the morphology via employing rigid phenyl side chains achieves efficient nonfullerene polymer solar cells. <i>Journal of Polymer Science Part A</i> , 2018 , 56, 2762-2770	2.5	6
69	Cyclic alkyl chains promote the polymer self-assembly and packing orders for solar cells. <i>Nano Energy</i> , 2017 , 36, 110-117	17.1	20
68	A novel naphthyl side-chained benzodithiophene polymer for efficient photovoltaic cells with a high fill factor of 75%. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 10430-10436	13	23
67	Asymmetric 2D benzodithiophene and quinoxaline copolymer for photovoltaic applications. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 6798-6804	7.1	9
66	Subtle side-chain tuning on terminal groups of small molecule electron acceptors for efficient fullerene-free polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 15175-15182	13	47
65	Efficient fullerene-free solar cells with wide optical band gap polymers based on fluorinated benzotriazole and asymmetric benzodithiophene. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 21650-21657	7.3	32
64	Two-Dimensional BDT-Based Wide Band Gap Polymer Donor for Efficient Non-Fullerene Organic Solar Cells. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 19634-19641	3.8	16

63	Acceptor-rich bulk heterojunction polymer solar cells with balanced charge mobilities. <i>Organic Electronics</i> , 2017 , 51, 16-24	3.5	11
62	Crystalline Medium-Bandgap Light-Harvesting Donor Material Based on π -Naphthalene Asymmetric-Modified Benzodithiophene Moiety toward Efficient Polymer Solar Cells. <i>Chemistry of Materials</i> , 2017 , 29, 8249-8257	9.6	30
61	Rhodanine side-chained thiophene and indacenodithiophene copolymer for solar cell applications. <i>Materials Today Energy</i> , 2017 , 5, 287-292	7	6
60	Fluorene Side-Chained Benzodithiophene Polymers for Low Energy Loss Solar Cells. <i>Macromolecules</i> , 2017 , 50, 6880-6887	5.5	24
59	Extending two-dimensional π -conjugation length by introducing the alkoxybiphenyl unit for efficient benzodithiophene based photovoltaic polymer. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 8716-8723	7.1	9
58	A diketopyrrolopyrrole-based low bandgap polymer with enhanced photovoltaic performances through backbone twisting. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 18174-18180	13	13
57	Comparative study of the conformational effect of dithienothiophene- and terthiophene-based photovoltaic polymers. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 11088-11095	7.1	6
56	A fluorine-induced high-performance narrow bandgap polymer based on thiadiazolo[3,4-c]pyridine for photovoltaic applications. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 11729-11737	13	18
55	Efficiency enhancement in an indacenodithiophene and thieno[3,4-c]pyrrole-4,6-dione backbone photovoltaic polymer with an extended thieno[3,2-b]thiophene π -bridge. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 6280-6286	7.1	16
54	Thiophene π -bridge effect on bulky side-chained benzodithiophene-based photovoltaic polymers. <i>Journal of Polymer Science Part A</i> , 2016 , 54, 1615-1622	2.5	4
53	Novel wide band gap polymers based on dithienobenzoxadiazole for polymer solar cells with high open circuit voltages over 1 V. <i>RSC Advances</i> , 2016 , 6, 51419-51425	3.7	6
52	Efficient fullerene-based and fullerene-free polymer solar cells using two wide band gap thiophene-thiazolothiazole-based photovoltaic materials. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 9511-9518	13	28
51	Investigation of Fluorination on Donor Moiety of Donor-Acceptor 4,7-Dithienylbenzothiadiazole-Based Conjugated Polymers toward Enhanced Photovoltaic Efficiency. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 26152-26161	9.5	23
50	High-Performance Photovoltaic Polymers Employing Symmetry-Breaking Building Blocks. <i>Advanced Materials</i> , 2016 , 28, 8490-8498	24	86
49	Benzodithiophene-Based Polymers Containing Alkylthiophenyl Side Chains with Lowered HOMO Energy Levels for Organic Solar Cells. <i>Asian Journal of Organic Chemistry</i> , 2016 , 5, 1273-1279	3	5
48	(E)-1,2-Di(thiophen-2-yl)ethene based high mobility polymer for efficient photovoltaic devices without any post treatment. <i>RSC Advances</i> , 2016 , 6, 68049-68057	3.7	8
47	Intra- and Intermolecular Steric Hindrance Effects Induced Higher Open-Circuit Voltage and Power Conversion Efficiency. <i>ACS Macro Letters</i> , 2015 , 4, 361-366	6.6	35
46	A new highly conjugated crossed benzodithiophene and its donor-acceptor copolymers for high open circuit voltages polymer solar cells. <i>Polymer Chemistry</i> , 2015 , 6, 3398-3406	4.9	20

45	Improved open-circuit voltage of benzodithiophene based polymer solar cells using bulky terthiophene side group. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 138, 26-34	6.4	19
44	A universal halogen-free solvent system for highly efficient polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 12723-12729	13	90
43	4,7-Di-2-thienyl-2,1,3-benzothiadiazole with hexylthiophene side chains and a benzodithiophene based copolymer for efficient organic solar cells. <i>Polymer Chemistry</i> , 2015 , 6, 4415-4423	4.9	24
42	Novel pendent thiophene side-chained benzodithiophene for polymer solar cells. <i>Journal of Polymer Science Part A</i> , 2015 , 53, 1558-1566	2.5	7
41	Enhanced efficiency of polymer photovoltaic cells via the incorporation of a water-soluble naphthalene diimide derivative as a cathode interlayer. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 9565-9571	7.1	49
40	Steric minimization towards high planarity and molecular weight for aggregation and photovoltaic studies. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 23587-23596	13	22
39	Simple planar perovskite solar cells with a dopant-free benzodithiophene conjugated polymer as hole transporting material. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 10070-10073	7.1	54
38	Synthesis and Optical-electronic Properties of a Novel Star-shaped Benzodithiophene Molecule. <i>Chemistry Letters</i> , 2015 , 44, 291-293	1.7	5
37	Thiophene π -bridge effect on photovoltaic performances of dithienosilole and bithiazole backboned polymers. <i>Journal of Applied Polymer Science</i> , 2015 , 132, n/a-n/a	2.9	2
36	An Easily Accessible Cathode Buffer Layer for Achieving Multiple High Performance Polymer Photovoltaic Cells. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 27322-27329	3.8	29
35	Hydrophilic poly-ether side-chained benzodithiophene-based homopolymer for solar cells and field-effect transistors. <i>Journal of Materials Science</i> , 2015 , 50, 2263-2271	4.3	3
34	Ultrathin polyaniline-based buffer layer for highly efficient polymer solar cells with wide applicability. <i>Scientific Reports</i> , 2014 , 4, 6570	4.9	65
33	Benzo[1,2-b:4,5-b']dithiophene and benzotriazole based small molecule for solution-processed organic solar cells. <i>Organic Electronics</i> , 2014 , 15, 405-413	3.5	41
32	Hyperconjugated side chained benzodithiophene and 4,7-di-2-thienyl-2,1,3-benzothiadiazole based polymer for solar cells. <i>Polymer Chemistry</i> , 2014 , 5, 2076	4.9	39
31	A triple bond side-chained 2D-conjugated benzodithiophene based photovoltaic polymer. <i>RSC Advances</i> , 2014 , 4, 58426-58431	3.7	3
30	Two-dimensional benzodithiophene and benzothiadiazole based solution-processed small molecular organic field-effect transistors & solar cells. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 3921	7.1	39
29	Solution-processed, indacenodithiophene-based, small-molecule organic field-effect transistors and solar cells. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 7523	7.1	37
28	Benzothiadiazole π -n excellent acceptor for indacenodithiophene based polymer solar cells. <i>RSC Advances</i> , 2014 , 4, 37934-37940	3.7	16

27	High efficiency solution-processed two-dimensional small molecule organic solar cells obtained via low-temperature thermal annealing. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 15904-15911	13	41
26	Enhancement of photovoltaic performance by increasing conjugation of the acceptor unit in benzodithiophene and quinoxaline copolymers. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 8047-8053	7.1	36
25	Electrochemistry and Near-infrared Electrochromism of Electropolymerized Polydithiophenes with π - π -Positions Bridged by Carbonyl or Dicarboxyl Substitute. <i>Electrochimica Acta</i> , 2014 , 142, 108-117	6.7	3
24	Development of new two-dimensional small molecules based on benzodifuran for efficient organic solar cells. <i>Chemistry - an Asian Journal</i> , 2014 , 9, 2621-7	4.5	14
23	Synthesis and photovoltaic properties of conjugated D π A copolymers based on thienyl substituted pyrene and diketopyrrolopyrrole for polymer solar cells. <i>Journal of Polymer Science Part A</i> , 2014 , 52, 3198-3204 ¹²	3.5	12
22	New small molecules with thiazolothiazole and benzothiadiazole acceptors for solution-processed organic solar cells. <i>New Journal of Chemistry</i> , 2014 , 38, 1559	3.6	21
21	Near-infrared response thienoisindigo-based small molecule for solution-processed bulk-heterojunction solar cells. <i>Synthetic Metals</i> , 2014 , 187, 24-29	3.6	20
20	Novel Panchromatic Absorption Material, Isoindigo-based A π A π Small Molecule. <i>Chemistry Letters</i> , 2014 , 43, 1870-1872	1.7	4
19	Synthesis and solar cells applications of EO-PF-DTBT polymer. <i>Journal of Applied Polymer Science</i> , 2014 , 131, n/a-n/a	2.9	2
18	Preparation and electrochemical properties of poly-2,5-dihydroxyaniline/activated carbon composite electrode in organic electrolyte. <i>Journal of Applied Polymer Science</i> , 2013 , 127, 4672-4680	2.9	8
17	A new isoindigo-based molecule with ideal energy levels for solution-processable organic solar cells. <i>Dyes and Pigments</i> , 2013 , 98, 11-16	4.6	59
16	Low HOMO isoindigo based small molecule for high open-circuit voltage 1.0V solution processed organic solar cells. <i>Synthetic Metals</i> , 2013 , 178, 38-43	3.6	24
15	Phase transformation and energy transfer induced photoluminescence modulation of fluorene based copolymer mono-dispersive nanoparticles. <i>RSC Advances</i> , 2013 , 3, 23704	3.7	3
14	Fluorene-Benzothiadiazole Copolymer for Single Component Green Light-Emitting Electrochemical Cells. <i>Journal of Display Technology</i> , 2013 , 9, 476-482		7
13	Selenophene and fluorene based narrow band gap copolymers with $E_g=1.41$ eV for near infrared polymer light emitting diodes. <i>Synthetic Metals</i> , 2012 , 162, 1406-1410	3.6	21
12	Capacitive properties of low potential electro-polymerized polyfluorene and activated carbon composite electrode. <i>Science China Chemistry</i> , 2012 , 55, 352-358	7.9	2
11	A Fluorene-Benzothiadiazole Copolymer for White Light-Emitting Electrochemical Cells. <i>Macromolecules</i> , 2010 , 43, 1714-1718	5.5	54
10	Corrosion behavior of anodic oxidized TiO ₂ film in seawater. <i>Journal of Ocean University of China</i> , 2010 , 9, 376-380	1	1

9	Pyrrole-based narrow-band-gap copolymers for red light-emitting diodes and bulk heterojunction photovoltaic cells. <i>Journal of Applied Polymer Science</i> , 2010 , 118, n/a-n/a	2.9	2
8	Benzothiadiazole-sandwiched quarter thiophene-based oligomer for organic solar cells. <i>Synthetic Metals</i> , 2009 , 159, 556-560	3.6	13
7	Narrow band-gap oligomer for solution-processed heterojunction organic solar cells. <i>Synthetic Metals</i> , 2008 , 158, 125-129	3.6	22
6	Near-infrared electroluminescence from fluorene-based copolymers. <i>Journal of Polymer Science Part A</i> , 2008 , 46, 3007-3013	2.5	9
5	Extremely Color-Stable Blue Light-Emitting Polymers Based on Alternating 2,7-Fluorene-co-3,9-carbazole Copolymer. <i>Macromolecular Chemistry and Physics</i> , 2007 , 208, 1503-1509	2.6	30
4	Near-infrared response photovoltaic device based on novel narrow band gap small molecule and PCBM fabricated by solution processing. <i>Solar Energy Materials and Solar Cells</i> , 2007 , 91, 1681-1687	6.4	64
3	Efficient white-light-emitting diodes based on polyfluorene doped with fluorescent chromophores. <i>Applied Physics Letters</i> , 2007 , 91, 213502	3.4	21
2	Manipulating the intermolecular stacking of polymeric donors for efficient organic solar cells. <i>Journal of Materials Chemistry C</i> ,	7.1	1
1	High-Performance Ternary Semitransparent Polymer Solar Cells with Different Bandgap Third Component as Non-Fullerene Guest Acceptor. <i>Solar Rrl</i> ,2200070	7.1	