

Kun Lu

List of Publications by Year in descending order

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61
papers

3,209
citations

201674

27
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149698

56
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62
all docs

62
docs citations

62
times ranked

2944
citing authors

#	ARTICLE	IF	CITATIONS
1	Single-bond-linked oligomeric donors for high performance organic solar cells. Chinese Chemical Letters, 2023, 34, 107321.	9.0	3
2	Electron-deficient TVT unit-based D ⁺ A polymer donor for high-efficiency thick-film OSCs. Nanotechnology, 2022, 33, 065401.	2.6	3
3	Low nonradiative energy losses within 0.2 eV in efficient non-fullerene all-small-molecule organic solar cells. Journal of Materials Chemistry C, 2022, 10, 2800-2806.	5.5	9
4	Aryl-substituted-indanone end-capped nonfullerene acceptors for organic solar cells with a low nonradiative loss. Chemical Communications, 2022, 58, 4877-4880.	4.1	8
5	Trifluoro alkyl side chains in the non-fullerene acceptors to optimize the phase miscibility and vertical distribution of organic solar cells. Journal of Materials Chemistry A, 2022, 10, 8837-8845.	10.3	12
6	Regulating phase separation and molecular stacking by introducing siloxane to small-molecule donors enables high efficiency all-small-molecule organic solar cells. Energy and Environmental Science, 2022, 15, 2937-2947.	30.8	33
7	Small reorganization energy acceptors enable low energy losses in non-fullerene organic solar cells. Nature Communications, 2022, 13, .	12.8	113
8	Combining chlorination and sulfuration strategies for high-performance all-small-molecule organic solar cells. Journal of Energy Chemistry, 2021, 52, 228-233.	12.9	23
9	Constructing high efficiency non-fullerene all-small-molecule ternary organic solar cells by employing structurally similar acceptors. Materials Chemistry Frontiers, 2021, 5, 1405-1409.	5.9	13
10	Progress and prospects of thick-film organic solar cells. Journal of Materials Chemistry A, 2021, 9, 3125-3150.	10.3	53
11	Optimizing the energy levels and crystallinity of 2,2'-bithiophene-3,3'-dicarboximide-based polymer donors for high-performance non-fullerene organic solar cells. Journal of Materials Chemistry C, 2021, 9, 7575-7582.	5.5	9
12	Optimizing the Charge Carrier and Light Management of Nonfullerene Acceptors for Efficient Organic Solar Cells with Small Nonradiative Energy Losses. Solar Rrl, 2021, 5, 2100008.	5.8	20
13	Enhancing the performances of all-small-molecule ternary organic solar cells via achieving optimized morphology and 3D charge pathways. Chinese Chemical Letters, 2021, 32, 2904-2908.	9.0	10
14	Ï-Extended Nonfullerene Acceptors for Efficient Organic Solar Cells with a High Open-Circuit Voltage of 0.94 V and a Low Energy Loss of 0.49 eV. ACS Applied Materials & Interfaces, 2021, 13, 22531-22539.	8.0	22
15	Creating Side Transport Pathways in Organic Solar Cells by Introducing Delayed Fluorescence Molecules. Chemistry of Materials, 2021, 33, 4578-4585.	6.7	11
16	The substituents on the intermediate electron-deficient groups in small molecular acceptors result appropriate morphologies for organic solar cells. Organic Electronics, 2021, 93, 106133.	2.6	8
17	Regioregular narrow bandgap copolymer with strong aggregation ability for high-performance semitransparent photovoltaics. Nano Energy, 2021, 86, 106098.	16.0	31
18	18.4% efficiency achieved by the cathode interface engineering in non-fullerene polymer solar cells. Nano Today, 2021, 41, 101289.	11.9	47

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19	The Crystallinity Control of Polymer Donor Materials for High-Performance Organic Solar Cells. <i>Frontiers in Chemistry</i> , 2020, 8, 603134.	3.6	16
20	Moving Alkyl Chain Branching Point Induced a Hierarchical Morphology for Efficient All-Small-Molecule Organic Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 2005426.	14.9	54
21	Synergistic Optimization Enables Large-Area Flexible Organic Solar Cells to Maintain over 98% PCE of the Small-Area Rigid Devices. <i>Advanced Materials</i> , 2020, 32, e2005153.	21.0	89
22	Modulation of Donor Alkyl Terminal Chains with the Shifting Branching Point Leads to the Optimized Morphology and Efficient All-Small-Molecule Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 25100-25107.	8.0	40
23	Ternary Organic Solar Cells Based on Two Non-Fullerene Acceptors with Complimentary Absorption and Balanced Crystallinity. <i>Chinese Journal of Chemistry</i> , 2020, 38, 935-940.	4.9	21
24	Effect of Side-Chain Variation on Single-Crystalline Structures for Revealing the Structure-Property Relationships of Organic Solar Cells. <i>Organic Materials</i> , 2020, 02, 026-032.	2.0	1
25	Chain Engineering of Benzodifuran-Based Wide-Bandgap Polymers for Efficient Non-Fullerene Polymer Solar Cells. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1900227.	3.9	15
26	A-D-A small-molecule donors with different end alkyl chains obtain different morphologies in organic solar cells. <i>Chinese Chemical Letters</i> , 2019, 30, 906-910.	9.0	8
27	Fluorination-substitution effect on all-small-molecule organic solar cells. <i>Science China Chemistry</i> , 2019, 62, 837-844.	8.2	32
28	All-small-molecule organic solar cells with over 14% efficiency by optimizing hierarchical morphologies. <i>Nature Communications</i> , 2019, 10, 5393.	12.8	273
29	Liquid-Crystalline Small Molecules for Nonfullerene Solar Cells with High Fill Factors and Power Conversion Efficiencies. <i>Advanced Energy Materials</i> , 2019, 9, 1803175.	19.5	55
30	Naphtho[1,2-b:5,6-b']dithiophene-Based Conjugated Polymers for Fullerene-Free Inverted Polymer Solar Cells. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1700872.	3.9	11
31	Two-dimensional benzo[1,2-b:4,5-b']difuran-based wide bandgap conjugated polymers for efficient fullerene-free polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4023-4031.	10.3	37
32	Improve the Performance of the All-Small-Molecule Nonfullerene Organic Solar Cells through Enhancing the Crystallinity of Acceptors. <i>Advanced Energy Materials</i> , 2018, 8, 1702377.	19.5	87
33	A Simple but Efficient Small Molecule with a High Open Circuit Voltage of 1.07 V in Solution-Processable Organic Solar Cells. <i>Asian Journal of Organic Chemistry</i> , 2018, 7, 558-562.	2.7	3
34	Wide-Bandgap Conjugated Polymers Based on Alkylthiofuran-Substituted Benzo[1,2-b:4,5-b']difuran for Efficient Fullerene-Free Polymer Solar Cells. <i>Macromolecules</i> , 2018, 51, 2498-2505.	4.8	23
35	A novel small molecule based on naphtho[1,2-b:5,6-b']dithiophene benefits both fullerene and non-fullerene solar cells. <i>Materials Chemistry Frontiers</i> , 2018, 2, 143-148.	5.9	14
36	Aromatic end-capped acceptor effects on molecular stacking and the photovoltaic performance of solution-processable small molecules. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22077-22085.	10.3	19

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37	High open-circuit voltage ternary organic solar cells based on ICBA as acceptor and absorption-complementary donors. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1223-1228.	5.9	18
38	Evolution of morphology and open-circuit voltage in alloy-energy transfer coexisting ternary organic solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9859-9866.	10.3	30
39	Large-area, flexible polymer solar cell based on silver nanowires as transparent electrode by roll-to-roll printing. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2017, 35, 261-268.	3.8	27
40	Asymmetric thiophene/pyridine flanked diketopyrrolopyrrole polymers for high performance polymer ambipolar field-effect transistors and solar cells. <i>Journal of Materials Chemistry C</i> , 2017, 5, 566-572.	5.5	51
41	D-A structural protean small molecule donor materials for solution-processed organic solar cells. <i>Chinese Chemical Letters</i> , 2017, 28, 2065-2077.	9.0	19
42	Versatile asymmetric thiophene/benzothiophene flanked diketopyrrolopyrrole polymers with ambipolar properties for OFETs and OSCs. <i>Polymer Chemistry</i> , 2017, 8, 5603-5610.	3.9	33
43	The effect of tuning chemical structure on the open-circuit voltage and photovoltaic performance of narrow band-gap polymers. <i>Journal of Polymer Science Part A</i> , 2017, 55, 699-706.	2.3	2
44	Improving the Performances of Random Copolymer Based Organic Solar Cells by Adjusting the Film Features of Active Layers Using Mixed Solvents. <i>Polymers</i> , 2016, 8, 4.	4.5	10
45	Fluorination-enabled optimal morphology leads to over 11% efficiency for inverted small-molecule organic solar cells. <i>Nature Communications</i> , 2016, 7, 13740.	12.8	549
46	Naphthodithiophene-based donor materials for solution processed organic solar cells. <i>Chinese Chemical Letters</i> , 2016, 27, 1271-1276.	9.0	14
47	Acceptor End-Capped Oligomeric Conjugated Molecules with Broadened Absorption and Enhanced Extinction Coefficients for High-Efficiency Organic Solar Cells. <i>Advanced Materials</i> , 2016, 28, 5980-5985.	21.0	87
48	Dialkoxypenyldithiophene-based small molecules with enhanced absorption for solution processed organic solar cells. <i>RSC Advances</i> , 2016, 6, 60595-60601.	3.6	9
49	Naphtho[1,2-b:5,6-b']dithiophene-Based Small Molecules for Thick-Film Organic Solar Cells with High Fill Factors. <i>Chemistry of Materials</i> , 2016, 28, 943-950.	6.7	50
50	A conformational locking strategy in linked-acceptor type polymers for organic solar cells. <i>Polymer Chemistry</i> , 2016, 7, 1323-1329.	3.9	37
51	Understanding the Impact of Hierarchical Nanostructure in Ternary Organic Solar Cells. <i>Advanced Science</i> , 2015, 2, 1500250.	11.2	43
52	Oligomeric Donor Material for High-Efficiency Organic Solar Cells: Breaking Down a Polymer. <i>Advanced Materials</i> , 2015, 27, 4229-4233.	21.0	74
53	Conjugated Polymer-Small Molecule Alloy Leads to High Efficient Ternary Organic Solar Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 8176-8183.	13.7	518
54	Effects of end-capped acceptors subject to subtle structural changes on solution-processable small molecules for organic solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 8894-8900.	2.8	21

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55	Linked-Acceptor Type Conjugated Polymer for High Performance Organic Photovoltaics with an Open-Circuit Voltage Exceeding 1 V. <i>Advanced Science</i> , 2015, 2, 1500021.	11.2	20
56	Synergistic Effect of Polymer and Small Molecules for High-Performance Ternary Organic Solar Cells. <i>Advanced Materials</i> , 2015, 27, 1071-1076.	21.0	192
57	Naphtho[1,2-b:5,6-b']dithiophene Based Two-Dimensional Conjugated Polymers for Highly Efficient Thick-Film Inverted Polymer Solar Cells. <i>Chemistry of Materials</i> , 2014, 26, 6947-6954.	6.7	45
58	Effects of Shortened Alkyl Chains on Solution-Processable Small Molecules with Oxalkylated Nitrile End-Capped Acceptors for High-Performance Organic Solar Cells. <i>Advanced Energy Materials</i> , 2014, 4, 1400538.	19.5	79
59	A facile strategy to enhance absorption coefficient and photovoltaic performance of two-dimensional benzo[1,2-b:4,5-b']dithiophene and thieno[3,4-c]pyrrole-4,6-dione polymers via subtle chemical structure variations. <i>Organic Electronics</i> , 2013, 14, 2652-2661.	2.6	35
60	Improving the performance of polymer solar cells by altering polymer side chains and optimizing film morphologies. <i>Organic Electronics</i> , 2012, 13, 3234-3243.	2.6	19
61	Single-Crystalline Structure Assisted Revealing the Critical Factors for the Properties of All-Small-Molecule Organic Solar Cells. <i>Advanced Energy and Sustainability Research</i> , 0, , 2100099.	5.8	1