

# Kun Lu

## List of Publications by Year in descending order

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61  
papers

3,209  
citations

201674

27  
h-index

149698

56  
g-index

62  
all docs

62  
docs citations

62  
times ranked

2944  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	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
3	All-small-molecule organic solar cells with over 14% efficiency by optimizing hierarchical morphologies. <i>Nature Communications</i> , 2019, 10, 5393.	12.8	273
4	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
5	Small reorganization energy acceptors enable low energy losses in non-fullerene organic solar cells. <i>Nature Communications</i> , 2022, 13, .	12.8	113
6	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
7	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
8	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
9	Effects of Shortened Alkyl Chains on Solution-Processable Small Molecules with Oxo-Alkylated Nitrile End-Capped Acceptors for High-Performance Organic Solar Cells. <i>Advanced Energy Materials</i> , 2014, 4, 1400538.	19.5	79
10	Oligomeric Donor Material for High-Efficiency Organic Solar Cells: Breaking Down a Polymer. <i>Advanced Materials</i> , 2015, 27, 4229-4233.	21.0	74
11	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
12	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
13	Progress and prospects of thick-film organic solar cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 3125-3150.	10.3	53
14	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
15	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
16	18.4% efficiency achieved by the cathode interface engineering in non-fullerene polymer solar cells. <i>Nano Today</i> , 2021, 41, 101289.	11.9	47
17	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
18	Understanding the Impact of Hierarchical Nanostructure in Ternary Organic Solar Cells. <i>Advanced Science</i> , 2015, 2, 1500250.	11.2	43

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19	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 &amp; Interfaces</i> , 2020, 12, 25100-25107.	8.0	40
20	A conformational locking strategy in linked-acceptor type polymers for organic solar cells. <i>Polymer Chemistry</i> , 2016, 7, 1323-1329.	3.9	37
21	Two-dimensional benzo[1,2- <i>b</i> :4,5- <i>b'</i> ]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
22	A facile strategy to enhance absorption coefficient and photovoltaic performance of two-dimensional benzo[1,2- <i>b</i> :4,5- <i>b'</i> ]dithiophene and thieno[3,4- <i>c</i> ]pyrrole-4,6-dione polymers via subtle chemical structure variations. <i>Organic Electronics</i> , 2013, 14, 2652-2661.	2.6	35
23	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
24	Regulating phase separation and molecular stacking by introducing siloxane to small-molecule donors enables high efficiency all-small-molecule organic solar cells. <i>Energy and Environmental Science</i> , 2022, 15, 2937-2947.	30.8	33
25	Fluorination-substitution effect on all-small-molecule organic solar cells. <i>Science China Chemistry</i> , 2019, 62, 837-844.	8.2	32
26	Regioregular narrow bandgap copolymer with strong aggregation ability for high-performance semitransparent photovoltaics. <i>Nano Energy</i> , 2021, 86, 106098.	16.0	31
27	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
28	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
29	Wide-Bandgap Conjugated Polymers Based on Alkylthiofuran-Substituted Benzo[1,2- <i>b</i> :4,5- <i>b'</i> ]difuran for Efficient Fullerene-Free Polymer Solar Cells. <i>Macromolecules</i> , 2018, 51, 2498-2505.	4.8	23
30	Combining chlorination and sulfuration strategies for high-performance all-small-molecule organic solar cells. <i>Journal of Energy Chemistry</i> , 2021, 52, 228-233.	12.9	23
31	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. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 22531-22539.	8.0	22
32	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
33	Ternary Organic Solar Cells Based on Two Nonfullerene Acceptors with Complimentary Absorption and Balanced Crystallinity. <i>Chinese Journal of Chemistry</i> , 2020, 38, 935-940.	4.9	21
34	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
35	Optimizing the Charge Carrier and Light Management of Nonfullerene Acceptors for Efficient Organic Solar Cells with Small Nonradiative Energy Losses. <i>Solar Rrl</i> , 2021, 5, 2100008.	5.8	20
36	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

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37	D-A structural protean small molecule donor materials for solution-processed organic solar cells. Chinese Chemical Letters, 2017, 28, 2065-2077.	9.0	19
38	Aromatic end-capped acceptor effects on molecular stacking and the photovoltaic performance of solution-processable small molecules. Journal of Materials Chemistry A, 2018, 6, 22077-22085.	10.3	19
39	High open-circuit voltage ternary organic solar cells based on ICBA as acceptor and absorption-complementary donors. Materials Chemistry Frontiers, 2017, 1, 1223-1228.	5.9	18
40	The Crystallinity Control of Polymer Donor Materials for High-Performance Organic Solar Cells. Frontiers in Chemistry, 2020, 8, 603134.	3.6	16
41	Chain Engineering of Benzodifuran-Based Wide-Bandgap Polymers for Efficient Non-Fullerene Polymer Solar Cells. Macromolecular Rapid Communications, 2019, 40, e1900227.	3.9	15
42	Naphthodithiophene-based donor materials for solution processed organic solar cells. Chinese Chemical Letters, 2016, 27, 1271-1276.	9.0	14
43	A novel small molecule based on naphtho[1,2-b:5,6-b']dithiophene benefits both fullerene and non-fullerene solar cells. Materials Chemistry Frontiers, 2018, 2, 143-148.	5.9	14
44	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
45	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
46	Naphtho[1,2-b:5,6-b']dithiophene-Based Conjugated Polymers for Fullerene-Free Inverted Polymer Solar Cells. Macromolecular Rapid Communications, 2018, 39, e1700872.	3.9	11
47	Creating Side Transport Pathways in Organic Solar Cells by Introducing Delayed Fluorescence Molecules. Chemistry of Materials, 2021, 33, 4578-4585.	6.7	11
48	Improving the Performances of Random Copolymer Based Organic Solar Cells by Adjusting the Film Features of Active Layers Using Mixed Solvents. Polymers, 2016, 8, 4.	4.5	10
49	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
50	Dialkoxyphenyldithiophene-based small molecules with enhanced absorption for solution processed organic solar cells. RSC Advances, 2016, 6, 60595-60601.	3.6	9
51	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
52	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
53	A-D-A small-molecule donors with different end alkyl chains obtain different morphologies in organic solar cells. Chinese Chemical Letters, 2019, 30, 906-910.	9.0	8
54	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

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55	Aryl-substituted-indanone end-capped nonfullerene acceptors for organic solar cells with a low nonradiative loss. <i>Chemical Communications</i> , 2022, 58, 4877-4880.	4.1	8
56	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
57	Electron-deficient TVT unit-based D <sup>π</sup> A polymer donor for high-efficiency thick-film OSCs. <i>Nanotechnology</i> , 2022, 33, 065401.	2.6	3
58	Single-bond-linked oligomeric donors for high performance organic solar cells. <i>Chinese Chemical Letters</i> , 2023, 34, 107321.	9.0	3
59	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
60	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
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