

Kuan Liu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4729037/publications.pdf>

Version: 2024-02-01

56
papers

4,859
citations

117625

34
h-index

155660

55
g-index

56
all docs

56
docs citations

56
times ranked

4396
citing authors

#	ARTICLE	IF	CITATIONS
1	Fused Nonacyclic Electron Acceptors for Efficient Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2017, 139, 1336-1343.	13.7	813
2	Triarylamine: Versatile Platform for Organic, Dye-Sensitized, and Perovskite Solar Cells. <i>Chemical Reviews</i> , 2016, 116, 14675-14725.	47.7	418
3	Fused Hexacyclic Nonfullerene Acceptor with Strong Near-Infrared Absorption for Semitransparent Organic Solar Cells with 9.77% Efficiency. <i>Advanced Materials</i> , 2017, 29, 1701308.	21.0	364
4	Enhancing the Performance of Polymer Solar Cells via Core Engineering of NIR-Absorbing Electron Acceptors. <i>Advanced Materials</i> , 2018, 30, e1706571.	21.0	309
5	Stable and low-photovoltage-loss perovskite solar cells by multifunctional passivation. <i>Nature Photonics</i> , 2021, 15, 681-689.	31.4	255
6	Fullerene derivative anchored SnO ₂ for high-performance perovskite solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 3463-3471.	30.8	205
7	Additive-induced miscibility regulation and hierarchical morphology enable 17.5% binary organic solar cells. <i>Energy and Environmental Science</i> , 2021, 14, 3044-3052.	30.8	170
8	Zwitterionic-Surfactant-Assisted Room-Temperature Coating of Efficient Perovskite Solar Cells. <i>Joule</i> , 2020, 4, 2404-2425.	24.0	137
9	Graded bulk-heterojunction enables 17% binary organic solar cells via nonhalogenated open air coating. <i>Nature Communications</i> , 2021, 12, 4815.	12.8	135
10	Precise Control of Perovskite Crystallization Kinetics via Sequential A-Site Doping. <i>Advanced Materials</i> , 2020, 32, e2004630.	21.0	122
11	High-Performance Fluorinated Fused-Ring Electron Acceptor with 3D Stacking and Exciton/Charge Transport. <i>Advanced Materials</i> , 2020, 32, e2000645.	21.0	122
12	Multifunctional Crosslinking-Enabled Strain-Regulating Crystallization for Stable, Efficient FAPbI ₃ -Based Perovskite Solar Cells. <i>Advanced Materials</i> , 2021, 33, e2008487.	21.0	106
13	Effect of Core Size on Performance of Fused-Ring Electron Acceptors. <i>Chemistry of Materials</i> , 2018, 30, 5390-5396.	6.7	102
14	A Simple Way to Simultaneously Release the Interface Stress and Realize the Inner Encapsulation for Highly Efficient and Stable Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2019, 29, 1905336.	14.9	96
15	Roll-coating fabrication of flexible organic solar cells: comparison of fullerene and fullerene-free systems. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1044-1051.	10.3	84
16	Spiro[fluorene-9,9'-xanthene]-based hole transporting materials for efficient perovskite solar cells with enhanced stability. <i>Materials Chemistry Frontiers</i> , 2017, 1, 100-110.	5.9	84
17	Alkoxy-Induced Near-Infrared Sensitive Electron Acceptor for High-Performance Organic Solar Cells. <i>Chemistry of Materials</i> , 2018, 30, 4150-4156.	6.7	79
18	High-Performance Fused Ring Electron Acceptor-Perovskite Hybrid. <i>Journal of the American Chemical Society</i> , 2018, 140, 14938-14944.	13.7	71

#	ARTICLE	IF	CITATIONS
19	Manipulating Crystallization Kinetics in High-Performance Blade-Coated Perovskite Solar Cells via Cosolvent-Assisted Phase Transition. <i>Advanced Materials</i> , 2022, 34, e2200276.	21.0	64
20	Fluorinated fused nonacyclic interfacial materials for efficient and stable perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21414-21421.	10.3	59
21	Novel Oligomer Enables Green Solvent Processed 17.5% Ternary Organic Solar Cells: Synergistic Energy Loss Reduction and Morphology Fine-Tuning. <i>Advanced Materials</i> , 2022, 34, e2107659.	21.0	57
22	Stretchable ITO-Free Organic Solar Cells with Intrinsic Anti-Reflection Substrate for High-Efficiency Outdoor and Indoor Energy Harvesting. <i>Advanced Functional Materials</i> , 2021, 31, 2010172.	14.9	53
23	A perylene diimide based polymer: a dual function interfacial material for efficient perovskite solar cells. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1079-1086.	5.9	51
24	Enhancing the performance of non-fullerene organic solar cells via end group engineering of fused-ring electron acceptors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16638-16644.	10.3	47
25	A low temperature processed fused-ring electron transport material for efficient planar perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24820-24825.	10.3	46
26	Enhancing the performance of the electron acceptor ITIC-Th via tailoring its end groups. <i>Materials Chemistry Frontiers</i> , 2018, 2, 537-543.	5.9	46
27	Bottom-Up Quasi-Epitaxial Growth of Hybrid Perovskite from Solution Process Achieving High-Efficiency Solar Cells via Template-Guided Crystallization. <i>Advanced Materials</i> , 2021, 33, e2100009.	21.0	44
28	Comparison of Linear- and Star-Shaped Fused-Ring Electron Acceptors. , 2019, 1, 367-374.		43
29	High-performance organic solar cells based on polymer donor/small molecule donor/nonfullerene acceptor ternary blends. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2268-2274.	10.3	42
30	Black Phosphorous Quantum Dots Sandwiched Organic Solar Cells. <i>Small</i> , 2019, 15, e1903977.	10.0	41
31	High-Performance Mid-Bandgap Fused-Pyrene Electron Acceptor. <i>Chemistry of Materials</i> , 2019, 31, 6484-6490.	6.7	40
32	Printing High-Efficiency Perovskite Solar Cells in High-Humidity Ambient Environment An In Situ Guided Investigation. <i>Advanced Science</i> , 2021, 8, 2003359.	11.2	40
33	Room-temperature multiple ligands-tailored SnO ₂ quantum dots endow in situ dual-interface binding for upscaling efficient perovskite photovoltaics with high VOC. <i>Light: Science and Applications</i> , 2021, 10, 239.	16.6	40
34	Enhancing the performance of a fused-ring electron acceptor via extending benzene to naphthalene. <i>Journal of Materials Chemistry C</i> , 2018, 6, 66-71.	5.5	38
35	High-Mobility p-Type Organic Semiconducting Interlayer Enhancing Efficiency and Stability of Perovskite Solar Cells. <i>Advanced Science</i> , 2017, 4, 1700025.	11.2	36
36	Efficient Slantwise Aligned Dion-Jacobson Phase Perovskite Solar Cells Based on Trans-1,4-Cyclohexanediamine. <i>Small</i> , 2020, 16, e2003098.	10.0	33

#	ARTICLE	IF	CITATIONS
37	Application of a new π -conjugated ladder-like polymer in enhancing the stability and efficiency of perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1417-1424.	10.3	32
38	High-performance ternary organic solar cells with photoresponses beyond 1000 nm. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24210-24215.	10.3	31
39	Fused octacyclic electron acceptor isomers for organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21432-21437.	10.3	26
40	Passivated Metal Oxide n-Type Contacts for Efficient and Stable Organic Solar Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 1111-1118.	5.1	26
41	Uncovering the out-of-plane nanomorphology of organic photovoltaic bulk heterojunction by GTSAXS. <i>Nature Communications</i> , 2021, 12, 6226.	12.8	23
42	ZnO electron transporting layer engineering realized over 20% efficiency and over 1.28 V open-circuit voltage in all-inorganic perovskite solar cells. <i>EcoMat</i> , 2022, 4, .	11.9	23
43	Self-assembly enables simple structure organic photovoltaics via green-solvent and open-air-printing: Closing the lab-to-fab gap. <i>Materials Today</i> , 2022, 55, 46-55.	14.2	23
44	Enhancing Efficiency and Stability of Organic Solar Cells by UV Absorbent. <i>Solar Rrl</i> , 2017, 1, 1700148.	5.8	21
45	Electropolymerization Porous Aromatic Framework Film As a Hole-Transport Layer for Inverted Perovskite Solar Cells with Superior Stability. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 43688-43695.	8.0	19
46	Facile synthesis of high-performance nonfullerene acceptor isomers <i>via</i> a one stone two birds strategy. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20667-20674.	10.3	19
47	Enhancing the <i>J</i>_{SC} of P3HT-Based OSCs via a Thiophene-Fused Aromatic Heterocycle as a π -Bridge π -for A π - π -A-Type Acceptors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 26005-26016.	8.0	19
48	Z-Shaped Fused-Chrysene Electron Acceptors for Organic Photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 33006-33011.	8.0	18
49	Enhancing Open-Circuit Voltage of High-Efficiency Nonfullerene Ternary Solar Cells with a Star-Shaped Acceptor. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 50660-50667.	8.0	16
50	Size Modulation and Heterovalent Doping Facilitated Hybrid Organic and Perovskite Quantum Dot Bulk Heterojunction Solar Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 11359-11367.	5.1	14
51	Ambipolar-transport wide-bandgap perovskite interlayer for organic photovoltaics with over 18% efficiency. <i>Matter</i> , 2022, 5, 2238-2250.	10.0	14
52	Upscaling perovskite solar cells via the ambient deposition of perovskite thin films. <i>Trends in Chemistry</i> , 2021, 3, 747-764.	8.5	12
53	A thiophene-fused benzotriazole unit as a π -bridge π -in A π -D π -A type acceptor to achieve more balanced JSC and VOC for OSCs. <i>Organic Electronics</i> , 2020, 82, 105705.	2.6	10
54	Effects of Fluorination Position on Fused π -Ring Electron Acceptors. <i>Small Structures</i> , 2020, 1, 2000006.	12.0	8

#	ARTICLE	IF	CITATIONS
55	Effects of linking units on fused-ring electron acceptor dimers. Journal of Materials Chemistry A, 2020, 8, 13735-13741.	10.3	8
56	New roles of fused-ring electron acceptors in organic solar cells. Journal of Materials Chemistry A, 2019, 7, 4766-4770.	10.3	5