

Chengyi Xiao

List of Publications by Year in descending order

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201674

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3197
citing authors

#	ARTICLE	IF	CITATIONS
1	Three-Bladed Rylene Propellers with Three-Dimensional Network Assembly for Organic Electronics. <i>Journal of the American Chemical Society</i> , 2016, 138, 10184-10190.	13.7	449
2	Bay-linked perylene bisimides as promising non-fullerene acceptors for organic solar cells. <i>Chemical Communications</i> , 2014, 50, 1024-1026.	4.1	290
3	Asymmetric Diketopyrrolopyrrole Conjugated Polymers for Field-Effect Transistors and Polymer Solar Cells Processed from a Nonchlorinated Solvent. <i>Advanced Materials</i> , 2016, 28, 943-950.	21.0	155
4	Corannulylene Pentapetalae. <i>Journal of the American Chemical Society</i> , 2019, 141, 5402-5408.	13.7	109
5	Flexible organic solar cells: Materials, large-area fabrication techniques and potential applications. <i>Nano Energy</i> , 2021, 89, 106399.	16.0	99
6	Miscibility-Controlled Phase Separation in Double-Cable Conjugated Polymers for Single-Component Organic Solar Cells with Efficiencies over 8%. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21683-21692.	13.8	82
7	High Performance Polymer Nanowire Field-Effect Transistors with Distinct Molecular Orientations. <i>Advanced Materials</i> , 2015, 27, 4963-4968.	21.0	79
8	Effect of Fluorination on Molecular Orientation of Conjugated Polymers in High Performance Field-Effect Transistors. <i>Macromolecules</i> , 2016, 49, 6431-6438.	4.8	71
9	Electron-Transporting Bis(heterotetracenes) with Tunable Helical Packing. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 10933-10937.	13.8	69
10	Double-Cable Conjugated Polymers with Pendant Rylene Diimides for Single-Component Organic Solar Cells. <i>Accounts of Chemical Research</i> , 2021, 54, 2227-2237.	15.6	67
11	Localization/Delocalization of Charges in Bay-Linked Perylene Bisimides. <i>Chemistry - A European Journal</i> , 2012, 18, 6764-6775.	3.3	66
12	Cyano-Substituted Perylene Diimides with Linearly Correlated LUMO Levels. <i>Organic Letters</i> , 2014, 16, 394-397.	4.6	65
13	Single-crystal field-effect transistors based on a fused-ring electron acceptor with high ambipolar mobilities. <i>Journal of Materials Chemistry C</i> , 2020, 8, 5370-5374.	5.5	57
14	An Organic-Inorganic Hybrid Electrolyte as a Cathode Interlayer for Efficient Organic Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 8526-8531.	13.8	54
15	Capillary-Bridge Mediated Assembly of Conjugated Polymer Arrays toward Organic Photodetectors. <i>Advanced Functional Materials</i> , 2017, 27, 1701347.	14.9	53
16	Synthesis and Properties of Heterocyclic Acene Diimides. <i>Organic Letters</i> , 2013, 15, 682-685.	4.6	51
17	Rational Functionalization of a C ₇₀ Buckybowl To Enable a C ₇₀ :Buckybowl Cocrystal for Organic Semiconductor Applications. <i>Journal of the American Chemical Society</i> , 2020, 142, 2460-2470.	13.7	48
18	Hexacene Diimides. <i>Journal of the American Chemical Society</i> , 2018, 140, 12175-12180.	13.7	46

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19	Dodecatwistarene Imides with Zigzag- π -Twisted Conformation for Organic Electronics. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 2008-2012.	13.8	44
20	Benzothiadiazole-based Conjugated Polymers for Organic Solar Cells. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2021, 39, 525-536.	3.8	39
21	Ternary organic solar cells based on polymer donor, polymer acceptor and PCBM components. <i>Chinese Chemical Letters</i> , 2020, 31, 865-868.	9.0	38
22	Polycyclic aromatic hydrocarbons with orthogonal tetraimides as n-type semiconductors. <i>Chemical Communications</i> , 2016, 52, 13209-13212.	4.1	37
23	High performance, air stable n-type single crystal transistors based on core-tetrachlorinated perylene diimides. <i>Chemical Communications</i> , 2014, 50, 12462-12464.	4.1	36
24	Pyridine-bridged diketopyrrolopyrrole conjugated polymers for field-effect transistors and polymer solar cells. <i>Polymer Chemistry</i> , 2015, 6, 4775-4783.	3.9	34
25	Zinc oxide nanoparticles as electron transporting interlayer in organic solar cells. <i>Journal of Materials Chemistry C</i> , 2021, 9, 14093-14114.	5.5	33
26	Mechanical Robust Flexible Single-Component Organic Solar Cells. <i>Small Methods</i> , 2021, 5, e2100481.	8.6	33
27	Ultrathin Flexible Transparent Composite Electrode via Semi-embedding Silver Nanowires in a Colorless Polyimide for High-Performance Ultraflexible Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 5699-5708.	8.0	32
28	A selenophene substituted double-cable conjugated polymer enables efficient single-component organic solar cells. <i>Journal of Materials Chemistry C</i> , 2020, 8, 2790-2797.	5.5	29
29	Noncovalent π -stacked robust topological organic framework. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 20397-20403.	7.1	28
30	Tuning charge transport from unipolar (n-type) to ambipolar in bis(naphthalene diimide) derivatives by introducing π -conjugated heterocyclic bridging moieties. <i>Journal of Materials Chemistry C</i> , 2016, 4, 7230-7240.	5.5	25
31	Controlled formation of large-area single-crystalline TIPS-pentacene arrays through superhydrophobic micropillar flow-coating. <i>Journal of Materials Chemistry C</i> , 2017, 5, 2702-2707.	5.5	25
32	Electron-Transporting Bis(heterotetracenes) with Tunable Helical Packing. <i>Angewandte Chemie</i> , 2018, 130, 11099-11103.	2.0	24
33	Conjugated polymers with deep LUMO levels for field-effect transistors and polymer-polymer solar cells. <i>Journal of Materials Chemistry C</i> , 2015, 3, 8255-8261.	5.5	23
34	Palladium-Catalyzed Si-C Bond Formation toward Sila-Annulated Perylene Diimides. <i>Organic Letters</i> , 2017, 19, 4331-4334.	4.6	23
35	A benzo[ghi]-perylene triimide based double-cable conjugated polymer for single-component organic solar cells. <i>Chinese Chemical Letters</i> , 2022, 33, 466-469.	9.0	23
36	Epitaxially-crystallized oriented naphthalene bis(dicarboximide) morphology for significant performance improvement of electron-transporting thin-film transistors. <i>Chemical Communications</i> , 2016, 52, 4902-4905.	4.1	21

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37	Insulating Polymers as Additives to Bulk-Heterojunction Organic Solar Cells: The Effect of Miscibility. <i>ChemPhysChem</i> , 2022, 23, .	2.1	20
38	Conjugated polymer with ternary electron-deficient units for ambipolar nanowire field-effect transistors. <i>Journal of Polymer Science Part A</i> , 2016, 54, 34-38.	2.3	19
39	Thermally Sensitive Self-Assembly of Glucose-Functionalized Tetrachloro-Perylene Bisimides: From Twisted Ribbons to Microplates. <i>Langmuir</i> , 2014, 30, 11040-11045.	3.5	18
40	A Dewetting-Induced Assembly Strategy for Precisely Patterning Organic Single Crystals in OFETs. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 18978-18984.	8.0	18
41	Poly(pentacyclic lactam-alt-diketopyrrolopyrrole) for field-effect transistors and polymer solar cells processed from non-chlorinated solvents. <i>Polymer Chemistry</i> , 2016, 7, 164-170.	3.9	18
42	Small Band gap Boron Dipyrromethene-Based Conjugated Polymers for All-Polymer Solar Cells: The Effect of Methyl Units. <i>Macromolecules</i> , 2019, 52, 8367-8373.	4.8	18
43	Triperylene[3,3,3]propellane triimides: achieving a new generation of quasi-D _{3h} symmetric nanostructures in organic electronics. <i>Chemical Science</i> , 2019, 10, 4951-4958.	7.4	18
44	Miscibility-Controlled Phase Separation in Double-Cable Conjugated Polymers for Single-Component Organic Solar Cells with Efficiencies over 8%. <i>Angewandte Chemie</i> , 2020, 132, 21867-21876.	2.0	18
45	Laterally Expanded Rylene Diimides with Uniform Branched Side Chains for Solution-Processed Air Stable n-Channel Thin Film Transistors. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 18098-18103.	8.0	17
46	Mechanical-robust and recyclable polyimide substrates coordinated with cyclic Ti-oxo cluster for flexible organic solar cells. <i>Npj Flexible Electronics</i> , 2022, 6, .	10.7	17
47	Perpendicularly entangled perylene diimides for high performance electron transport materials. <i>Journal of Materials Chemistry C</i> , 2013, 1, 7812.	5.5	16
48	End Group Engineering on the Side Chains of Conjugated Polymers toward Efficient Non-Fullerene Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6151-6158.	8.0	16
49	Dodecatwistarene Imides with Zigzag-Twisted Conformation for Organic Electronics. <i>Angewandte Chemie</i> , 2020, 132, 2024-2028.	2.0	16
50	An Organic-Inorganic Hybrid Electrolyte as a Cathode Interlayer for Efficient Organic Solar Cells. <i>Angewandte Chemie</i> , 2021, 133, 8607-8612.	2.0	16
51	Miscibility-Controlled Mechanical and Photovoltaic Properties in Double-Cable Conjugated Polymer/Insulating Polymer Composites. <i>Macromolecules</i> , 2022, 55, 322-330.	4.8	16
52	Chlorinated Spiroconjugated Fused Extended Aromatics for Multifunctional Organic Electronics. <i>Advanced Materials</i> , 2021, 33, 2006120.	21.0	15
53	Semitransparent Organic Solar Cells based on Non-Fullerene Electron Acceptors. <i>Wuli Huaxue Xuebao/ Acta Physico-Chimica Sinica</i> , 2020, .	4.9	15
54	High-performance electron-transporting hybrid rylenees with low threshold voltage. <i>Journal of Materials Chemistry C</i> , 2013, 1, 7513.	5.5	14

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55	Soluble Twisted Diarenoperylene: Synthesis, Characterization, and Device Performance. <i>Organic Letters</i> , 2018, 20, 4512-4515.	4.6	14
56	Ti-Oxo Clusters with Peripheral Alkyl Groups as Cathode Interlayers for Efficient Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 39671-39677.	8.0	14
57	Functional Ligand-Decorated ZnO Nanoparticles as Cathode Interlayers for Efficient Organic Solar Cells. <i>ACS Applied Energy Materials</i> , 2022, 5, 1291-1297.	5.1	14
58	Enhancing the Performance of Small-Molecule Organic Solar Cells via Fused-Ring Design. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 7093-7101.	8.0	13
59	Revisiting Conjugated Polymers with Long-Branched Alkyl Chains: High Molecular Weight, Excellent Mechanical Properties, and Low Voltage Losses. <i>Macromolecules</i> , 2022, 55, 5964-5974.	4.8	13
60	Conjugated donor-acceptor copolymers from dicyanated naphthalene diimide. <i>Tetrahedron</i> , 2014, 70, 6265-6270.	1.9	12
61	Topâ€Pinning Controlled Dewetting for Fabrication of Largeâ€Scaled Polymer Microwires and Applications in OFETs. <i>Advanced Electronic Materials</i> , 2016, 2, 1600111.	5.1	12
62	Effect of conjugation length on the properties of fused perylene diimides with variable isoindigos. <i>Journal of Materials Chemistry C</i> , 2019, 7, 12263-12269.	5.5	12
63	Highâ€Performance Indoor Organic Solar Cells Based on a Doubleâ€Cable Conjugated Polymer. <i>Solar Rrl</i> , 2022, 6, .	5.8	12
64	Tuning the electronic properties of thiophene-annulated NDIs: the influence of the lateral fusion position. <i>Chemical Communications</i> , 2018, 54, 5542-5545.	4.1	11
65	All-polymer solar cells based on PTACs/P3HT blends with large open-circuit voltage. <i>Dyes and Pigments</i> , 2013, 99, 1065-1071.	3.7	10
66	Surface-induced highly oriented perylo[1,12-b,c,d]selenophene thin films for high performance organic field-effect transistors. <i>Organic Electronics</i> , 2016, 35, 186-192.	2.6	10
67	Influence of alkyl chain branching point on the electron transport properties of di(perylene diimides) thin film transistors. <i>RSC Advances</i> , 2016, 6, 55946-55952.	3.6	9
68	Synthesis and properties of isoindigo and benzo[1,2- <i>b</i> :4,5- <i>b'</i> â€ ²]bis[<i>b</i>]benzothiophene oligomers. <i>Chemical Communications</i> , 2018, 54, 11152-11155.	4.1	9
69	Nearâ€Infrared Nonfullerene Acceptors Based on 4 <i>H</i> -Cyclopenta[1,2- <i>b</i> :5,4- <i>b'</i> â€ ²]dithiophene for Organic Solar Cells and Organic Fieldâ€Effect Transistors. <i>Chemistry - an Asian Journal</i> , 2021, 16, 4171-4178.	3.3	9
70	Alternating Tetrafluorobenzene and Thiophene Units by Direct Arylation for Organic Electronics. <i>Chemistry - an Asian Journal</i> , 2019, 14, 1443-1447.	3.3	8
71	Side-chains Engineering of Conjugated Polymers toward Additive-free Non-fullerene Organic Solar Cells. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2021, 39, 43-50.	3.8	8
72	Defect-controlled synthesis of graphene based nano-size electronic devices using in situ thermal treatment. <i>Organic Electronics</i> , 2014, 15, 685-691.	2.6	7

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73	Length Effect of Alkyl Linkers on the Crystalline Transition in Naphthalene Diimide-Based Double-Cable Conjugated Polymers. <i>Macromolecules</i> , 2022, 55, 5188-5196.	4.8	7
74	Effect of halogenated substituent on the properties of aza-octacenes. <i>Organic Electronics</i> , 2020, 85, 105895.	2.6	6
75	Perylene bisimides-based molecular dyads with different alkyl linkers for single-component organic solar cells. <i>Dyes and Pigments</i> , 2022, 203, 110355.	3.7	6
76	Fused Pyrazine and Carbazole-Containing Azaacenes: Synthesis and Properties. <i>ChemPlusChem</i> , 2019, 84, 1257-1262.	2.8	5
77	Single crystal field-effect transistor of tetrabenzoporphyrin with a one-dimensionally extended columnar packing motif exhibiting efficient charge transport properties. <i>Journal of Materials Chemistry C</i> , 2022, 10, 2527-2531.	5.5	5
78	Novel and asymmetric S,N-heterocyclics with fused six-membered rings for organic field effect transistor applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 17083-17089.	5.5	3
79	Incorporating semiflexible linkers into double-cable conjugated polymers via a click reaction. <i>Polymer Chemistry</i> , 2021, 12, 6865-6872.	3.9	3
80	A Naphthalenediimide-Based Polymer Acceptor with Multidirectional Orientations via Double-Cable Design. <i>Macromolecules</i> , 2020, 53, 9279-9286.	4.8	2
81	Simple Sn-based coordination complex as cathode interlayer for efficient organic solar cells. <i>Organic Electronics</i> , 2022, 108, 106577.	2.6	1
82	Synthesis and Evaluation of Charge Transport Property of Ethynylene-Bridged Anthracene Oligomers. <i>Macromolecular Chemistry and Physics</i> , 2021, 222, 2100024.	2.2	0