Yao Chen

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4780618/publications.pdf

Version: 2024-02-01

52 papers	1,880 citations	201674 27 h-index	265206 42 g-index
52 all docs	52 docs citations	52 times ranked	2280 citing authors

#	Article	IF	Citations
1	Processing Strategies for an Organic Photovoltaic Module with over 10% Efficiency. Joule, 2020, 4, 189-206.	24.0	154
2	Ion-Transport Design for High-Performance Na⁺-Based Electrochromics. ACS Nano, 2018, 12, 3759-3768.	14.6	136
3	A Narrowâ€Bandgap nâ€Type Polymer Semiconductor Enabling Efficient Allâ€Polymer Solar Cells. Advanced Materials, 2019, 31, e1905161.	21.0	121
4	Simultaneous Bottomâ€Up Interfacial and Bulk Defect Passivation in Highly Efficient Planar Perovskite Solar Cells using Nonconjugated Smallâ€Molecule Electrolytes. Advanced Materials, 2019, 31, e1903239.	21.0	89
5	Highly stretchable organic electrochemical transistors with strain-resistant performance. Nature Materials, 2022, 21, 564-571.	27.5	86
6	Breath figureâ€“derived porous semiconducting films for organic electronics. Science Advances, 2020, 6, eaaz1042.	10.3	81
7	The tomato Ethylene Response Factor Slâ€<scp>ERF</scp>.B3 integrates ethylene and auxin signaling via direct regulation of Slâ€Aux/<scp>IAA</scp>27. New Phytologist, 2018, 219, 631-640.	7.3	75
8	Porous Semiconducting Polymers Enable Highâ€Performance Electrochemical Transistors. Advanced Materials, 2021, 33, e2007041.	21.0	61
9	Readily Accessible Benzo[d]thiazole Polymers for Nonfullerene Solar Cells with >16% Efficiency and Potential Pitfalls. ACS Energy Letters, 2020, 5, 1780-1787.	17.4	58
10	SlERF.F12 modulates the transition to ripening in tomato fruit by recruiting the co-repressor TOPLESS and histone deacetylases to repress key ripening genes. Plant Cell, 2022, 34, 1250-1272.	6.6	57
11	Hole (donor) and electron (acceptor) transporting organic semiconductors for bulk-heterojunction solar cells. EnergyChem, 2020, 2, 100042.	19.1	55
12	A novel tomato Fâ€box protein, SlEBF3, is involved in tuning ethylene signaling during plant development and climacteric fruit ripening. Plant Journal, 2018, 95, 648-658.	5.7	48
13	Systematically Controlling Acceptor Fluorination Optimizes Hierarchical Morphology, Vertical Phase Separation, and Efficiency in Nonâ€Fullerene Organic Solar Cells. Advanced Energy Materials, 2022, 12, .	19.5	46
14	Synergistic Boron Doping of Semiconductor and Dielectric Layers for High-Performance Metal Oxide Transistors: Interplay of Experiment and Theory. Journal of the American Chemical Society, 2018, 140, 12501-12510.	13.7	43
15	Polymer Doping Enables a Twoâ€Dimensional Electron Gas for Highâ€Performance Homojunction Oxide Thinâ€Film Transistors. Advanced Materials, 2019, 31, e1805082.	21.0	43
16	Cyano-substitution on the end-capping group: facile access toward asymmetrical squaraine showing strong dipoleâ€“dipole interactions as a high performance small molecular organic solar cells material. Journal of Materials Chemistry A, 2015, 3, 17704-17712.	10.3	40
17	Asymmetrical Squaraines Bearing Fluorine-Substituted Indoline Moieties for High-Performance Solution-Processed Small-Molecule Organic Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 13675-13684.	8.0	39
18	A low bandgap asymmetrical squaraine for high-performance solution-processed small molecule organic solar cells. Chemical Communications, 2014, 50, 9346-9348.	4.1	36

#	Article	IF	Citations
19	Nitroacetylacetone as a Cofuel for the Combustion Synthesis of High-Performance Indiumâ€“Galliumâ€“Zinc Oxide Transistors. Chemistry of Materials, 2018, 30, 3323-3329.	6.7	35
20	Asymmetrical squaraines for high-performance small-molecule organic solar cells with a short circuit current of over 12 mA cm^{â˜2}. Chemical Communications, 2015, 51, 6133-6136.	4.1	33
21	To Fluorinate or Not to Fluorinate in Organic Solar Cells: Achieving a Higher PCE of 15.2% when the Donor Polymer is Halogenâ€Free. Advanced Energy Materials, 2021, 11, 2102648.	19.5	33
22	An Azuleneâ€Containing Low Bandgap Small Molecule for Organic Photovoltaics with High Openâ€Circuit Voltage. Chemistry - A European Journal, 2016, 22, 14527-14530.	3.3	32
23	Overexpression of bHLH95, a basic helixâ€“loopâ€“helix transcription factor family member, impacts trichome formation via regulating gibberellin biosynthesis in tomato. Journal of Experimental Botany, 2020, 71, 3450-3462.	4.8	32
24	Ï€-Extended Naphthalene Diimide Derivatives for n-Type Semiconducting Polymers. Chemistry of Materials, 2020, 32, 5317-5326.	6.7	32
25	Experimental and theoretical evidence for hydrogen doping in polymer solution-processed indium gallium oxide. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18231-18239.	7.1	31
26	Colorful Squaraines Dyes for Efficient Solution-Processed All Small-Molecule Semitransparent Organic Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 26465-26472.	8.0	28
27	Frequency-Agile Low-Temperature Solution-Processed Alumina Dielectrics for Inorganic and Organic Electronics Enhanced by Fluoride Doping. Journal of the American Chemical Society, 2020, 142, 12440-12452.	13.7	27
28	2,3-Diphenylthieno[3,4-b]pyrazines as Hole-Transporting Materials for Stable, High-Performance Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 2118-2127.	17.4	27
29	Mixed-flow design for microfluidic printing of two-component polymer semiconductor systems. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17551-17557.	7.1	24
30	Self-Assembled Nanodielectrics for Solution-Processed Top-Gate Amorphous IGZO Thin-Film Transistors. ACS Applied Materials & Interfaces, 2021, 13, 15399-15408.	8.0	24
31	Cinnamate-Functionalized Natural Carbohydrates as Photopatternable Gate Dielectrics for Organic Transistors. Chemistry of Materials, 2019, 31, 7608-7617.	6.7	23
32	Novel unsymmetrical squaraine-based small molecules for organic solar cells. Journal of Materials Chemistry C, 2018, 6, 847-854.	5.5	22
33	Performance, Morphology, and Charge Recombination Correlations in Ternary Squaraine Solar Cells. Chemistry of Materials, 2018, 30, 6810-6820.	6.7	22
34	The influence of intramolecular noncovalent interactions in unsymmetrical squaraines on material properties, film morphologyÂand photovoltaic performance. Dyes and Pigments, 2017, 145, 222-232.	3.7	19
35	Foundry-compatible high-resolution patterning of vertically phase-separated semiconducting films for ultraflexible organic electronics. Nature Communications, 2021, 12, 4937.	12.8	19
36	Photovoltaic Devices Prepared through a Trihydroxy Substitution Strategy on an Unsymmetrical Squaraine Dye. Chemistry - A European Journal, 2018, 24, 3234-3240.	3.3	18

#	Article	IF	Citations
37	Synthesis of 3Hâ€Benzo[e]indoline and Its Application to Smallâ€Molecule Organic Solar Cells. Chemistry - A European Journal, 2018, 24, 8747-8750.	3.3	15
38	Recent Advances in Squaraine Dyes for Bulk-Heterojunction Organic Solar Cells. Organic Photonics and Photovoltaics, 2019, 6, 1-16.	1.3	15
39	All-Polymer Solar Cells Incorporating Readily Accessible Naphthalene Diimide and Isoindigo Acceptor Polymers for Improved Light Harvesting. Chemistry of Materials, 2022, 34, 3267-3279.	6.7	14
40	Marked Cofuel Tuning of Combustion Synthesis Pathways for Metal Oxide Semiconductor Films. Advanced Electronic Materials, 2019, 5, 1900540.	5.1	13
41	Unsymmetrical squaraines with new linkage manner for high-performance solution-processed small-molecule organic photovoltaic cells. RSC Advances, 2016, 6, 1877-1884.	3.6	12
42	Printable Organicâ€Inorganic Nanoscale Multilayer Gate Dielectrics for Thinâ€Film Transistors Enabled by a Polymeric Organic Interlayer. Advanced Functional Materials, 2020, 30, 2005069.	14.9	12
43	Isomers of Dithienocyclopentapyreneâ€Based Nonâ€Fullerene Electron Acceptors: Configuration Effect on Photoelectronic Properties. Chemistry - A European Journal, 2019, 25, 6385-6391.	3.3	10
44	Tuning the antiaromatic character and charge transport of pentalene-based antiaromatic compounds by substitution. Journal of Materials Chemistry C, 2022, 10, 2724-2731.	5.5	10
45	Design, synthesis, and antibacterial evaluation of novel derivatives of NPS-2143 for the treatment of methicillin-resistant S. aureus (MRSA) infection. Journal of Antibiotics, 2019, 72, 545-554.	2.0	7
46	Nitrogen-influenced competition between the genders of Salix rehderiana. Tree Physiology, 2021, 41, 2375-2391.	3.1	7
47	The effects of SQ additive on charge carrier transport and recombination in PCDTBT:PC71BM based ternary organic solar cells. Synthetic Metals, 2017, 234, 125-131.	3.9	4
48	Effects of different types of unsymmetrical squaraines on the material properties and Coulomb interactions in organic photovoltaic devices. Materials Chemistry Frontiers, 2018, 2, 2116-2123.	5.9	4
49	Cross-Plane Thermal Conductance of Phosphonate-Based Self-Assembled Monolayers and Self-Assembled Nanodielectrics. ACS Applied Materials & Interfaces, 2020, 12, 34901-34909.	8.0	3
50	Computational insight into the mechanism and stereoselectivity of cycloaddition between donorâ€“acceptor spirocyclopropane and aldehyde catalyzed by BrÃ¸nsted acid TsOH. Organic and Biomolecular Chemistry, 2022, 20, 4006-4015.	2.8	3
51	Systematic Analysis of Self-Assembled Nanodielectric Architecture and Organization Effects on Organic Transistor Switching. ACS Applied Electronic Materials, 2022, 4, 2015-2025.	4.3	2
52	Perovskite Solar Cells: Simultaneous Bottomâ€Up Interfacial and Bulk Defect Passivation in Highly Efficient Planar Perovskite Solar Cells using Nonconjugated Smallâ€Molecule Electrolytes (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 T	21.9	2