

Liang Yao

List of Publications by Year in descending order

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77
papers

5,320
citations

101543

36
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72
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docs citations

78
times ranked

4627
citing authors

#	ARTICLE	IF	CITATIONS
1	Bulk Heterojunction Organic Semiconductor Photoanodes: Tuning Energy Levels to Optimize Electron Injection. ACS Applied Materials & Interfaces, 2022, 14, 8191-8198.	8.0	5
2	An efficient nickel hydrogen oxidation catalyst for hydroxide exchange membrane fuel cells. Nature Materials, 2022, 21, 804-810.	27.5	97
3	Covalent Organic Framework Nanoplates Enable Solution-Processed Crystalline Nanofilms for Photoelectrochemical Hydrogen Evolution. Journal of the American Chemical Society, 2022, 144, 10291-10300.	13.7	33
4	Defect engineered nanostructured LaFeO ₃ photoanodes for improved activity in solar water oxidation. Journal of Materials Chemistry A, 2021, 9, 2888-2898.	10.3	13
5	A hybrid bulk-heterojunction photoanode for direct solar-to-chemical conversion. Energy and Environmental Science, 2021, 14, 3141-3151.	30.8	20
6	A Direct Z-Scheme for the Photocatalytic Hydrogen Production from a Water Ethanol Mixture on CoTiO ₃ /TiO ₂ Heterostructures. ACS Applied Materials & Interfaces, 2021, 13, 449-457.	8.0	37
7	Spectroelectrochemical and Chemical Evidence of Surface Passivation at Zinc Ferrite (ZnFe ₂ O ₄) Photoanodes for Solar Water Oxidation. Advanced Functional Materials, 2021, 31, 2010081.	14.9	26
8	A semiconducting polymer bulk heterojunction photoanode for solar water oxidation. Nature Catalysis, 2021, 4, 431-438.	34.4	48
9	Benzodithiophene-Based Spacers for Layered and Quasi-Layered Lead Halide Perovskite Solar Cells. ChemSusChem, 2021, 14, 3001-3009.	6.8	8
10	Identifying Reactive Sites and Surface Traps in Chalcopyrite Photocathodes. Angewandte Chemie - International Edition, 2021, 60, 23651-23655.	13.8	11
11	Identifizierung von reaktiven Zentren und Oberflächenfallen in Chalkopyrit-Photokathoden. Angewandte Chemie, 2021, 133, 23843-23847.	2.0	2
12	Interlayer Interactions as Design Tool for Large-Pore COFs. Journal of the American Chemical Society, 2021, 143, 15711-15722.	13.7	60
13	Generalized Synthesis to Produce Transparent Thin Films of Ternary Metal Oxide Photoelectrodes. ChemSusChem, 2020, 13, 3645-3653.	6.8	10
14	Cu ₂ O photocathodes with band-tail states assisted hole transport for standalone solar water splitting. Nature Communications, 2020, 11, 318.	12.8	139
15	Establishing Stability in Organic Semiconductor Photocathodes for Solar Hydrogen Production. Journal of the American Chemical Society, 2020, 142, 7795-7802.	13.7	45
16	Robust Electron Transport Layers via In Situ Cross-Linking of Perylene Diimide and Fullerene for Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 6616-6623.	5.1	11
17	Lead Halide Perovskite Quantum Dots To Enhance the Power Conversion Efficiency of Organic Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 12696-12704.	13.8	27
18	Lead Halide Perovskite Quantum Dots To Enhance the Power Conversion Efficiency of Organic Solar Cells. Angewandte Chemie, 2019, 131, 12826-12834.	2.0	10

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19	Solution-Processed Ultrathin SnS ₂ Pt Nanoplates for Photoelectrochemical Water Oxidation. ACS Applied Materials & Interfaces, 2019, 11, 6918-6926.	8.0	57
20	Insights into the interfacial carrier behaviour of copper ferrite (CuFe ₂ O ₄) photoanodes for solar water oxidation. Journal of Materials Chemistry A, 2019, 7, 1669-1677.	10.3	65
21	Multisite and Substituent Effects on Charge Transport of Organic Hole Transport Materials. Chemistry of Materials, 2019, 31, 6605-6614.	6.7	21
22	Fully Conjugated Donor-Acceptor Block Copolymers for Organic Photovoltaics via Heck-Mizoroki Coupling. ACS Macro Letters, 2019, 8, 134-139.	4.8	25
23	Catalyst-Free, Fast, and Tunable Synthesis for Robust Covalent Polymer Network Semiconducting Thin Films. Advanced Functional Materials, 2018, 28, 1706303.	14.9	7
24	Melt-processing of small molecule organic photovoltaics via bulk heterojunction compatibilization. Green Chemistry, 2018, 20, 2218-2224.	9.0	9
25	Dual-emissive electropolymerization films for the ratiometric fluorescence detection of TNT and TNP with high sensitivity and selectivity. Sensors and Actuators B: Chemical, 2018, 259, 380-386.	7.8	28
26	Organic Semiconductor Based Devices for Solar Water Splitting. Advanced Energy Materials, 2018, 8, 1802585.	19.5	88
27	Monodisperse π-π Stacking Anthracene Dimer under Pressure: Unique Fluorescence Behaviors and Experimental Determination of Interplanar Distance at Excimer Equilibrium Geometry. Advanced Optical Materials, 2018, 6, 1800085.	7.3	63
28	Conjugation break spacers and flexible linkers as tools to engineer the properties of semiconducting polymers. Polymer Journal, 2018, 50, 725-736.	2.7	25
29	Semiconducting alternating multi-block copolymers via a di-functionalized macromonomer approach. Polymer Chemistry, 2017, 8, 824-827.	3.9	6
30	Morphology stabilization strategies for small-molecule bulk heterojunction photovoltaics. Journal of Materials Chemistry A, 2017, 5, 17517-17524.	10.3	16
31	Amorphous Ternary Charge-Cascade Molecules for Bulk Heterojunction Photovoltaics. ACS Applied Materials & Interfaces, 2017, 9, 27825-27831.	8.0	22
32	Hybridization and de-hybridization between the locally-excited (LE) state and the charge-transfer (CT) state: a combined experimental and theoretical study. Physical Chemistry Chemical Physics, 2016, 18, 24176-24184.	2.8	117
33	Excimer-induced high-efficiency fluorescence due to pairwise anthracene stacking in a crystal with long lifetime. Chemical Communications, 2016, 52, 7356-7359.	4.1	164
34	Polarized Thin Layer Deposited Electrochemically on Aluminum-Doped Zinc Oxide as a Cathode Interlayer for Highly Efficient Organic Electronics. ACS Applied Materials & Interfaces, 2016, 8, 26463-26469.	8.0	13
35	Adjusting Nitrogen Atom Orientations of Pyridine Ring in Tetraphenylsilane-Based Hosts for Highly Efficient Blue Phosphorescent Organic Light-Emitting Devices. ACS Applied Materials & Interfaces, 2016, 8, 24793-24802.	8.0	34
36	Efficient deep-blue non-doped organic light-emitting diode with improved roll-off of efficiency based on hybrid local and charge-transfer excited state. RSC Advances, 2016, 6, 70085-70090.	3.6	44

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37	Electrochemical Deposition of Azobenzene-Containing Network Films with High-Contrast and Stable Photoresponse. <i>Macromolecular Rapid Communications</i> , 2016, 37, 610-615.	3.9	10
38	Highly Efficient Nondoped Green Organic Light-Emitting Diodes with Combination of High Photoluminescence and High Exciton Utilization. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 3041-3049.	8.0	126
39	Highly Efficient Solid-State Near-Infrared Emitting Material Based on Triphenylamine and Diphenylfumarone with an EQE of 2.58% in Nondoped Organic Light-Emitting Diode. <i>Advanced Functional Materials</i> , 2015, 25, 7521-7529.	14.9	181
40	28.2: <i>Invited Paper</i> : Reverse Intersystem Crossing From High-Lying Triplet Energy Levels to Excited Singlet: A "Hot excitation" Path for OLEDs. <i>Digest of Technical Papers SID International Symposium</i> , 2015, 46, 404-407.	0.3	3
41	Reverse intersystem crossing from upper triplet levels to excited singlet: a "hot excitation" path for organic light-emitting diodes. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140318.	3.4	103
42	Isomers of Pyrene-Imidazole Compounds: Synthesis and Configuration Effect on Optical Properties. <i>Organic Letters</i> , 2015, 17, 6138-6141.	4.6	47
43	Achieving a Significantly Increased Efficiency in Nondoped Pure Blue Fluorescent OLED: A Quasi-Equivalent Hybridized Excited State. <i>Advanced Functional Materials</i> , 2015, 25, 1755-1762.	14.9	381
44	Tailoring Excited-State Properties and Electroluminescence Performance of Donor-Acceptor Molecules through Tuning the Energy Level of the Charge-Transfer State. <i>Journal of Physical Chemistry C</i> , 2015, 119, 17800-17808.	3.1	76
45	Highly efficient near ultraviolet organic light-emitting diode based on a meta-linked donor-acceptor molecule. <i>Chemical Science</i> , 2015, 6, 3797-3804.	7.4	245
46	Efficient Deep Blue Electroluminescence with an External Quantum Efficiency of 6.8% and CIE $y < 0.08$ Based on a Phenanthroimidazole-Sulfone Hybrid Donor-Acceptor Molecule. <i>Chemistry of Materials</i> , 2015, 27, 7050-7057.	6.7	239
47	Fully solution-processed and multilayer blue organic light-emitting diodes based on efficient small molecule emissive layer and intergrated interlayer optimization. <i>Organic Electronics</i> , 2015, 27, 35-40.	2.6	25
48	An Efficient Al-Active Blue-Emitting Molecule by Incorporating Multifunctional Groups into Tetraphenylsilane. <i>Chemistry - A European Journal</i> , 2014, 20, 7589-7592.	3.3	41
49	Progress in next-generation organic electroluminescent materials: material design beyond exciton statistics. <i>Science China Chemistry</i> , 2014, 57, 335-345.	8.2	100
50	Fluorescence detection of trace TNT by novel cross-linking electropolymerized films both in vapor and aqueous medium. <i>Journal of Hazardous Materials</i> , 2014, 264, 474-480.	12.4	46
51	Highly Efficient Near-Infrared Organic Light-Emitting Diode Based on a Butterfly-Shaped Donor-Acceptor Chromophore with Strong Solid-State Fluorescence and a Large Proportion of Radiative Excitons. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2119-2123.	13.8	604
52	High Yields of Singlet Excitons in Organic Electroluminescence through Two Paths of Cold and Hot Excitons. <i>Advanced Optical Materials</i> , 2014, 2, 510-515.	7.3	216
53	Triphenylamine-Substituted Metalloporphyrins for Solution-Processed Bulk Heterojunction Solar Cells: The Effect of the Central Metal Ion on Device Performance. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 4852-4857.	2.0	7
54	Novel violet emitting material synthesized by stepwise chemical reactions. <i>Journal of Materials Chemistry C</i> , 2014, 2, 5019.	5.5	27

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55	Highly efficient deep-blue OLED with an extraordinarily narrow FWHM of 35 nm and a y coordinate $\lt;0.05$ based on a fully twisting donor-acceptor molecule. <i>Journal of Materials Chemistry C</i> , 2014, 2, 4733-4736.	5.5	123
56	Solution-processable Hosts Constructed by Carbazole/PO Substituted Tetraphenylsilanes for Efficient Blue Electrophosphorescent Devices. <i>Advanced Functional Materials</i> , 2014, 24, 5881-5888.	14.9	45
57	Highly Sensitive and Selective Fluorometric/Electrochemical Dual-channel Sensors for TNT and DNT Explosives. <i>Chemistry - A European Journal</i> , 2014, 20, 11655-11658.	3.3	26
58	A Hybridized Local and Charge-transfer Excited State for Highly Efficient Fluorescent OLEDs: Molecular Design, Spectral Character, and Full Exciton Utilization. <i>Advanced Optical Materials</i> , 2014, 2, 892-901.	7.3	357
59	A simple, selective, fluorescent iron(III) sensing material based on peripheral carbazole. <i>Sensors and Actuators B: Chemical</i> , 2014, 191, 332-336.	7.8	36
60	Enhanced proportion of radiative excitons in non-doped electro-fluorescence generated from an imidazole derivative with an orthogonal donor-acceptor structure. <i>Chemical Communications</i> , 2013, 49, 11302.	4.1	198
61	Mixed bipolar fluorescent small molecules for solution processable white light-emitting devices with excellent efficiency roll-off. <i>Journal of Materials Chemistry C</i> , 2013, 1, 7175.	5.5	5
62	Cross-linked luminescent films via electropolymerization of multifunctional precursors for highly efficient electroluminescence. <i>Polymer Chemistry</i> , 2013, 4, 2090.	3.9	16
63	Aromatic S-Heterocycle and Fluorene Derivatives as Solution-Processed Blue Fluorescent Emitters: Structure-Property Relationships for Different Sulfur Oxidation States. <i>Journal of Physical Chemistry C</i> , 2013, 117, 14189-14196.	3.1	47
64	Chemistry and materials based on 5,5'-bibenzo[<i>c</i>][1,2,5]thiadiazole. <i>Chemical Communications</i> , 2013, 49, 5730.	4.1	18
65	High-efficiency Violet-light-emitting Materials Based on Phenanthro[9,10- <i>cd</i>]imidazole. <i>Chemistry - A European Journal</i> , 2013, 19, 2602-2605.	3.3	111
66	Identifying the efficient inter-conversion between singlet and triplet charge-transfer states by magneto-electroluminescence study. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	38
67	Simultaneous enhancement of the carrier mobility and luminous efficiency through thermal annealing a molecular glass material and device. <i>Journal of Materials Chemistry</i> , 2012, 22, 21502.	6.7	13
68	A simple sensitive colorimetric/fluorometric probe for iodide. <i>Talanta</i> , 2012, 97, 343-348.	5.5	22
69	Cross-linked Multifunctional Conjugated Polymers Prepared by In Situ Electrochemical Deposition for a Highly-efficient Blue-emitting and Electron-transport Layer. <i>Advanced Materials</i> , 2012, 24, 2413-2417.	21.0	57
70	RGB Small Molecules Based on a Bipolar Molecular Design for Highly Efficient Solution-processed Single-layer OLEDs. <i>Chemistry - A European Journal</i> , 2012, 18, 2707-2714.	3.3	37
71	Highly Efficient and Fully Solution-processed White Electroluminescence Based on Fluorescent Small Molecules and a Polar Conjugated Polymer as the Electron-injection Material. <i>Advanced Functional Materials</i> , 2012, 22, 1092-1097.	14.9	39
72	Electroactive Self-assembled Monolayers for Enhanced Efficiency and Stability of Electropolymerized Luminescent Films and Devices. <i>Advanced Functional Materials</i> , 2011, 21, 2896-2900.	14.9	30

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73	Multilayer Polymer Stacking by In Situ Electrochemical Polymerization for Colorâ€Stable White Electroluminescence. <i>Advanced Materials</i> , 2011, 23, 527-530.	21.0	68
74	Low-temperature annealing to enhance efficiency in organic small-molecule solution-processable OLEDs. <i>Semiconductor Science and Technology</i> , 2011, 26, 055016.	2.0	1
75	Organic Semiconductors for Photoelectrochemical Applications. , 0, , .		0
76	Operando Potential-Sensing at the Semiconductor-Liquid Junctions: Tracking the Surface Energetics and Interfacial Kinetics during Photoelectrosynthetic Reactions. , 0, , .		0
77	Tuning Naphthalenediimide Cations for Incorporation into Ruddlesdenâ€Popper-Type Hybrid Perovskites. <i>Chemistry of Materials</i> , 0, , .	6.7	6