Xinyi Cai

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/10811584/publications.pdf

Version: 2024-02-01

56 papers	3,701 citations	147566 31 h-index	161609 54 g-index
56 all docs	56 docs citations	56 times ranked	2455 citing authors

#	Article	IF	Citations
1	Marching Toward Highly Efficient, Pureâ€Blue, and Stable Thermally Activated Delayed Fluorescent Organic Lightâ€Emitting Diodes. Advanced Functional Materials, 2018, 28, 1802558.	7.8	489
2	Evaporationâ€•and Solutionâ€Processâ€Feasible Highly Efficient Thianthreneâ€9,9â€²,10,10â€²â€Tetraoxideâ€Based Thermally Activated Delayed Fluorescence Emitters with Reduced Efficiency Rollâ€Off. Advanced Materials, 2016, 28, 181-187.	11.1	291
3	â€œRate-limited effectâ€•of reverse intersystem crossing process: the key for tuning thermally activated delayed fluorescence lifetime and efficiency roll-off of organic light emitting diodes. Chemical Science, 2016, 7, 4264-4275.	3.7	212
4	Triâ€Spiral Donor for High Efficiency and Versatile Blue Thermally Activated Delayed Fluorescence Materials. Angewandte Chemie - International Edition, 2019, 58, 11301-11305.	7.2	198
5	Design Strategy of Blue and Yellow Thermally Activated Delayed Fluorescence Emitters and Their Allâ€Fluorescence White OLEDs with External Quantum Efficiency beyond 20%. Advanced Functional Materials, 2016, 26, 6904-6912.	7.8	164
6	Horizontally Orientated Sticklike Emitters: Enhancement of Intrinsic Out-Coupling Factor and Electroluminescence Performance. Chemistry of Materials, 2017, 29, 8630-8636.	3.2	164
7	Singletâ€“Triplet Splitting Energy Management via Acceptor Substitution: Complanation Molecular Design for Deepâ€Blue Thermally Activated Delayed Fluorescence Emitters and Organic Lightâ€Emitting Diodes Application. Advanced Functional Materials, 2016, 26, 8042-8052.	7.8	141
8	Highâ€Efficiency WOLEDs with High Colorâ€Rendering Index based on a Chromaticityâ€Adjustable Yellow Thermally Activated Delayed Fluorescence Emitter. Advanced Materials, 2016, 28, 4614-4619.	11.1	120
9	Fluorescent Organic Planar pn Heterojunction Lightâ€Emitting Diodes with Simplified Structure, Extremely Low Driving Voltage, and High Efficiency. Advanced Materials, 2016, 28, 239-244.	11.1	115
10	Adamantaneâ€Substituted Acridine Donor for Blue Dual Fluorescence and Efficient Organic Lightâ€Emitting Diodes. Angewandte Chemie - International Edition, 2019, 58, 582-586.	7.2	111
11	â€œTradeâ€Offâ€•Hidden in Condensed State Solvation: Multiradiative Channels Design for Highly Efficient Solutionâ€Processed Purely Organic Electroluminescence at High Brightness. Advanced Functional Materials, 2018, 28, 1704927.	7.8	105
12	Utilizing a Spiro TADF Moiety as a Functional Electron Donor in TADF Molecular Design toward Efficient â€œMultichannelâ€•Reverse Intersystem Crossing. Advanced Functional Materials, 2019, 29, 1808088.	7.8	101
13	Study of Configuration Differentia and Highly Efficient, Deepâ€Blue, Organic Lightâ€Emitting Diodes Based on Novel Naphtho[1,2â€d]imidazole Derivatives. Advanced Functional Materials, 2015, 25, 5190-5198.	7.8	91
14	Structureâ€“Performance Investigation of Thioxanthone Derivatives for Developing Color Tunable Highly Efficient Thermally Activated Delayed Fluorescence Emitters. ACS Applied Materials & Interfaces, 2016, 8, 8627-8636.	4.0	89
15	Purely Organic Crystals Exhibit Bright Thermally Activated Delayed Fluorescence. Angewandte Chemie - International Edition, 2019, 58, 13522-13531.	7.2	72
16	Achieving Efficient Triplet Exciton Utilization with Large Î”E_{ST} and Nonobvious Delayed Fluorescence by Adjusting Excited State Energy Levels. Journal of Physical Chemistry Letters, 2018, 9, 4725-4731.	2.1	69
17	An ideal universal host for highly efficient full-color, white phosphorescent and TADF OLEDs with a simple and unified structure. Journal of Materials Chemistry C, 2017, 5, 10406-10416.	2.7	63
18	Efficient solution-processed red all-fluorescent organic light-emitting diodes employing thermally activated delayed fluorescence materials as assistant hosts: molecular design strategy and exciton dynamic analysis. Journal of Materials Chemistry C, 2017, 5, 5223-5231.	2.7	62

#	Article	IF	Citations
19	Polarity-Tunable Host Materials and Their Applications in Thermally Activated Delayed Fluorescence Organic Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2016, 8, 27920-27930.	4.0	59
20	Coâ€Interlayer Engineering toward Efficient Green Quasiâ€Twoâ€Dimensional Perovskite Lightâ€Emitting Diodes. Advanced Functional Materials, 2020, 30, 1910167.	7.8	52
21	Highly efficient thermally activated delayed fluorescence materials with reduced efficiency roll-off and low on-set voltages. Materials Chemistry Frontiers, 2017, 1, 2039-2046.	3.2	49
22	Deep blue fluorophores incorporating sulfone-locked triphenylamine: the key for highly efficient fluorescenceâ€“phosphorescence hybrid white OLEDs with simplified structure. Journal of Materials Chemistry C, 2015, 3, 6986-6996.	2.7	48
23	Achieving Purely Organic Room-Temperature Phosphorescence Mediated by a Hostâ€“Guest Charge Transfer State. Journal of Physical Chemistry Letters, 2021, 12, 4600-4608.	2.1	47
24	Excitonâ€Adjustable Interlayers for High Efficiency, Low Efficiency Rollâ€Off, and Lifetime Improved Warm White Organic Lightâ€Emitting Diodes (WOLEDs) Based on a Delayed Fluorescence Assistant Host. Advanced Functional Materials, 2018, 28, 1706922.	7.8	45
25	An Effective Strategy toward Highâ€Efficiency Fluorescent OLEDs by Radiative Coupling of Spatially Separated Electronâ€“Hole Pairs. Advanced Materials Interfaces, 2018, 5, 1800025.	1.9	44
26	Achieving Enhanced Thermally Activated Delayed Fluorescence Rates and Shortened Exciton Lifetimes by Constructing Intramolecular Hydrogen Bonding Channels. ACS Applied Materials & Interfaces, 2019, 11, 45999-46007.	4.0	43
27	Predicting Operational Stability for Organic Lightâ€Emitting Diodes with Exciplex Cohosts. Advanced Science, 2019, 6, 1802246.	5.6	42
28	Reversible switching between normal and thermally activated delayed fluorescence towards â€œsmartâ€• and single compound white-light luminescence via controllable conformational distribution. Science China Chemistry, 2018, 61, 677-686.	4.2	37
29	Incorporation of rubidium cations into blue perovskite quantum dot light-emitting diodes via FABr-modified multi-cation hot-injection method. Nanoscale, 2019, 11, 1295-1303.	2.8	36
30	Achieving high-efficiency purely organic room-temperature phosphorescence materials by boronic ester substitution of phenoxathiine. Chemical Communications, 2019, 55, 7215-7218.	2.2	35
31	9,9-Diphenyl-thioxanthene derivatives as host materials for highly efficient blue phosphorescent organic light-emitting diodes. Journal of Materials Chemistry C, 2015, 3, 9999-10006.	2.7	34
32	One-step synthesis of cyclic compounds towards easy room-temperature phosphorescence and deep blue thermally activated delayed fluorescence. Chemical Communications, 2018, 54, 7850-7853.	2.2	32
33	Structure-simplified and highly efficient deep blue organic light-emitting diodes with reduced efficiency roll-off at extremely high luminance. Chemical Communications, 2016, 52, 14454-14457.	2.2	29
34	Thiophene Disubstituted Benzothiadiazole Derivatives: An Effective Planarization Strategy Toward Deep-Red to Near-Infrared (NIR) Organic Light-Emitting Diodes. Frontiers in Chemistry, 2019, 7, 276.	1.8	29
35	Triâ€Spiral Donor for High Efficiency and Versatile Blue Thermally Activated Delayed Fluorescence Materials. Angewandte Chemie, 2019, 131, 11423-11427.	1.6	28
36	Boosting purely organic room-temperature phosphorescence performance through a hostâ€“guest strategy. Chemical Science, 2021, 12, 13580-13587.	3.7	27

#	Article	IF	Citations
37	Highly efficient blue and warm white organic light-emitting diodes with a simplified structure. Nanotechnology, 2016, 27, 124001.	1.3	26
38	Nonaromatic Amine Containing Exciplex for Thermally Activated Delayed Fluorescent Electroluminescence. Advanced Optical Materials, 2019, 7, 1801554.	3.6	26
39	Star-shaped isoindigo-based small molecules as potential non-fullerene acceptors in bulk heterojunction solar cells. New Journal of Chemistry, 2015, 39, 8771-8779.	1.4	25
40	Purely Organic Crystals Exhibit Bright Thermally Activated Delayed Fluorescence. Angewandte Chemie, 2019, 131, 13656-13665.	1.6	24
41	Pyridine-Based Bipolar Hosts for Solution-Processed Bluish-Green Thermally Activated Delayed Fluorescence Devices: A Subtle Regulation of Chemical Stability and Carrier Transportation. ACS Applied Materials & Interfaces, 2020, 12, 49905-49914.	4.0	24
42	Introduction of Twisted Backbone: A New Strategy to Achieve Efficient Blue Fluorescence Emitter with Delayed Emission. Advanced Optical Materials, 2017, 5, 1700334.	3.6	23
43	Sky-blue thermally activated delayed fluorescence material employing a diphenylethyne acceptor for organic light-emitting diodes. Journal of Materials Chemistry C, 2018, 6, 36-42.	2.7	23
44	Adamantaneâ€Substituted Acridine Donor for Blue Dual Fluorescence and Efficient Organic Lightâ€Emitting Diodes. Angewandte Chemie, 2019, 131, 592-596.	1.6	22
45	Dâ€“Aâ€“D-type orange-light emitting thermally activated delayed ï¬‚uorescence (TADF) materials based on a fluorenone unit: simulation, photoluminescence and electroluminescence studies. Beilstein Journal of Organic Chemistry, 2018, 14, 672-681.	1.3	22
46	Dynamic adjustment of emission from both singlets and triplets: the role of excited state conformation relaxation and charge transfer in phenothiazine derivates. Journal of Materials Chemistry C, 2021, 9, 1378-1386.	2.7	22
47	Highly efficient thermally activated delayed fluorescence yellow organic light-emitting diodes with a low efficiency roll-off. Journal of Materials Chemistry C, 2019, 7, 8063-8069.	2.7	21
48	Synthesis and photovoltaic properties of Aâ€“Dâ€“A type non-fullerene acceptors containing isoindigo terminal units. RSC Advances, 2015, 5, 107566-107574.	1.7	19
49	Engineering the excited-state properties of purely organic intramolecular and intermolecular charge transfer emitters towards high-performance fluorescent OLEDs. Journal of Materials Chemistry C, 2017, 5, 10991-11000.	2.7	14
50	A â€œFlexibleâ€•Purely Organic Molecule Exhibiting Strong Spinâ€“Orbital Coupling: Toward Nondoped Room-Temperature Phosphorescence OLEDs. Journal of Physical Chemistry Letters, 2022, 13, 4971-4980.	2.1	14
51	Spiro[fluorene-9,9â€˜-thioxanthene] core based host materials for thermally activated delayed fluorescence devices. Dyes and Pigments, 2019, 163, 249-256.	2.0	10
52	Molecular Engineering of Sulfurâ€Bridged Polycyclic Emitters Towards Tunable TADF and RTP Electroluminescence. Angewandte Chemie, 2022, 134, .	1.6	6
53	Enhanced performances of planar heterojunction organic light-emitting diodes via diluting an n-type transporter into a carbazole-based matrix. Journal of Materials Chemistry C, 2018, 6, 29-35.	2.7	5
54	3.2: Singletâ€Triplet Splitting Energy Management via Acceptor Substitution: Complanation Molecular Design for Deepâ€Blue Thermally Activated Delayed Fluorescent Organic Lightâ€Emitting Diodes. Digest of Technical Papers SID International Symposium, 2018, 49, 16-21.	0.1	1

#	Article	IF	Citations
55	Highly efficient and stable blue thermally activated delayed fluorescent organic light-emitting diodes. , 2022, , 117-191.		1
56	19.1: Excitonâ€Adjustable Interlayers for Efficient and Lifetime Improved Warm White Organic Lightâ€Emitting Diodes Based on a Delayed Fluorescence Assistant Host. Digest of Technical Papers SID International Symposium, 2018, 49, 197-201.	0.1	0