Dongcheng Chen

List of Publications by Citations

64 papers	3,071 citations	31 h-index	55 g-index
65 ext. papers	3,523 ext. citations	9.8 avg, IF	5.24 L-index

#	Paper	IF	Citations
64	Evaporation- and Solution-Process-Feasible Highly Efficient Thianthrene-9,9$10,10STetraoxide-Based Thermally Activated Delayed Fluorescence Emitters with Reduced Efficiency Roll-Off. *Advanced Materials*, **2016**, 28, 181-7	24	253
63	"Rate-limited effect" 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	9.4	178
62	High-Performance Color-Tunable Perovskite Light Emitting Devices through Structural Modulation from Bulk to Layered Film. *Advanced Materials*, **2017**, 29, 1603157	24	172
61	Nitrogen heterocycle-containing materials for highly efficient phosphorescent OLEDs with low operating voltage. *Journal of Materials Chemistry C*, **2014**, 2, 9565-9578	7.1	129
60	Tri-Spiral Donor for High Efficiency and Versatile Blue Thermally Activated Delayed Fluorescence Materials. *Angewandte Chemie - International Edition*, **2019**, 58, 11301-11305	16.4	128
59	Horizontally Orientated Sticklike Emitters: Enhancement of Intrinsic Out-Coupling Factor and Electroluminescence Performance. *Chemistry of Materials*, **2017**, 29, 8630-8636	9.6	119
58	A series of new medium-bandgap conjugated polymers based on naphtho[1,2-c:5,6-c]bis(2-octyl-[1,2,3]triazole) for high-performance polymer solar cells. *Advanced Materials*, **2013**, 25, 3683-8	24	118
57	Pyridine-Containing Electron-Transport Materials for Highly Efficient Blue Phosphorescent OLEDs with Ultralow Operating Voltage and Reduced Efficiency Roll-Off. *Advanced Functional Materials*, **2014**, 24, 3268-3275	15.6	106
56	Fluorescent Organic Planar pn Heterojunction Light-Emitting Diodes with Simplified Structure, Extremely Low Driving Voltage, and High Efficiency. *Advanced Materials*, **2016**, 28, 239-44	24	104
55	High-Efficiency WOLEDs with High Color-Rendering Index based on a Chromaticity-Adjustable Yellow Thermally Activated Delayed Fluorescence Emitter. *Advanced Materials*, **2016**, 28, 4614-9	24	103
54	A highly soluble, crystalline covalent organic framework compatible with device implementation. *Chemical Science*, **2019**, 10, 1023-1028	9.4	102
53	Blue thermally activated delayed fluorescence materials based on bis(phenylsulfonyl)benzene derivatives. *Chemical Communications*, **2015**, 51, 16353-6	5.8	97
52	Highly Efficient Spiro[fluorene-9,9?-thioxanthene] Core Derived Blue Emitters and Fluorescent/Phosphorescent Hybrid White Organic Light-Emitting Diodes. *Chemistry of Materials*, **2015**, 27, 1100-1109	9.6	94
51	Study of Configuration Differentia and Highly Efficient, Deep-Blue, Organic Light-Emitting Diodes Based on Novel Naphtho[1,2-d]imidazole Derivatives. *Advanced Functional Materials*, **2015**, 25, 5190-5198	15.6	81
50	Adamantane-Substituted Acridine Donor for Blue Dual Fluorescence and Efficient Organic Light-Emitting Diodes. *Angewandte Chemie - International Edition*, **2019**, 58, 582-586	16.4	78
49	Structure-Performance Investigation of Thioxanthone Derivatives for Developing Color Tunable Highly Efficient Thermally Activated Delayed Fluorescence Emitters. *ACS Applied Materials & Interfaces*, **2016**, 8, 8627-36	9.5	70
48	Modulation of Exciton Generation in Organic Active Planar pn Heterojunction: Toward Low Driving Voltage and High-Efficiency OLEDs Employing Conventional and Thermally Activated Delayed Fluorescent Emitters. *Advanced Materials*, **2016**, 28, 6758-65	24	68

47	Recombination Dynamics Study on Nanostructured Perovskite Light-Emitting Devices. *Advanced Materials*, **2018**, 30, e1801370	24	60
46	Achieving Efficient Triplet Exciton Utilization with Large ΔE and Nonobvious Delayed Fluorescence by Adjusting Excited State Energy Levels. *Journal of Physical Chemistry Letters*, **2018**, 9, 4725-4731	6.4	52
45	Interlayer Interaction Enhancement in Ruddlesden–Popper Perovskite Solar Cells toward High Efficiency and Phase Stability. *ACS Energy Letters*, **2019**, 4, 1025-1033	20.1	50
44	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	7.1	47
43	Polarity-Tunable Host Materials and Their Applications in Thermally Activated Delayed Fluorescence Organic Light-Emitting Diodes. *ACS Applied Materials & Interfaces*, **2016**, 8, 27920-27930	9.5	47
42	Deep blue fluorophores incorporating sulfone-locked triphenylamine: the key for highly efficient fluorescence–phosphorescence hybrid white OLEDs with simplified structure. *Journal of Materials Chemistry C*, **2015**, 3, 6986-6996	7.1	44
41	Electrochemical biosensing platforms using poly-cyclodextrin and carbon nanotube composite. *Biosensors and Bioelectronics*, **2010**, 26, 295-8	11.8	42
40	Novel cathode interlayers based on neutral alcohol-soluble small molecules with a triphenylamine core featuring polar phosphonate side chains for high-performance polymer light-emitting and photovoltaic devices. *Macromolecular Rapid Communications*, **2013**, 34, 595-603	4.8	41
39	Efficient exciplex organic light-emitting diodes with a bipolar acceptor. *Organic Electronics*, **2015**, 25, 79-84	3.5	40
38	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	7.1	37
37	Pyridinium salt-based molecules as cathode interlayers for enhanced performance in polymer solar cells. *Journal of Materials Chemistry A*, **2013**, 1, 3387	13	35
36	Highly efficient and solution-processed iridium complex for single-layer yellow electrophosphorescent diodes. *Journal of Materials Chemistry*, **2012**, 22, 23005		35
35	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	7.1	32
34	Spiral Donor Design Strategy for Blue Thermally Activated Delayed Fluorescence Emitters. *ACS Applied Materials & Interfaces*, **2021**, 13, 5302-5311	9.5	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	5.8	28
32	J-Aggregation Enhances the Electroluminescence Performance of a Sky-Blue Thermally Activated Delayed-Fluorescence Emitter in Nondoped Organic Light-Emitting Diodes. *ACS Applied Materials & Interfaces*, **2020**, 12, 2717-2723	9.5	27
31	Predicting Operational Stability for Organic Light-Emitting Diodes with Exciplex Cohosts. *Advanced Science*, **2019**, 6, 1802246	13.6	27
30	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	7.7	26

29	Co-Interlayer Engineering toward Efficient Green Quasi-Two-Dimensional Perovskite Light-Emitting Diodes. *Advanced Functional Materials*, **2020**, 30, 1910167	15.6	26
28	An Effective Strategy toward High-Efficiency Fluorescent OLEDs by Radiative Coupling of Spatially Separated Electron□Hole Pairs. *Advanced Materials Interfaces*, **2018**, 5, 1800025	4.6	26
27	Highly efficient blue and warm white organic light-emitting diodes with a simplified structure. *Nanotechnology*, **2016**, 27, 124001	3.4	25
26	Combined optimization of emission layer morphology and hole-transport layer for enhanced performance of perovskite light-emitting diodes. *Journal of Materials Chemistry C*, **2017**, 5, 6169-6175	7.1	24
25	Non-noble-metal-based organic emitters for OLED applications. *Materials Science and Engineering Reports*, **2020**, 142, 100581	30.9	24
24	Three pyrido[2,3,4,5-lmn]phenanthridine derivatives and their large band gap copolymers for organic solar cells. *Journal of Materials Chemistry A*, **2014**, 2, 321-325	13	23
23	Rational utilization of intramolecular and intermolecular hydrogen bonds to achieve desirable electron transporting materials with high mobility and high triplet energy. *Journal of Materials Chemistry C*, **2016**, 4, 1482-1489	7.1	22
22	Highly Improved Efficiency of Deep-Blue Fluorescent Polymer Light-Emitting Device Based on a Novel Hole Interface Modifier with 1,3,5-Triazine Core. *ACS Applied Materials & Interfaces*, **2015**, 7, 26405-13	9.5	20
21	Nonaromatic Amine Containing Exciplex for Thermally Activated Delayed Fluorescent Electroluminescence. *Advanced Optical Materials*, **2019**, 7, 1801554	8.1	19
20	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	7.1	19
19	High-performance and stable CsPbBr light-emitting diodes based on polymer additive treatment.. *RSC Advances*, **2019**, 9, 27684-27691	3.7	17
18	Improving the efficiency and spectral stability of white-emitting polycarbazoles by introducing a dibenzothiophene-S,S-dioxide unit into the backbone. *Journal of Materials Chemistry C*, **2014**, 2, 7881	7.1	17
17	Synthesis and optoelectronic properties of amino-functionalized carbazole-based conjugated polymers. *Science China Chemistry*, **2013**, 56, 1119-1128	7.9	14
16	Phosphor-doping enhanced efficiency in bilayer organic solar cells due to longer exciton diffusion length. *Journal of Luminescence*, **2014**, 151, 193-196	3.8	13
15	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	7.1	11
14	A water-processable organic electron-selective layer for solution-processed inverted organic solar cells. *Applied Physics Letters*, **2014**, 104, 053304	3.4	11
13	Tuning color-correlated temperature and color rendering index of phosphorescent white polymer light-emitting diodes: Towards healthy solid-state lighting. *Organic Electronics*, **2016**, 34, 18-22	3.5	10
12	Dibenzothiophene- S,S -dioxide based medium-band-gap polymers for efficient bulk heterojunction solar cells. *Organic Electronics*, **2014**, 15, 2950-2958	3.5	8

11	Solution-processed cathode-interlayer-free deep blue organic light-emitting diodes. *Organic Electronics*, **2014**, 15, 1197-1204	3.5	8
10	TICT based fluorescent probe with excellent photostability for real-time and long-term imaging of lipid droplets. *Tetrahedron Letters*, **2019**, 60, 1880-1884	2	6
9	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	7.1	5
8	Conjugated polymers containing trifluoren-2-ylamine, trifluoren-2-ylbenzene and trifluoren-2-yltriazine for electroluminescence. *Polymer*, **2013**, 54, 162-173	3.9	4
7	Highly efficient non-doped single-layer blue organic light-emitting diodes based on light-emitting conjugated polymers containing trifluoren-2-ylamine and dibenzothiophene-S,S-dioxide. *Synthetic Metals*, **2015**, 205, 228-235	3.6	4
6	Alternative carrier injection/extraction inspired by electrode interlayers based on peripheral modification of the electron-rich skeleton. *ACS Applied Materials & Interfaces*, **2015**, 7, 3133-41	9.5	4
5	The dibenzothiophene-S,S-dioxide and spirobifluorene based small molecules promote Low roll-off and Blue organic light-emitting diodes. *Journal of Photochemistry and Photobiology A: Chemistry*, **2019**, 382, 111946	4.7	3
4	Synthesis, Properties, Calculations and Applications of Small Molecular Host Materials Containing Oxadiazole Units with Different Nitrogen and Oxygen Atom Orientations for Solution-Processable Blue Phosphorescent OLEDs. *Electronic Materials Letters*, **2018**, 14, 89-100	2.9	3
3	Influence of fullerene-based acceptor materials on the performance of indacenodithiophene-cored small molecule bulk heterojunction organic solar cells. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 5006-5013	2.1	1
2	Tri-Spiral Donor for High Efficiency and Versatile Blue Thermally Activated Delayed Fluorescence Materials. *Angewandte Chemie*, **2019**, 131, 11423	3.6	1
1	Adamantane-Substituted Acridine Donor for Blue Dual Fluorescence and Efficient Organic Light-Emitting Diodes. *Angewandte Chemie*, **2018**, 131, 592	3.6	1