

# Kai Wang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

69 papers	1,987 citations	23 h-index	43 g-index
76 ext. papers	2,597 ext. citations	9.1 avg, IF	5.02 L-index

#	Paper	IF	Citations
69	Blocking Energy-Loss Pathways for Efficient All-Fluorescent Solution-processed Organic Light-emitting Diodes by Introducing Polymer Additive. <i>Journal of Physics: Conference Series</i> , <b>2022</b> , 2174, 012030	0.3	
68	A facile strategy for enhancing reverse intersystem crossing of red thermally activated delayed fluorescence emitters. <i>Chemical Engineering Journal</i> , <b>2022</b> , 433, 134423	14.7	1
67	Using fullerene fragments as acceptors to construct thermally activated delayed fluorescence emitters for high-efficiency organic light-emitting diodes. <i>Chemical Engineering Journal</i> , <b>2022</b> , 435, 134731	14.7	2
66	Efficient and stable single-emitting-layer white organic light-emitting diodes by employing all thermally activated delayed fluorescence emitters. <i>Organic Electronics</i> , <b>2022</b> , 101, 106415	3.5	1
65	Recent progress in thermally activated delayed fluorescence emitters for nondoped organic light-emitting diodes.. <i>Chemical Science</i> , <b>2022</b> , 13, 3625-3651	9.4	15
64	Controlling the conjugation extension inside acceptors for enhancing reverse intersystem crossing of red thermally activated delayed fluorescence emitters. <i>Chemical Engineering Journal</i> , <b>2022</b> , 440, 135773	14.7	1
63	Optimizing Intermolecular Interactions and Energy Level Alignments of Red TADF Emitters for High-Performance Organic Light-Emitting Diodes.. <i>Small</i> , <b>2022</b> , e2201548	11	4
62	Thermally Activated Delayed Fluorescence Warm White Organic Light Emitting Devices with External Quantum Efficiencies Over 30%. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101647	15.6	17
61	High-Performance Nondoped Organic Light-Emitting Diode Based on a Thermally Activated Delayed Fluorescence Emitter with 1D Intermolecular Hydrogen Bonding Interactions. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2100461	8.1	8
60	Nonconjugated Triptycene-Spaced Donor-Acceptor-Type Emitters Showing Thermally Activated Delayed Fluorescence via Both Intra- and Intermolecular Charge-Transfer Transitions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 25193-25201	9.5	6
59	Pyridine-substituted triazine as an acceptor for thermally activated delayed fluorescence emitters showing high efficiency and low roll-off in organic light-emitting diodes. <i>Materials Today Energy</i> , <b>2021</b> , 20, 100581	7	3
58	Managing Locally Excited and Charge-Transfer Triplet States to Facilitate Up-Conversion in Red TADF Emitters That Are Available for Both Vacuum- and Solution-Processes. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 2478-2484	16.4	49
57	Managing Locally Excited and Charge-Transfer Triplet States to Facilitate Up-Conversion in Red TADF Emitters That Are Available for Both Vacuum- and Solution-Processes. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 2508-2514	3.6	12
56	Hydrogen-Bond-Assisted Exciplex Emitters Realizing Improved Efficiencies and Stabilities in Organic Light Emitting Diodes. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2010100	15.6	8
55	Approaching Efficient and Narrow RGB Electroluminescence from D-A-Type TADF Emitters Containing an Identical Multiple Resonance Backbone as the Acceptor. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 36089-36097	9.5	17
54	High-performance red and white organic light-emitting diodes based on a novel red thermally activated delayed fluorescence emitter in an exciplex matrix. <i>Materials Today Energy</i> , <b>2021</b> , 21, 100818	7	1
53	Characterizing the Conformational Distribution in an Amorphous Film of an Organic Emitter and Its Application in a "Self-Doping" Organic Light-Emitting Diode. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 25878-25883	16.4	11

52	Novel D-D?-A structure thermally activated delayed fluorescence emitters realizing over 20% external quantum efficiencies in both evaporation- and solution-processed organic light-emitting diodes. <i>Organic Electronics</i> , <b>2021</b> , 99, 106312	3.5	0
51	Triplet Acceptors with a D-A Structure and Twisted Conformation for Efficient Organic Solar Cells. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 15043-15049	16.4	45
50	Triplet Acceptors with a D-A Structure and Twisted Conformation for Efficient Organic Solar Cells. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 15153-15159	3.6	6
49	Chiral thermally activated delayed fluorescence emitters with dual conformations based on a pair of enantiomeric donors containing asymmetric carbons. <i>Dyes and Pigments</i> , <b>2020</b> , 178, 108336	4.6	7
48	Forcing dimethylacridine crooking to improve the efficiency of orange-red thermally activated delayed fluorescent emitters. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 10416-10421	7.1	2
47	Influence of energy gap between charge-transfer and locally excited states on organic long persistence luminescence. <i>Nature Communications</i> , <b>2020</b> , 11, 191	17.4	61
46	6,12-Dihydro-6,12-diboradibenzo[def,mno]chrysene: A Doubly Boron-Doped Polycyclic Aromatic Hydrocarbon for Organic Light Emitting Diodes by a One-Pot Synthesis. <i>Organic Letters</i> , <b>2020</b> , 22, 7942-7946	6.3	6
45	Charge-transfer transition regulation of thermally activated delayed fluorescence emitters by changing the valence of sulfur atoms. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 17457-17463	7.1	5
44	Hydrogen bond-modulated molecular packing and its applications in high-performance non-doped organic electroluminescence. <i>Materials Horizons</i> , <b>2020</b> , 7, 2734-2740	14.4	21
43	Origin of thermally activated delayed fluorescence in a donor-acceptor type emitter with an optimized nearly planar geometry. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 13263-13269	7.1	6
42	Using fluorene to lock electronically active moieties in thermally activated delayed fluorescence emitters for high-performance non-doped organic light-emitting diodes with suppressed roll-off. <i>Chemical Science</i> , <b>2020</b> , 12, 1495-1502	9.4	20
41	Titelbild: Red/Near-Infrared Thermally Activated Delayed Fluorescence OLEDs with Near 100 % Internal Quantum Efficiency (Angew. Chem. 41/2019). <i>Angewandte Chemie</i> , <b>2019</b> , 131, 14529-14529	3.6	
40	Development of Red Exciplex for Efficient OLEDs by Employing a Phosphor as a Component. <i>Frontiers in Chemistry</i> , <b>2019</b> , 7, 16	5	15
39	Isomeric thermally activated delayed fluorescence emitters based on indolo[2,3-b]acridine electron-donor: a compromising optimization for efficient orange/red organic light-emitting diodes. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 2898-2904	7.1	20
38	Thermally activated delayed fluorescence emitters with low concentration sensitivity for highly efficient organic light emitting devices. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 8923-8928	7.1	8
37	Tricomponent Exciplex Emitter Realizing over 20% External Quantum Efficiency in Organic Light-Emitting Diode with Multiple Reverse Intersystem Crossing Channels. <i>Advanced Science</i> , <b>2019</b> , 6, 1801938	13.6	27
36	Thermally Activated Delayed Fluorescence Carbonyl Derivatives for Organic Light-Emitting Diodes with Extremely Narrow Full Width at Half-Maximum. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 13472-13480	9.5	90
35	Dibenzofuran/dibenzothiophene as the secondary electron-donors for highly efficient blue thermally activated delayed fluorescence emitters. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 4475-4483	7.1	11

34	Red/Near-Infrared Thermally Activated Delayed Fluorescence OLEDs with Near 100 % Internal Quantum Efficiency. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 14802-14807	3.6	23
33	Red/Near-Infrared Thermally Activated Delayed Fluorescence OLEDs with Near 100 % Internal Quantum Efficiency. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 14660-14665	16.4	149
32	Efficient Orange-Red Thermally Activated Delayed Fluorescence Emitters Feasible for Both Thermal Evaporation and Solution Process. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 29086-29093	9.5	30
31	Manipulating exciton dynamics of thermally activated delayed fluorescence materials for tuning two-photon nanotheranostics. <i>Chemical Science</i> , <b>2019</b> , 11, 888-895	9.4	39
30	Improving performance of thermally activated delayed fluorescence emitter by extending its LUMO distribution. <i>Science China Materials</i> , <b>2019</b> , 62, 719-728	7.1	2
29	Efficient solution-processed red organic light-emitting diode based on an electron-donating building block of pyrrolo[3,2-b]pyrrole. <i>Organic Electronics</i> , <b>2019</b> , 65, 110-115	3.5	17
28	Highly Efficient Thermally Activated Delayed Fluorescence Emitter Developed by Replacing Carbazole With 1,3,6,8-Tetramethyl-Carbazole. <i>Frontiers in Chemistry</i> , <b>2019</b> , 7, 17	5	7
27	Highly efficient thermally activated delayed fluorescence emitters based on novel Indolo[2,3-b]acridine electron-donor. <i>Organic Electronics</i> , <b>2018</b> , 57, 327-334	3.5	12
26	Efficient solution-processed orange-red organic light-emitting diodes based on a novel thermally activated delayed fluorescence emitter. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 9152-9157	7.1	21
25	Red Organic Light-Emitting Diode with External Quantum Efficiency beyond 20% Based on a Novel Thermally Activated Delayed Fluorescence Emitter. <i>Advanced Science</i> , <b>2018</b> , 5, 1800436	13.6	126
24	Novel star-shaped yellow thermally activated delayed fluorescence emitter realizing over 10% external quantum efficiency at high luminance of 30000 cd m <sup>-2</sup> in OLED. <i>Organic Electronics</i> , <b>2018</b> , 62, 220-226	3.5	4
23	Control of Dual Conformations: Developing Thermally Activated Delayed Fluorescence Emitters for Highly Efficient Single-Emitter White Organic Light-Emitting Diodes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 31515-31525	9.5	60
22	Intermolecular Charge-Transfer Transition Emitter Showing Thermally Activated Delayed Fluorescence for Efficient Non-Doped OLEDs. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 9480-9484	16.4	98
21	Intermolecular Charge-Transfer Transition Emitter Showing Thermally Activated Delayed Fluorescence for Efficient Non-Doped OLEDs. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 9624-9628	3.6	16
20	Optimization on Molecular Restriction for Highly Efficient Thermally Activated Delayed Fluorescence Emitters. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1800935	8.1	19
19	Coumarin-Based Thermally Activated Delayed Fluorescence Emitters with High External Quantum Efficiency and Low Efficiency Roll-off in the Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 8848-8854	9.5	53
18	A comparative study of carbazole-based thermally activated delayed fluorescence emitters with different steric hindrance. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 4797-4803	7.1	31
17	Fine-tuning the emissions of highly efficient thermally activated delayed fluorescence emitters with different linking positions of electron-deficient substituent groups. <i>Dyes and Pigments</i> , <b>2017</b> , 143, 62-70	4.6	6

16	Dual fluorescence polymorphs: Wide-range emission from blue to red regulated by TICT and their dynamic electron state behavior under external pressure. <i>Dyes and Pigments</i> , <b>2017</b> , 145, 294-300	4.6	15
15	Novel bipolar host for highly efficient green, yellow, orange, red and deep-red phosphorescent organic light-emitting devices. <i>Science China Chemistry</i> , <b>2017</b> , 60, 504-509	7.9	6
14	Efficient, color-stable and high color-rendering-index white organic light-emitting diodes employing full thermally activated delayed fluorescence system. <i>Organic Electronics</i> , <b>2017</b> , 50, 466-472	3.5	25
13	Avoiding Energy Loss on TADF Emitters: Controlling the Dual Conformations of D-A Structure Molecules Based on the Pseudoplanar Segments. <i>Advanced Materials</i> , <b>2017</b> , 29, 1701476	24	142
12	High Performance All Fluorescence White Organic Light Emitting Devices with a Highly Simplified Structure Based on Thermally Activated Delayed Fluorescence Dopants and Host. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 32984-32991	9.5	48
11	Isomeric Thermally Activated Delayed Fluorescence Emitters for Color Purity-Improved Emission in Organic Light-Emitting Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 16791-8	9.5	51
10	OLEDs: Novel Strategy to Develop Exciplex Emitters for High-Performance OLEDs by Employing Thermally Activated Delayed Fluorescence Materials (Adv. Funct. Mater. 12/2016). <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 2036-2036	15.6	2
9	Novel Strategy to Develop Exciplex Emitters for High-Performance OLEDs by Employing Thermally Activated Delayed Fluorescence Materials. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 2002-2008	15.6	149
8	Theoretical investigation of the singlet-triplet splittings for carbazole-based thermally activated delayed fluorescence emitters. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 26623-26629	3.6	36
7	Bromine-substituted triphenylamine derivatives with improved hole-mobility for highly efficient green phosphorescent OLEDs with a low operating voltage. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 10301-10308	7.1	17
6	A novel nicotinonitrile derivative as an excellent multifunctional blue fluorophore for highly efficient hybrid white organic light-emitting devices. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 8817-8823	7.1	18
5	Novel Carbazol-Pyridine-Carbonitrile Derivative as Excellent Blue Thermally Activated Delayed Fluorescence Emitter for Highly Efficient Organic Light-Emitting Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 18930-6	9.5	97
4	Constructing a novel single-layer white organic light-emitting device through a new sky-blue fluorescent bipolar host. <i>Organic Electronics</i> , <b>2014</b> , 15, 3514-3520	3.5	5
3	A bipolar transporter as an efficient green fluorescent emitter and host for red phosphors in multi- and single-layer organic light-emitting diodes. <i>Chemistry - A European Journal</i> , <b>2014</b> , 20, 13762-9	4.8	23
2	High-Performance Red, Green, and Blue Electroluminescent Devices Based on Blue Emitters with Small Singlet-Triplet Splitting and Ambipolar Transport Property. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 2672-2680	15.6	127
1	Managing Intersegmental Charge-Transfer and Multiple Resonance Alignments of D3-A Typed TADF Emitters for Red OLEDs with Improved Efficiency and Color Purity. <i>Advanced Optical Materials</i> , <b>2017</b> , 7, 1701789	8.1	4