

# Xiaosong Cao

## List of Publications by Year in descending order

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51  
papers

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citations

236925

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Quenching-Resistant Multiresonance TADF Emitter Realizes 40% External Quantum Efficiency in Narrowband Electroluminescence at High Doping Level. <i>Advanced Materials</i> , 2022, 34, e2106954.	21.0	235
2	Peripheral Decoration of Multi-Resonance Molecules as a Versatile Approach for Simultaneous Long-Wavelength and Narrowband Emission. <i>Advanced Functional Materials</i> , 2021, 31, 2102017.	14.9	157
3	Chain-Growth Click Polymerization of AB <sub>2</sub> Monomers for the Formation of Hyperbranched Polymers with Low Polydispersities in a One-Pot Process. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7631-7635.	13.8	138
4	High-Performance Narrowband Pure-Red OLEDs with External Quantum Efficiencies up to 36.1% and Ultralow Efficiency Roll-Off. <i>Advanced Materials</i> , 2022, 34, e2201442.	21.0	131
5	Heavy-atom effect promotes multi-resonance thermally activated delayed fluorescence. <i>Chemical Engineering Journal</i> , 2021, 426, 131169.	12.7	122
6	Extending the $\pi$ -Skeleton of Multi-Resonance TADF Materials towards High-Efficiency Narrowband Deep-Blue Emission. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	110
7	The use of azide-alkyne click chemistry in recent syntheses and applications of polytriazole-based nanostructured polymers. <i>Nanoscale</i> , 2016, 8, 4864-4881.	5.6	88
8	Simple Acridan-Based Multi-Resonance Structures Enable Highly Efficient Narrowband Green TADF Electroluminescence. <i>Advanced Optical Materials</i> , 2021, 9, 2100825.	7.3	79
9	Integrating molecular rigidity and chirality into thermally activated delayed fluorescence emitters for highly efficient sky-blue and orange circularly polarized electroluminescence. <i>Materials Horizons</i> , 2021, 8, 547-555.	12.2	76
10	Semitransparent Circularly Polarized Phosphorescent Organic Light-Emitting Diodes with External Quantum Efficiency over 30% and Dissymmetry Factor Close to $10^2$ . <i>Advanced Functional Materials</i> , 2021, 31, 2102898.	14.9	60
11	Chiral Multi-Resonance TADF Emitters Exhibiting Narrowband Circularly Polarized Electroluminescence with an EQE of 37.2%. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	58
12	AIE-active multicolor tunable luminogens: simultaneous mechanochromism and acidochromism with high contrast beyond 100 nm. <i>Materials Chemistry Frontiers</i> , 2020, 4, 2047-2053.	5.9	55
13	Sulfone-Incorporated Multi-Resonance TADF Emitter for High-Performance Narrowband Blue OLEDs with EQE of 32%. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	53
14	Regulating the photophysical properties of highly twisted TADF emitters by concurrent through-space/-bond charge transfer. <i>Chemical Engineering Journal</i> , 2020, 402, 126173.	12.7	49
15	Produce Molecular Brushes with Ultrahigh Grafting Density Using Accelerated CuAAC Grafting-Onto Strategy. <i>Macromolecules</i> , 2017, 50, 215-222.	4.8	46
16	High-Efficiency Red Electroluminescence Based on a Carbene-Cu(I)-Acridine Complex. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 13478-13486.	8.0	46
17	Highly Branched Polymers with Layered Structures that Mimic Light-Harvesting Processes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 516-520.	13.8	43
18	Simple Molecular Design Strategy for Multiresonance Induced TADF Emitter: Highly Efficient Deep Blue to Blue Electroluminescence with High Color Purity. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	42

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19	Investigate the Glass Transition Temperature of Hyperbranched Copolymers with Segmented Monomer Sequence. <i>Macromolecules</i> , 2016, 49, 4416-4422.	4.8	35
20	Narrowing the Electroluminescence Spectra of Multiresonance Emitters for High-Performance Blue OLEDs by a Peripheral Decoration Strategy. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 59035-59042.	8.0	34
21	Synthesis of acid-degradable hyperbranched polymers by chain-growth CuAAC polymerization of an AB <sub>3</sub> monomer. <i>Polymer Chemistry</i> , 2016, 7, 5512-5517.	3.9	33
22	Molecular Engineering Enables TADF Emitters Well Suitable for Non-Doped OLEDs with External Quantum Efficiency of Nearly 30%. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	32
23	Isomerization enhanced quantum yield of dibenzo[ <i>a,c</i> ]phenazine-based thermally activated delayed fluorescence emitters for highly efficient orange OLEDs. <i>Journal of Materials Chemistry C</i> , 2020, 8, 9639-9645.	5.5	31
24	Highly efficient red thermally activated delayed fluorescence emitters by manipulating the molecular horizontal orientation. <i>Materials Chemistry Frontiers</i> , 2021, 5, 3209-3215.	5.9	28
25	Extending the $\pi$ -Skeleton of Multi-Resonance TADF Materials towards High-Efficiency Narrowband Deep-Blue Emission. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	25
26	Friedel-Crafts A <sub>2</sub> + B <sub>4</sub> Polycondensation toward Regioselective Linear Polymer with Rigid Triphenylmethane Backbone and Its Property as Gas Separation Membrane. <i>Macromolecules</i> , 2018, 51, 6580-6586.	4.8	24
27	Synthesis and direct assembly of linear dendritic copolymers via CuAAC click polymerization-induced self-assembly (CPISA). <i>Polymer Chemistry</i> , 2020, 11, 936-943.	3.9	21
28	High-efficiency and low roll-off deep-blue OLEDs enabled by thermally activated delayed fluorescence emitter with preferred horizontal dipole orientation. <i>Chemical Engineering Journal</i> , 2022, 433, 133598.	12.7	21
29	Tandem Functionalization in a Highly Branched Polymer with Layered Structure. <i>Chemistry - A European Journal</i> , 2018, 24, 5974-5981.	3.3	19
30	Fused tetracyclic tris[1,2,4]triazolo[1,3,5]triazine as a novel rigid electron acceptor for efficient thermally activated delayed fluorescence emitters. <i>RSC Advances</i> , 2020, 10, 15523-15529.	3.6	19
31	Multi-resonance organoboron-based fluorescent probe for ultra-sensitive, selective and reversible detection of fluoride ions. <i>Journal of Materials Chemistry C</i> , 2021, 9, 1567-1571.	5.5	19
32	Highly Branched Polymers with Layered Structures that Mimic Light-Harvesting Processes. <i>Angewandte Chemie</i> , 2018, 130, 525-529.	2.0	17
33	Host-Dopant Interaction between Organic Thermally Activated Delayed Fluorescence Emitter and Host Material: Insight into the Excited State. <i>Advanced Optical Materials</i> , 2022, 10, 2101343.	7.3	16
34	Chiral Multi-Resonance TADF Emitters Exhibiting Narrowband Circularly Polarized Electroluminescence with an EQE of 37.2%. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	16
35	Triplet-triplet annihilation upconversion with reversible emission-tunability induced by chemical-stimuli: a remote modulator for photocontrol isomerization. <i>Materials Horizons</i> , 2021, 8, 606-611.	12.2	15
36	On-off switchable thermally activated delayed fluorescence controlled by multiple channels: Understanding the mechanism behind distinctive polymorph-dependent optical properties. <i>Chemical Engineering Journal</i> , 2021, 415, 128909.	12.7	15

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37	Efficient Triplet-Triplet Annihilation Upconversion in Solution and Hydrogel Enabled by an S-T Absorption Os(II) Complex Dyad with an Elongated Triplet Lifetime. <i>Inorganic Chemistry</i> , 2021, 60, 19001-19008.	4.0	15
38	Preparation of water-soluble hyperbranched polymers with tunable thermosensitivity using chain-growth CuAAC copolymerization. <i>Polymer Chemistry</i> , 2016, 7, 7500-7505.	3.9	14
39	Star-shaped thermally activated delayed fluorescence emitters with a tri-armed arylsulfonic acceptor for efficient solution processed organic light emitting diodes. <i>Journal of Materials Chemistry C</i> , 2020, 8, 5580-5586.	5.5	13
40	Ligand effect in the synthesis of hyperbranched polymers via copper-catalyzed azide-alkyne cycloaddition polymerization (CuACP). <i>Journal of Polymer Science Part A</i> , 2018, 56, 2238-2244.	2.3	11
41	Recyclable Palladium-Loaded Hyperbranched Polytriazoles as Efficient Polymer Catalysts for Heck Reaction. <i>ACS Applied Polymer Materials</i> , 2020, 2, 677-684.	4.4	11
42	A Novel Chain-Growth CuAAC Polymerization: One-pot Synthesis of Dendritic Hyperbranched Polymers with Well-Defined Structures. <i>Synlett</i> , 2017, 28, 391-396.	1.8	10
43	Chiral thermally activated delayed fluorescence emitters for circularly polarized luminescence and efficient deep blue OLEDs. <i>Dyes and Pigments</i> , 2022, 197, 109860.	3.7	10
44	Superacid-catalyzed Friedel-Crafts polyhydroxyalkylation: a straightforward method to construct sky-blue thermally activated delayed fluorescence polymers. <i>Polymer Chemistry</i> , 2020, 11, 3481-3487.	3.9	9
45	Synthesis of multisegmented block copolymer by Friedel-Crafts hydroxyalkylation polymerization. <i>Polymer Chemistry</i> , 2020, 11, 2542-2549.	3.9	9
46	Color-tunable tetracoordinated organoboron complexes exhibiting aggregation-induced emission for the efficient turn-on detection of fluoride ions. <i>Materials Chemistry Frontiers</i> , 2021, 5, 2353-2360.	5.9	9
47	Tunable Fluorescence from a Responsive Hyperbranched Polymer with Spatially Arranged Fluorophore Arrays. <i>Chemistry - an Asian Journal</i> , 2018, 13, 3723-3728.	3.3	7
48	Chain-growth polymerization of azide-alkyne difunctional monomer: Synthesis of star polymer with linear polytriazole arms from a core. <i>Journal of Polymer Science</i> , 2020, 58, 84-90.	3.8	6
49	Synthesize Hyperbranched Polymers Carrying Two Reactive Handles via CuAAC Reaction and Thiol-Ene Chemistry. <i>Macromolecular Chemistry and Physics</i> , 2019, 220, 1900221.	2.2	4
50	Phenoxazine-Dibenzothiophene Sulfoximine Emitters Featuring Both Thermally Activated Delayed Fluorescence and Aggregation Induced Emission. <i>Molecules</i> , 2021, 26, 5243.	3.8	4
51	Innenteilbild: Chain-Growth Click Polymerization of AB <sub>2</sub> Monomers for the Formation of Hyperbranched Polymers with Low Polydispersities in a One-Pot Process ( <i>Angew. Chem.</i> 26/2015). <i>Angewandte Chemie</i> , 2015, 127, 7562-7562.	2.0	1