Dahui Zhao

List of Publications by Year
in descending order

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97 papers	5,846 citations	81900 39 h-index	74163 75 g-index
99 all docs	99 docs citations	99 times ranked	6884 citing authors

#	Article	IF	Citations
1	Nucleationâ€“elongation: a mechanism for cooperative supramolecular polymerization. Organic and Biomolecular Chemistry, 2003, 1, 3471-3491.	2.8	421
2	Shape-persistent arylene ethynylene macrocycles: syntheses and supramolecular chemistry. Chemical Communications, 2003, , 807-818.	4.1	327
3	High Performance Allâ€Polymer Solar Cell via Polymer Sideâ€Chain Engineering. Advanced Materials, 2014, 26, 3767-3772.	21.0	320
4	Improved Performance of Allâ€Polymer Solar Cells Enabled by Naphthodiperylenetetraimideâ€Based Polymer Acceptor. Advanced Materials, 2017, 29, 1700309.	21.0	306
5	Sensory Responses in Solution vs Solid State:Â A Fluorescence Quenching Study of Poly(iptycenebutadiynylene)s. Macromolecules, 2005, 38, 9377-9384.	4.8	297
6	Towards rational design of organic electron acceptors for photovoltaics: a study based on perylenediimide derivatives. Chemical Science, 2013, 4, 4389.	7.4	242
7	A Vinyleneâ€Bridged Perylenediimideâ€Based Polymeric Acceptor Enabling Efficient Allâ€Polymer Solar Cells Processed under Ambient Conditions. Advanced Materials, 2016, 28, 8483-8489.	21.0	222
8	Flow-enhanced solution printing of all-polymer solar cells. Nature Communications, 2015, 6, 7955.	12.8	221
9	Rollâ€toâ€Roll Printed Largeâ€Area Allâ€Polymer Solar Cells with 5% Efficiency Based on a Low Crystallinity Conjugated Polymer Blend. Advanced Energy Materials, 2017, 7, 1602742.	19.5	214
10	Regioâ€Regular Polymer Acceptors Enabled by Determined Fluorination on End Groups for Allâ€Polymer Solar Cells with 15.2â€‰% Efficiency. Angewandte Chemie - International Edition, 2021, 60, 10137-10146.	13.8	145
11	A Vinyleneâ€Linkerâ€Based Polymer Acceptor Featuring a Coplanar and Rigid Molecular Conformation Enables Highâ€Performance Allâ€Polymer Solar Cells with Over 17% Efficiency. Advanced Materials, 2022, 34, e2200361.	21.0	131
12	Lattice-Directed Formation of Covalent and Organometallic Molecular Wires by Terminal Alkynes on Ag Surfaces. ACS Nano, 2015, 9, 6305-6314.	14.6	114
13	Concurrent Cooperative J-Aggregates and Anticooperative H-Aggregates. Journal of the American Chemical Society, 2018, 140, 5764-5773.	13.7	113
14	NIR J-Aggregates of Hydroazaheptacene Tetraimides. Journal of the American Chemical Society, 2014, 136, 28-31.	13.7	109
15	Synthesis and Self-Association of an Imine-Containingm-Phenylene Ethynylene Macrocycle. Journal of Organic Chemistry, 2002, 67, 3548-3554.	3.2	108
16	Developing efficient heavy-atom-free photosensitizers applicable to TTA upconversion in polymer films. Chemical Science, 2016, 7, 1233-1237.	7.4	106
17	A Difluoroâ€Monobromo End Group Enables Highâ€Performance Polymer Acceptor and Efficient Allâ€Polymer Solar Cells Processable with Green Solvent under Ambient Condition. Advanced Functional Materials, 2021, 31, 2100791.	14.9	89
18	Reversible Polymerization Driven by Folding. Journal of the American Chemical Society, 2002, 124, 9996-9997.	13.7	88

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19	Direct Observation of Aggregationâ€Induced Emission Mechanism. Angewandte Chemie - International Edition, 2020, 59, 14903-14909.	13.8	85
20	New polymer acceptors for organic solar cells: the effect of regio-regularity and device configuration. Journal of Materials Chemistry A, 2013, 1, 6609.	10.3	82
21	All-Polymer Solar Cells Employing Non-Halogenated Solvent and Additive. Chemistry of Materials, 2016, 28, 5037-5042.	6.7	69
22	Roomâ€Temperatureâ€Operated Ultrasensitive Broadband Photodetectors by Perovskite Incorporated with Conjugated Polymer and Singleâ€Wall Carbon Nanotubes. Advanced Functional Materials, 2018, 28, 1705541.	14.9	69
23	Conjugated Dimeric and Trimeric Perylenediimide Oligomers. Organic Letters, 2009, 11, 3426-3429.	4.6	68
24	SWIR Photodetection and Visualization Realized by Incorporating an Organic SWIR Sensitive Bulk Heterojunction. Advanced Science, 2020, 7, 2000444.	11.2	67
25	Nucleationâ€"Elongation Polymerization under Imbalanced Stoichiometry. Journal of the American Chemical Society, 2003, 125, 16294-16299.	13.7	66
26	Iridium-Based High-Sensitivity Oxygen Sensors and Photosensitizers with Ultralong Triplet Lifetimes. ACS Applied Materials & Interfaces, 2016, 8, 3591-3600.	8.0	63
27	Oligo(p-phenyleneethynylene)s with Hydrogen-Bonded Coplanar Conformation. Organic Letters, 2008, 10, 2669-2672.	4.6	62
28	Tripletâ€"Triplet Annihilation Photon Upconversion in Polymer Thin Film: Sensitizer Design. ACS Applied Materials & Interfaces, 2016, 8, 11441-11449.	8.0	59
29	Ternary organic solar cells based on two compatible PDI-based acceptors with an enhanced power conversion efficiency. Journal of Materials Chemistry A, 2019, 7, 3552-3557.	10.3	58
30	Large hydroazaacene diimides: synthesis, tautomerism, halochromism, and redox-switchable NIR optics. Chemical Science, 2012, 3, 3175.	7.4	56
31	Chemical designs of functional photoactive molecular assemblies. Chemical Society Reviews, 2014, 43, 4199-4221.	38.1	55
32	Folding-Driven Reversible Polymerization of Oligo(m-phenylene ethynylene) Imines:â€‰ Solvent and Starter Sequence Studies. Macromolecules, 2003, 36, 2712-2720.	4.8	53
33	Recent advances in arylene ethynylene folding systems: Toward functioning. Coordination Chemistry Reviews, 2010, 254, 954-971.	18.8	50
34	Sensitizer design for efficient tripletâ€"triplet annihilation upconversion: annihilator-appended tris-cyclometalated Ir(iii) complexes. Chemical Communications, 2014, 50, 7828.	4.1	50
35	A NIR dye with high-performance n-type semiconducting properties. Chemical Science, 2016, 7, 499-504.	7.4	48
36	New cyclometalated transition-metal based photosensitizers for singlet oxygen generation and photodynamic therapy. Science China Chemistry, 2016, 59, 40-52.	8.2	46

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37	New Bichromophoric Triplet Photosensitizer Designs and Their Application in Tripletâ€“Triplet Annihilation Upconversion. Advanced Optical Materials, 2018, 6, 1700981.	7.3	46
38	A photoswitch based on self-assembled single microwire of a phenyleneethynylene macrocycle. Chemical Communications, 2010, 46, 5725.	4.1	43
39	Conjugated Polymers Containing Large Soluble Diethynyl Iptycenes. Organic Letters, 2005, 7, 4357-4360.	4.6	40
40	Energy Transfer Dynamics in Tripletâ€“Triplet Annihilation Upconversion Using a Bichromophoric Heavy-Atom-Free Sensitizer. Journal of Physical Chemistry A, 2018, 122, 6673-6682.	2.5	40
41	A polycyclic aromatic hydrocarbon diradical with pH-responsive magnetic properties. Chemical Science, 2020, 11, 5565-5571.	7.4	39
42	Folding a Conjugated Chain: Oligo(o-phenyleneethynylene-alt-p-phenyleneethynylene). Organic Letters, 2008, 10, 4283-4286.	4.6	38
43	Water-Soluble Triscyclometalated Organoiridium Complex: Phosphorescent Nanoparticle Formation, Nonlinear Optics, and Application for Cell Imaging. ACS Applied Materials & Interfaces, 2014, 6, 3122-3131.	8.0	38
44	Bromine adatom promoted Câ€“H bond activation in terminal alkynes at room temperature on Ag(111). Physical Chemistry Chemical Physics, 2018, 20, 11081-11088.	2.8	35
45	Arylene Ethynylene Macrocycles with Intramolecular Ï€â^Ï€ Stacking. Organic Letters, 2010, 12, 4784-4787.	4.6	34
46	A size, shape and concentration controlled self-assembling structure with hostâ€“guest recognition at the liquidâ€“solid interface studied by STM. Nanoscale, 2016, 8, 11962-11968.	5.6	32
47	Electron-transporting PAHs with dual perylenediimides: syntheses and semiconductive characterizations. Chemical Communications, 2013, 49, 2882.	4.1	30
48	All-polymer solar cells with perylenediimide polymer acceptors. Chinese Journal of Polymer Science (English Edition), 2017, 35, 293-301.	3.8	30
49	Oligo(pâ€phenyleneâ€ethynylene)s with Backbone Conformation Controlled by Competitive Intramolecular Hydrogen Bonds. Chemistry - A European Journal, 2011, 17, 7087-7094.	3.3	29
50	Coronenediimides Synthesized via ICl-Induced Cyclization of Diethynyl Perylenediimides. Organic Letters, 2012, 14, 4654-4657.	4.6	29
51	A chlorinated polymer promoted analogue co-donors for efficient ternary all-polymer solar cells. Science China Chemistry, 2019, 62, 238-244.	8.2	29
52	Oligo- and Polyfluorene-Tetheredfac-Ir(ppy)3: Substitution Effects. Macromolecules, 2010, 43, 8479-8487.	4.8	28
53	Unusual Temperature-Dependent Photophysics of Oligofluorene-Substituted Tris-Cyclometalated Iridium Complexes. Macromolecules, 2012, 45, 133-141.	4.8	27
54	Cyclo-oligomerization of 6,12-Diethynyl Indeno[1,2-b]fluorenes via Diradical Intermediates. Organic Letters, 2015, 17, 5694-5697.	4.6	27

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55	Two- and three-photon absorption and excitation phosphorescence of oligofluorene-substituted Ir(ppy)₃. Chemical Communications, 2015, 51, 3446-3449.	4.1	26
56	Stepwise on-surface dissymmetric reaction to construct binodal organometallic network. Nature Communications, 2019, 10, 2545.	12.8	26
57	Aromatic Stacking Mediated Spinâ€“Spin Coupling in Cyclophane-Assembled Diradicals. Journal of the American Chemical Society, 2021, 143, 17690-17700.	13.7	26
58	Heterohexacene Diimides: Anti- and Syn- Isomers and Quinonoid Forms. Organic Letters, 2014, 16, 1852-1855.	4.6	24
59	Side-chain engineering of perylenediimide-vinylene polymer acceptors for high-performance all-polymer solar cells. Materials Chemistry Frontiers, 2017, 1, 1362-1368.	5.9	24
60	Supramolecular aggregates with distinct optical properties from PDI oligomers of similar structures. Physical Chemistry Chemical Physics, 2016, 18, 1905-1910.	2.8	23
61	A Foldamer at the Liquid/Graphite Interface: The Effect of Interfacial Interactions, Solvent, Concentration, and Temperature. Chemistry - A European Journal, 2011, 17, 7061-7068.	3.3	21
62	Cyano- and chloro-substituted coronene diimides as solution-processable electron-transporting semiconductors. Chemical Communications, 2015, 51, 7144-7147.	4.1	21
63	Syntheses of polycyclic aromatic diimides via intramolecular cyclization of maleic acid derivatives. New Journal of Chemistry, 2016, 40, 113-121.	2.8	20
64	Tweaking the Molecular Geometry of a Tetraperylenediimide Acceptor. ACS Applied Materials & Interfaces, 2019, 11, 6970-6977.	8.0	20
65	Effect of bulky substituents on the self-assembly and mixing behavior of arylene ethynylene macrocycles at the solid/liquid interface. Physical Chemistry Chemical Physics, 2013, 15, 11748.	2.8	19
66	Triangular Platinum(II) Metallacycles: Syntheses, Photophysics, and Nonlinear Optics. ACS Applied Materials & Interfaces, 2015, 7, 6162-6171.	8.0	19
67	Theoretical Studies on the Thermodynamic Product Size Distribution in Nucleationâ^'Elongation Polymerization under Imbalanced Stoichiometry. Macromolecules, 2008, 41, 4029-4036.	4.8	18
68	Toward MÃ¶bius and Tubular Cyclopolyarene Nanorings via Arylbutadiyne Macrocycles. Angewandte Chemie - International Edition, 2020, 59, 14854-14860.	13.8	17
69	Triangular arylene ethynylene macrocycles: syntheses, optical, and thermotropic liquid crystalline properties. Soft Matter, 2012, 8, 2405.	2.7	16
70	Probing the intermolecular interactions of aromatic amides containing N-heterocycles and triptycene. CrystEngComm, 2014, 16, 4265-4273.	2.6	15
71	Stabilizing surface Ag adatoms into tunable single atom arrays by terminal alkyne assembly. Chemical Communications, 2016, 52, 12944-12947.	4.1	15
72	Tetrahydrosalen Uranyl(VI) Complexes: Crystal Structures and Solution Binding Study. European Journal of Inorganic Chemistry, 2018, 2018, 1185-1191.	2.0	15

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73	Efficient molecular recognition based on nonspecific van der Waals interaction at the solid/liquid interface. Chemical Communications, 2014, 50, 11946-11949.	4.1	14
74	Two-Dimensional Self-Assembly of a Pair of Triangular Macrocycles Studied by STM. Journal of Physical Chemistry C, 2015, 119, 9227-9233.	3.1	14
75	Pyrene-1,5,6,10-tetracarboxyl diimide: a new building block for high-performance electron-transporting polymers. Journal of Materials Chemistry C, 2021, 9, 7599-7606.	5.5	14
76	Regioâ€Regular Polymer Acceptors Enabled by Determined Fluorination on End Groups for Allâ€Polymer Solar Cells with 15.2â€‰% Efficiency. Angewandte Chemie, 2021, 133, 10225-10234.	2.0	13
77	Thiophene-Fused Perylenediimide-Based Polymer Acceptors for High-Performance All-Polymer Solar Cells. Macromolecules, 2021, 54, 1499-1506.	4.8	13
78	Helical Folding of Conjugated Oligo(phenyleneethynylene): Chainâ€Length Dependence, Solvent Effects, and Intermolecular Assembly. Chemistry - an Asian Journal, 2012, 7, 2386-2393.	3.3	12
79	Intramolecular Interactions of Highly Ï€-Conjugated Perylenediimide Oligomers Probed by Single-Molecule Spectroscopy. Journal of Physical Chemistry Letters, 2014, 5, 3895-3901.	4.6	12
80	Toward an Air-Stable Triradical with Strong Spin Coupling: Synthesis of Substituted Truxene-5,10,15-triyl. Journal of Organic Chemistry, 2020, 85, 5761-5770.	3.2	11
81	Triangular-shaped molecular random tiling and molecular rotation in two-dimensional glassy networks. Nanoscale, 2014, 6, 7221-7225.	5.6	9
82	Two-dimensional (2D) self-assembly of oligo(phenylene-ethynylene) molecules and their triangular platinum(ii) diimine complexes studied using STM. Physical Chemistry Chemical Physics, 2017, 19, 31284-31289.	2.8	9
83	Improved Electron Transport with Reduced Contact Resistance in Nâ€Doped Polymer Fieldâ€Effect Transistors with a Dimeric Dopant. Macromolecular Rapid Communications, 2018, 39, e1700726.	3.9	9
84	Enhanced Triplet Sensitizing Ability of an Iridium Complex by Intramolecular Energy-Transfer Mechanism. Journal of Physical Chemistry A, 2018, 122, 6963-6969.	2.5	9
85	Direct Observation of Aggregationâ€Induced Emission Mechanism. Angewandte Chemie, 2020, 132, 15013-15019.	2.0	9
86	Conformational polymorphism of multimeric perylene derivatives observed by using scanning tunneling microscopy. CrystEngComm, 2011, 13, 5566.	2.6	7
87	Toward MÃ¶bius and Tubular Cyclopolyarene Nanorings via Arylbutadiyne Macrocycles. Angewandte Chemie, 2020, 132, 14964-14970.	2.0	7
88	Assemblies at the Liquidâ€Solid Interface: Chirality Expression from Molecular Conformers. ChemPhysChem, 2013, 14, 92-95.	2.1	5
89	Helical Folding Competing with Unfolded Aggregation in Phenylene Ethynylene Foldamers. Chemistry - A European Journal, 2016, 22, 11028-11034.	3.3	5
90	Selective Adsorption of Coronene atop the Polycyclic Aromatic Diimide Monolayer Investigated by STM and DFT. ACS Omega, 2017, 2, 5611-5617.	3.5	5

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91	Best Practices for New Polymers and Nanoparticulate Systems. Chemistry of Materials, 2018, 30, 6587-6588.	6.7	4
92	Synthesis, solvent-dependent emission and two-photon absorption of a triangular â€“[Dâ€“Ïâ€“A]‹sub›3‹/sub›â€“ macrocycle. Organic Chemistry Frontiers, 2017, 4, 737-742.	4.5	3
93	Syntheses of Anthraceneâ€Centered Large PAH Diimides and Conjugated Polymers**. Chemistry - A European Journal, 2022, 28, .	3.3	2
94	STM analysis of surface-adsorbed conjugated oligo(‹i›p‹/i›-phenylene-ethynylene) (OPE) nanostructures. Physical Chemistry Chemical Physics, 2016, 18, 31725-31731.	2.8	1
95	White Light Luminescence from a Homoâ€conjugated Molecule with Thermally Activated Delayed Fluorescence. Chemistry - an Asian Journal, 2021, 16, 1893-1896.	3.3	1
96	Shape-Persistent Arylene Ethynylene Macrocycles: Syntheses and Supramolecular Chemistry. ChemInform, 2003, 34, no.	0.0	0
97	Nucleationâ€”Elongation: A Mechanism for Cooperative Supramolecular Polymerization. ChemInform, 2004, 35, no.	0.0	0