Zesheng An

List of Publications by Year
in descending order

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94 papers	7,111 citations	57758 44 h-index	56724 83 g-index
99 all docs	99 docs citations	99 times ranked	6509 citing authors

#	Article	IF	Citations
1	A High-Mobility Electron-Transport Polymer with Broad Absorption and Its Use in Field-Effect Transistors and All-Polymer Solar Cells. Journal of the American Chemical Society, 2007, 129, 7246-7247.	13.7	1,110
2	Star Polymers. Chemical Reviews, 2016, 116, 6743-6836.	47.7	653
3	Facile RAFT Precipitation Polymerization for the Microwave-Assisted Synthesis of Well-Defined, Double Hydrophilic Block Copolymers and Nanostructured Hydrogels. Journal of the American Chemical Society, 2007, 129, 14493-14499.	13.7	318
4	High Electron Mobility in Room-Temperature Discotic Liquid-Crystalline Perylene Diimides. Advanced Materials, 2005, 17, 2580-2583.	21.0	300
5	Biocompatible, Antifouling, and Thermosensitive Coreâ^'Shell Nanogels Synthesized by RAFT Aqueous Dispersion Polymerization. Macromolecules, 2011, 44, 2524-2530.	4.8	203
6	Aqueous Polymerization-Induced Self-Assembly for the Synthesis of Ketone-Functionalized Nano-Objects with Low Polydispersity. ACS Macro Letters, 2015, 4, 495-499.	4.8	184
7	Aqueous Dispersion Polymerization of 2-Methoxyethyl Acrylate for the Synthesis of Biocompatible Nanoparticles Using a Hydrophilic RAFT Polymer and a Redox Initiator. Macromolecules, 2011, 44, 5237-5245.	4.8	181
8	New Insights into RAFT Dispersion Polymerizationâ€Induced Selfâ€Assembly: From Monomer Library, Morphological Control, and Stability to Driving Forces. Macromolecular Rapid Communications, 2019, 40, e1800325.	3.9	171
9	Copolymers of perylene diimide with dithienothiophene and dithienopyrrole as electron-transport materials for all-polymer solar cells and field-effect transistors. Journal of Materials Chemistry, 2009, 19, 5794.	6.7	165
10	Scalable preparation of alternating block copolymer particles with inverse bicontinuous mesophases. Nature Communications, 2019, 10, 1397.	12.8	141
11	Enzyme-Initiated Reversible Additionâ€"Fragmentation Chain Transfer Polymerization. Macromolecules, 2015, 48, 7792-7802.	4.8	133
12	Enzymatic Cascade Catalysis for the Synthesis of Multiblock and Ultrahighâ€Molecularâ€Weight Polymers with Oxygen Tolerance. Angewandte Chemie - International Edition, 2017, 56, 13852-13856.	13.8	121
13	Single Monomer for Multiple Tasks: Polymerization Induced Self-Assembly, Functionalization and Cross-Linking, and Nanoparticle Loading. ACS Macro Letters, 2014, 3, 1220-1224.	4.8	120
14	Advanced functional polymer materials. Materials Chemistry Frontiers, 2020, 4, 1803-1915.	5.9	117
15	Development of thermosensitive copolymers of poly(2-methoxyethyl acrylate-co-poly(ethylene glycol)) Tj ETQq1 1 0.784314 rgBT /Ov Polymer Chemistry, 2012, 3, 504-513.	3.9	112
16	Dispersion polymerization in environmentally benign solvents via reversible deactivation radical polymerization. Progress in Polymer Science, 2018, 83, 1-27.	24.7	111
17	Room-temperature discotic liquid-crystalline coronene diimides exhibiting high charge-carrier mobility in air. Journal of Materials Chemistry, 2009, 19, 6688.	6.7	107
18	Star Architecture Promoting Morphological Transitions during Polymerization-Induced Self-Assembly. ACS Macro Letters, 2017, 6, 337-342.	4.8	99

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19	In Situ Cross-Linking of Vesicles in Polymerization-Induced Self-Assembly. ACS Macro Letters, 2016, 5, 316-320.	4.8	92
20	Hydrazine as a Nucleophile and Antioxidant for Fast Aminolysis of RAFT Polymers in Air. Macromolecular Rapid Communications, 2010, 31, 1444-1448.	3.9	90
21	Glucose oxidase deoxygenationâ^'redox initiation for RAFT polymerization in air. Journal of Polymer Science Part A, 2017, 55, 164-174.	2.3	83
22	Synthesis and Photophysical Properties of Donor- and Acceptor-Substituted 1,7-Bis(arylalkynyl)perylene-3,4:9,10-bis(dicarboximide)s. Journal of Physical Chemistry A, 2009, 113, 5585-5593.	2.5	82
23	Exploring the Volume Phase Transition Behavior of POEGA- and PNIPAM-Based Coreâ€"Shell Nanogels from Infrared-Spectral Insights. Macromolecules, 2014, 47, 1144-1154.	4.8	75
24	Efficient and versatile synthesis of star polymers in water and their use as emulsifiers. Chemical Communications, 2011, 47, 12685.	4.1	73
25	Synthesis of architecturally well-defined nanogels via RAFT polymerization for potential bioapplications. Chemical Communications, 2011, 47, 12424.	4.1	72
26	UCST or LCST? Composition-Dependent Thermoresponsive Behavior of Poly(N-acryloylglycinamide-co-diacetone acrylamide). Macromolecules, 2017, 50, 2175-2182.	4.8	69
27	Photocontrolled RAFT Polymerization Mediated by a Supramolecular Catalyst. ACS Macro Letters, 2017, 6, 625-631.	4.8	69
28	Temperature-Induced Morphological Transitions of Poly(dimethylacrylamide)â€"Poly(diacetone) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38 Macromolecules, 2017, 50, 7222-7232.	4.8	67
29	One-Step Microwave Preparation of Well-Defined and Functionalized Polymeric Nanoparticles. Journal of the American Chemical Society, 2006, 128, 15054-15055.	13.7	66
30	pH-responsive high internal phase emulsions stabilized by core cross-linked star (CCS) polymers. Polymer Chemistry, 2013, 4, 4092.	3.9	66
31	Charge photogeneration in polythiopheneâ€"perylene diimide blend films. Chemical Communications, 2009, , 5445.	4.1	64
32	RAFT Polymerization-Induced Self-Assembly as a Strategy for Versatile Synthesis of Semifluorinated Liquid-Crystalline Block Copolymer Nanoobjects. ACS Macro Letters, 2018, 7, 287-292.	4.8	63
33	High electron mobility in nickel bis(dithiolene) complexes. Journal of Materials Chemistry, 2007, 17, 2642.	6.7	61
34	Modular Monomers with Tunable Solubility: Synthesis of Highly Incompatible Block Copolymer Nano-Objects via RAFT Aqueous Dispersion Polymerization. ACS Macro Letters, 2017, 6, 224-228.	4.8	61
35	Iceâ€Templating of Core/Shell Microgel Fibers through â€˜Bricksâ€andâ€Mortarâ€™ Assembly**. Advanced Materials, 2007, 19, 4539-4543.	21.0	59
36	Nonâ€natural Photoenzymatic Controlled Radical Polymerization Inspired by DNA Photolyase. Angewandte Chemie - International Edition, 2019, 58, 9479-9484.	13.8	57

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37	Core cross-linked star (CCS) polymers with temperature and salt dual responsiveness: synthesis, formation of high internal phase emulsions (HIPEs) and triggered demulsification. Polymer Chemistry, 2014, 5, 175-185.	3.9	56
38	In Situ Cross-Linking as a Platform for the Synthesis of Triblock Copolymer Vesicles with Diverse Surface Chemistry and Enhanced Stability via RAFT Dispersion Polymerization. Macromolecules, 2017, 50, 2165-2174.	4.8	56
39	Morphological Stabilization of Block Copolymer Worms Using Asymmetric Cross-Linkers during Polymerization-Induced Self-Assembly. Macromolecules, 2018, 51, 2776-2784.	4.8	56
40	Heterofunctional polymers and coreâ€“shell nanoparticles via cascade aminolysis/Michael addition and alkyneâ€“azide click reaction of RAFT polymers. Chemical Communications, 2008, , 6501.	4.1	55
41	Efficient Access to Inverse Bicontinuous Mesophases via Polymerization-Induced Cooperative Assembly. CCS Chemistry, 2021, 3, 2211-2222.	7.8	55
42	100th Anniversary of Macromolecular Science Viewpoint: Achieving Ultrahigh Molecular Weights with Reversible Deactivation Radical Polymerization. ACS Macro Letters, 2020, 9, 350-357.	4.8	52
43	Emerging Synthetic Strategies for Core Crossâ€Linked Star (CCS) Polymers and Applications as Interfacial Stabilizers: Bridging Linear Polymers and Nanoparticles. Macromolecular Rapid Communications, 2013, 34, 1507-1517.	3.9	48
44	Versatile RAFT dispersion polymerization in cononsolvents for the synthesis of thermoresponsive nanogels with controlled composition, functionality and architecture. Polymer Chemistry, 2014, 5, 6244-6255.	3.9	48
45	Formation of Multidomain Hydrogels via Thermally Induced Assembly of PISA-Generated Triblock Terpolymer Nanogels. Macromolecules, 2016, 49, 3038-3048.	4.8	44
46	Enzymatic Cascade Catalysis for the Synthesis of Multiblock and Ultrahighâ€Molecularâ€Weight Polymers with Oxygen Tolerance. Angewandte Chemie, 2017, 129, 14040-14044.	2.0	44
47	Achieving Ultrahigh Molecular Weights with Diverse Architectures for Unconjugated Monomers through Oxygenâ€Tolerant Photoenzymatic RAFT Polymerization. Angewandte Chemie - International Edition, 2020, 59, 22258-22264.	13.8	44
48	Amphiphilic heteroarm star polymer synthesized by RAFT dispersion polymerization in water/ethanol solution. Chemical Communications, 2012, 48, 7389.	4.1	42
49	Fluorenyl-substituted silole molecules: geometric, electronic, optical, and device properties. Journal of Materials Chemistry, 2008, 18, 3157.	6.7	41
50	Polymerization-Induced Cooperative Assembly of Block Copolymer and Homopolymer via RAFT Dispersion Polymerization. ACS Macro Letters, 2017, 6, 304-309.	4.8	41
51	Frontiers in the design and synthesis of advanced nanogels for nanomedicine. Polymer Chemistry, 2014, 5, 1559-1565.	3.9	40
52	What Determines the Formation of Block Copolymer Nanotubes?. Macromolecules, 2020, 53, 367-373.	4.8	39
53	Core cross-linked star (CCS) polymers with tunable polarity: synthesis by RAFT dispersion polymerization, self-assembly and emulsification. Polymer Chemistry, 2013, 4, 1950.	3.9	38
54	One-pot RAFT synthesis of core cross-linked star polymers of polyPEGMA in water by sequential homogeneous and heterogeneous polymerizations. Polymer Chemistry, 2012, 3, 2656.	3.9	37

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55	One-Enzyme Triple Catalysis: Employing the Promiscuity of Horseradish Peroxidase for Synthesis and Functionalization of Well-Defined Polymers. ACS Macro Letters, 2018, 7, 1-6.	4.8	37
56	A Fluorine-Substituted Hexakisdecyloxy- hexa-peri-hexabenzocoronene. Organic Letters, 2005, 7, 5019-5022.	4.6	36
57	Alkyl Î±-Hydroxymethyl Acrylate Monomers for Aqueous Dispersion Polymerization-Induced Self-Assembly. ACS Macro Letters, 2018, 7, 1461-1467.	4.8	32
58	Heterogeneous photocatalytic reversible deactivation radical polymerization. Polymer Chemistry, 2021, 12, 2357-2373.	3.9	32
59	pHâ€Induced Inversion of Waterâ€inâ€Oil Emulsions to Oilâ€inâ€Water High Internal Phase Emulsions (HIPEs) Using Core Crossâ€Linked Star (CCS) Polymer as Interfacial Stabilizer. Macromolecular Rapid Communications, 2014, 35, 1148-1152.	3.9	30
60	General Synthesis of Ultrafine Monodispersed Hybrid Nanoparticles from Highly Stable Monomicelles. Advanced Materials, 2021, 33, e2100820.	21.0	30
61	Synthesis of poly(ionic liquid)-based nano-objects with morphological transitionsviaRAFT polymerization-induced self-assembly in ethanol. Polymer Chemistry, 2018, 9, 824-827.	3.9	29
62	Enzyme Catalysis for Reversible Deactivation Radical Polymerization. Angewandte Chemie - International Edition, 2022, 61, .	13.8	28
63	Optical fiber amplifiers based on PbS/CdS QDs modified by polymers. Optics Express, 2013, 21, 8214.	3.4	27
64	RAFT emulsion polymerization of styrene mediated by core cross-linked star (CCS) polymers. Polymer Chemistry, 2013, 4, 1921.	3.9	26
65	A highly efficient macromonomer approach to core cross-linked star (CCS) polymers via one-step RAFT emulsion polymerization. Polymer Chemistry, 2014, 5, 4277.	3.9	26
66	Boronic Acid Linear Homopolymers as Effective Emulsifiers and Gelators. ACS Applied Materials & Interfaces, 2015, 7, 21668-21672.	8.0	25
67	Visible light induced aqueous RAFT polymerization using a supramolecular perylene diimide/cucurbit[7]uril complex. Polymer Chemistry, 2019, 10, 2801-2811.	3.9	25
68	Templateless Synthesis of Polyacrylamide-Based Nanogels via RAFT Dispersion Polymerization. Macromolecular Rapid Communications, 2015, 36, 566-570.	3.9	22
69	Understanding the thermosensitivity of POEGA-based star polymers: LCST-type transition in water vs. UCST-type transition in ethanol. Soft Matter, 2016, 12, 2473-2480.	2.7	21
70	RAFT Synthesis in Water of Cationic Polyelectrolytes with Tunable UCST. Macromolecular Rapid Communications, 2015, 36, 2107-2110.	3.9	20
71	Enhanced thermal stability of oleic-acid-capped PbS quantum dot optical fiber amplifier. Optics Express, 2014, 22, 519.	3.4	19
72	Exploration of Doubly Thermal Phase Transition Process of PDEGA-b-PDMA-b-PVCL in Water. Langmuir, 2016, 32, 6691-6700.	3.5	17

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73	Enzymatically Crosslinked Emulsion Gels Using Star-Polymer Stabilizers. Macromolecular Rapid Communications, 2016, 37, 1593-1597.	3.9	15
74	Hydrogen bonding reinforcement as a strategy to improve upper critical solution temperature of poly(N-acryloylglycinamide-co-methacrylic acid). Polymer Chemistry, 2018, 9, 3667-3673.	3.9	14
75	Nonâ€natural Photoenzymatic Controlled Radical Polymerization Inspired by DNA Photolyase. Angewandte Chemie, 2019, 131, 9579-9584.	2.0	13
76	Polymerizationâ€Induced Selfâ€Assembly for the Synthesis of Poly(N,Nâ€dimethylacrylamide)â€bâ€Poly(4â€tertâ€butoxystyrene) Particles with Inverse Bicontinuous Phases. Macromolecular Rapid Communications, 2020, 41, e2000209.	3.9	13
77	Photoenzymatic RAFT Emulsion Polymerization with Oxygen Tolerance. Chinese Journal of Polymer Science (English Edition), 2021, 39, 1138-1145.	3.8	13
78	Inter versus intra-molecular photoinduced charge separation in solid films of donorâ€“acceptor molecules. Chemical Communications, 2008, , 4915.	4.1	11
79	Effect of Butyl Î±-Hydroxymethyl Acrylate Monomer Structure on the Morphology Produced via Aqueous Emulsion Polymerization-induced Self-assembly. Chinese Journal of Polymer Science (English) Tj ETQq1 1 0.784314 rgBT /Over	3.8	11
80	<scp>Polymerizationâ€Induced Selfâ€Assembly</scp> for the Preparation of Poly(N,Nâ€dimethylacrylamide)â€<scp>bâ€Poly</scp>(4â€tertâ€butoxystyreneâ€coâ€pentafluorost Particles with Inverse Bicontinuous Phases^{â€}. Chinese Journal of Chemistry, 2021, 39, 1819-1824.	4.9	11
81	Nanoprecipitation of PMMA Stabilized by Core Crossâ€Linked Star Polymers. Macromolecular Chemistry and Physics, 2013, 214, 1158-1164.	2.2	10
82	Raft polymerization ofN,N-dimethylacrylamide from magnetic poly(2-hydroxyethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Td (Part A, 2016, 54, 1036-1043.	2.3	10
83	Synthesis of star polymeric ionic liquids and use as the stabilizers for high internal phase emulsions. Chinese Journal of Polymer Science (English Edition), 2017, 35, 54-65.	3.8	10
84	Polymers via Reversible Additionâ€“Fragmentation Chain Transfer Polymerization with High Thiol End-Group Fidelity for Effective Grafting-To Gold Nanoparticles. Journal of Physical Chemistry Letters, 2021, 12, 4713-4721.	4.6	8
85	Achieving Ultrahigh Molecular Weights with Diverse Architectures for Unconjugated Monomers through Oxygenâ€Tolerant Photoenzymatic RAFT Polymerization. Angewandte Chemie, 2020, 132, 22442-22448.	2.0	7
86	Thermosensitive, biocompatible and antifouling nanogels prepared via aqueous raft dispersion polymerization for targeted drug delivery. Journal of Controlled Release, 2011, 152, e75-e76.	9.9	6
87	Revealing the distinct thermal transition behavior between PEGA-based linear polymers and their disulfide cross-linked nanogels. Physical Chemistry Chemical Physics, 2017, 19, 25746-25753.	2.8	6
88	Enzyme Catalysis for Reversible Deactivation Radical Polymerization. Angewandte Chemie, 2022, 134, .	2.0	6
89	Switching between Polymer Architectures with Distinct Thermoresponses. Macromolecular Rapid Communications, 2017, 38, 1600808.	3.9	5
90	Enzyme-initiated reversible addition â˜’ fragmentation chain transfer (RAFT) polymerization: Precision polymer synthesis via enzymatic catalysis. Methods in Enzymology, 2019, 627, 291-319.	1.0	5

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91	Macromol. Rapid Commun. 19/2016. Macromolecular Rapid Communications, 2016, 37, 1632-1632.	3.9	2
92	Nonlinear optical properties of conjugated polymer charge transfer composites. , 2008, , .		0
93	Ultra-broadband multi-sized PbS quantum dots fiber amplifier based on a symmetric fiber coupler. , 2013, , .		0
94	Polymer Research at the State Key Laboratory of Supramolecular Structure and Materials, Jilin University. Macromolecular Rapid Communications, 2020, 41, e2000630.	3.9	0