

Haifeng Gao

List of Publications by Year in descending order

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112
papers

7,807
citations

66315

42
h-index

49868

87
g-index

116
all docs

116
docs citations

116
times ranked

6144
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of functional polymers with controlled architecture by CRP of monomers in the presence of cross-linkers: From stars to gels. <i>Progress in Polymer Science</i> , 2009, 34, 317-350.	11.8	741
2	Synthesis of Molecular Brushes by "Grafting onto" Method: Combination of ATRP and Click Reactions. <i>Journal of the American Chemical Society</i> , 2007, 129, 6633-6639.	6.6	559
3	Preparation of Homopolymers and Block Copolymers in Miniemulsion by ATRP Using Activators Generated by Electron Transfer (AGET). <i>Journal of the American Chemical Society</i> , 2005, 127, 3825-3830.	6.6	460
4	Synthesis of Star Polymers by a Combination of ATRP and the "Click" Coupling Method. <i>Macromolecules</i> , 2006, 39, 4960-4965.	2.2	435
5	Use of Ascorbic Acid as Reducing Agent for Synthesis of Well-Defined Polymers by ARGET ATRP. <i>Macromolecules</i> , 2007, 40, 1789-1791.	2.2	351
6	Inverse Miniemulsion ATRP: A New Method for Synthesis and Functionalization of Well-Defined Water-Soluble/Cross-Linked Polymeric Particles. <i>Journal of the American Chemical Society</i> , 2006, 128, 5578-5584.	6.6	313
7	Arm-First Method As a Simple and General Method for Synthesis of Miktoarm Star Copolymers. <i>Journal of the American Chemical Society</i> , 2007, 129, 11828-11834.	6.6	176
8	Synthesis of Degradable Miktoarm Star Copolymers via Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2005, 38, 5995-6004.	2.2	174
9	Development of an ab Initio Emulsion Atom Transfer Radical Polymerization: From Microemulsion to Emulsion. <i>Journal of the American Chemical Society</i> , 2006, 128, 10521-10526.	6.6	167
10	Low Polydispersity Star Polymers via Cross-Linking Macromonomers by ATRP. <i>Journal of the American Chemical Society</i> , 2006, 128, 15111-15113.	6.6	164
11	Structural Control in ATRP Synthesis of Star Polymers Using the Arm-First Method. <i>Macromolecules</i> , 2006, 39, 3154-3160.	2.2	161
12	Determination of Gel Point during Atom Transfer Radical Copolymerization with Cross-Linker. <i>Macromolecules</i> , 2007, 40, 7763-7770.	2.2	158
13	Development of Star Polymers as Unimolecular Containers for Nanomaterials. <i>Macromolecular Rapid Communications</i> , 2012, 33, 722-734.	2.0	156
14	Gradient Polymer Elution Chromatographic Analysis of \pm -Dihydroxypolystyrene Synthesized via ATRP and Click Chemistry. <i>Macromolecules</i> , 2005, 38, 8979-8982.	2.2	146
15	One-Pot Synthesis of Robust Core/Shell Gold Nanoparticles. <i>Journal of the American Chemical Society</i> , 2008, 130, 12852-12853.	6.6	138
16	Chain-Growth Click Polymerization of AB ₂ 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.	7.2	138
17	Synthesis of Star Polymers by A New "Core-First" Method: Sequential Polymerization of Cross-Linker and Monomer. <i>Macromolecules</i> , 2008, 41, 1118-1125.	2.2	131
18	Synthesis of Polyacrylate Networks by ATRP: Parameters Influencing Experimental Gel Points. <i>Macromolecules</i> , 2008, 41, 2335-2340.	2.2	124

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19	New Method To Access Hyperbranched Polymers with Uniform Structure via One-Pot Polymerization of Inimer in Microemulsion. <i>Journal of the American Chemical Society</i> , 2012, 134, 15680-15683.	6.6	107
20	One-Pot Synthesis of Hairy Nanoparticles by Emulsion ATRP. <i>Macromolecules</i> , 2009, 42, 1597-1603.	2.2	105
21	Easy Access to a Family of Polymer Catalysts from Modular Star Polymers. <i>Journal of the American Chemical Society</i> , 2010, 132, 2570-2572.	6.6	104
22	All-Star Polymer Multilayers as pH-Responsive Nanofilms. <i>Macromolecules</i> , 2009, 42, 368-375.	2.2	93
23	Developing recyclable pH-responsive magnetic nanoparticles for oil/water separation. <i>Polymer</i> , 2015, 72, 361-367.	1.8	92
24	Gelation in Living Copolymerization of Monomer and Divinyl Cross-Linker: Comparison of ATRP Experiments with Monte Carlo Simulations. <i>Macromolecules</i> , 2009, 42, 5925-5932.	2.2	88
25	Relationship between Interchain Interaction, Exciton Delocalization, and Charge Separation in Low-Bandgap Copolymer Blends. <i>Journal of the American Chemical Society</i> , 2014, 136, 10024-10032.	6.6	88
26	The use of azide-alkyne click chemistry in recent syntheses and applications of polytriazole-based nanostructured polymers. <i>Nanoscale</i> , 2016, 8, 4864-4881.	2.8	88
27	Synthesis of Miktoarm Star Polymers via ATRP Using the "Out" Method: Determination of Initiation Efficiency of Star Macroinitiators. <i>Macromolecules</i> , 2006, 39, 7216-7223.	2.2	87
28	Low-Polydispersity Star Polymers with Core Functionality by Cross-Linking Macromonomers Using Functional ATRP Initiators. <i>Macromolecules</i> , 2007, 40, 399-401.	2.2	87
29	Synthesis of Low-Polydispersity Miktoarm Star Copolymers via a Simple "Arm-First" Method: Macromonomers as Arm Precursors. <i>Macromolecules</i> , 2008, 41, 4250-4257.	2.2	86
30	Synthesis of 3-Arm Star Block Copolymers by Combination of "Core-First" and "Coupling-On" Methods Using ATRP and Click Reactions. <i>Macromolecular Chemistry and Physics</i> , 2007, 208, 1370-1378.	1.1	84
31	Thermosensitive poly(N-isopropylacrylamide) nanocapsules with controlled permeability. <i>Polymer</i> , 2005, 46, 1087-1093.	1.8	79
32	Effect of Cross-Linker Reactivity on Experimental Gel Points during ATRCp of Monomer and Cross-Linker. <i>Macromolecules</i> , 2008, 41, 7843-7849.	2.2	75
33	Design a Highly Reactive Trifunctional Core Molecule To Obtain Hyperbranched Polymers with over a Million Molecular Weight in One-Pot Click Polymerization. <i>Macromolecules</i> , 2016, 49, 760-766.	2.2	73
34	Exploring Self-Condensing Vinyl Polymerization of Inimers in Microemulsion To Regulate the Structures of Hyperbranched Polymers. <i>Macromolecules</i> , 2015, 48, 2118-2126.	2.2	72
35	pH-Responsive Fluorescent Molecular Bottlebrushes Prepared by Atom Transfer Radical Polymerization. <i>Macromolecules</i> , 2011, 44, 5905-5910.	2.2	61
36	Biotin, Pyrene, and GRGDS-Functionalized Polymers and Nanogels via ATRP and End Group Modification. <i>Macromolecular Chemistry and Physics</i> , 2008, 209, 2179-2193.	1.1	60

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37	Influence of Initiation Efficiency and Polydispersity of Primary Chains on Gelation during Atom Transfer Radical Copolymerization of Monomer and Cross-Linker. <i>Macromolecules</i> , 2009, 42, 927-932.	2.2	59
38	Recent Progress on Hyperbranched Polymers Synthesized via Radical-Based Self-Condensing Vinyl Polymerization. <i>Polymers</i> , 2017, 9, 188.	2.0	59
39	Hierarchically porous materials via assembly of nitrogen-rich polymer nanoparticles for efficient and selective CO ₂ capture. <i>Journal of Materials Chemistry A</i> , 2013, 1, 14862.	5.2	58
40	Mixed Mosaic Membranes Prepared by Layer-by-Layer Assembly for Ionic Separations. <i>ACS Nano</i> , 2014, 8, 12338-12345.	7.3	56
41	Produce Molecular Brushes with Ultrahigh Grafting Density Using Accelerated CuAAC Grafting-Onto Strategy. <i>Macromolecules</i> , 2017, 50, 215-222.	2.2	46
42	Rapid Cellular Internalization of Multifunctional Star Polymers Prepared by Atom Transfer Radical Polymerization. <i>Biomacromolecules</i> , 2010, 11, 2199-2203.	2.6	45
43	Tuning the thermal conductivity of solar cell polymers through side chain engineering. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 7764-7771.	1.3	44
44	Highly Branched Polymers with Layered Structures that Mimic Light Harvesting Processes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 516-520.	7.2	43
45	Cell-Adhesive Star Polymers Prepared by ATRP. <i>Biomacromolecules</i> , 2009, 10, 1795-1803.	2.6	42
46	Characterization of Linear and 3-Arm Star Block Copolymers by Liquid Chromatography at Critical Conditions. <i>Macromolecular Chemistry and Physics</i> , 2006, 207, 1709-1717.	1.1	40
47	Site Isolation of Emitters within Cross-Linked Polymer Nanoparticles for White Electroluminescence. <i>Nano Letters</i> , 2010, 10, 1440-1444.	4.5	39
48	Preparation of a novel polymeric fluorescent nanoparticle. <i>Colloid and Polymer Science</i> , 2002, 280, 653-660.	1.0	38
49	Synthesis of degradable molecular brushes via a combination of ring-opening polymerization and click chemistry. <i>Journal of Polymer Science Part A</i> , 2015, 53, 239-248.	2.5	36
50	Core-Double-Shell Fe ₃ O ₄ @Carbon@Poly(In ^{III} -carboxylate) Microspheres: Cycloaddition of CO ₂ and Epoxides on Coordination Polymer Shells Constituted by Imidazolium-Derived Al ^{III} -Salen Bifunctional Catalysts. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 4969-4978.	4.0	35
51	Investigate the Glass Transition Temperature of Hyperbranched Copolymers with Segmented Monomer Sequence. <i>Macromolecules</i> , 2016, 49, 4416-4422.	2.2	35
52	Effect of Monomer Structure on the CuAAC Polymerization To Produce Hyperbranched Polymers. <i>Macromolecules</i> , 2016, 49, 5342-5349.	2.2	34
53	Synthesis of acid-degradable hyperbranched polymers by chain-growth CuAAC polymerization of an AB ₃ monomer. <i>Polymer Chemistry</i> , 2016, 7, 5512-5517.	1.9	33
54	In Situ Photocatalyzed Polymerization to Stabilize Perovskite Nanocrystals in Protic Solvents. <i>ACS Energy Letters</i> , 2022, 7, 610-616.	8.8	33

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55	Melt rheology of star polymers with large number of small arms, prepared by crosslinking poly(n-butyl acrylate) macromonomers via ATRP. <i>European Polymer Journal</i> , 2011, 47, 746-751.	2.6	30
56	Development of a redox/pH dual stimuli-responsive MSP@P(MAA-Cy) drug delivery system for programmed release of anticancer drugs in tumour cells. <i>Journal of Materials Chemistry B</i> , 2014, 2, 5187-5194.	2.9	29
57	Developing Porous Honeycomb Films Using Miktoarm Star Copolymers and Exploring Their Application in Particle Separation. <i>Macromolecular Rapid Communications</i> , 2014, 35, 221-227.	2.0	28
58	One-pot synthesis of hyperstar polymers via sequential ATRP of inimers and functional monomers in aqueous dispersed media. <i>Polymer Chemistry</i> , 2015, 6, 6739-6745.	1.9	25
59	Cationic Hyperbranched Polymers with Biocompatible Shells for siRNA Delivery. <i>Biomacromolecules</i> , 2018, 19, 3754-3765.	2.6	25
60	Gelation in ATRP Using Structurally Different Branching Reagents: Comparison of Inimer, Divinyl and Trivinyl Cross-Linkers. <i>Macromolecules</i> , 2009, 42, 8039-8043.	2.2	24
61	Combinatorial therapy for triple negative breast cancer using hyperstar polymer-based nanoparticles. <i>Chemical Communications</i> , 2015, 51, 16710-16713.	2.2	24
62	Friedel-Crafts $A_{2} + B_{4}$ Polycondensation toward Regioselective Linear Polymer with Rigid Triphenylmethane Backbone and Its Property as Gas Separation Membrane. <i>Macromolecules</i> , 2018, 51, 6580-6586.	2.2	24
63	Effect of crosslinker multiplicity on the gel point in ATRP. <i>Journal of Polymer Science Part A</i> , 2010, 48, 2016-2023.	2.5	23
64	Preparation of hyperstar polymers with encapsulated $Au_{25}(SR)_{18}$ clusters as recyclable catalysts for nitrophenol reduction. <i>Nanoscale</i> , 2017, 9, 3629-3636.	2.8	23
65	Development of Excipient-Free Freeze-Dryable Unimolecular Hyperstar Polymers for Efficient siRNA Silencing. <i>ACS Macro Letters</i> , 2017, 6, 700-704.	2.3	23
66	Recent advances on synthesis and biomaterials applications of hyperbranched polymers. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2020, 12, e1640.	3.3	23
67	Characterization of \pm -dihydroxypolystyrene by gradient polymer elution chromatography and two-dimensional liquid chromatography. <i>Designed Monomers and Polymers</i> , 2005, 8, 533-546.	0.7	21
68	Synthesis and direct assembly of linear dendritic copolymers via CuAAC click polymerization-induced self-assembly (CPISA). <i>Polymer Chemistry</i> , 2020, 11, 936-943.	1.9	21
69	Methacryloyl and/or Hydroxyl End-Functional Star Polymers Synthesized by ATRP Using the Arm-First Method. <i>Macromolecular Chemistry and Physics</i> , 2009, 210, 421-430.	1.1	20
70	Modular Approaches to Star and Miktoarm Star Polymers by ATRP of Cross-Linkers. <i>Macromolecular Symposia</i> , 2010, 291-292, 12-16.	0.4	20
71	Tandem Functionalization in a Highly Branched Polymer with Layered Structure. <i>Chemistry - A European Journal</i> , 2018, 24, 5974-5981.	1.7	19
72	Probing the Inhomogeneous Charge Distribution on Annealed Polyelectrolyte Star Polymers in Dilute Aqueous Solutions. <i>ACS Macro Letters</i> , 2016, 5, 402-406.	2.3	18

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73	Functional Degradable Polymeric Materials Prepared by Atom Transfer Radical Polymerization. ACS Symposium Series, 2006, , 184-200.	0.5	17
74	Comparison of Loading Efficiency between Hyperbranched Polymers and Cross-Linked Nanogels at Various Branching Densities. Macromolecular Rapid Communications, 2015, 36, 2076-2082.	2.0	17
75	Exciton Structure and Dynamics in Solution Aggregates of a Low-Bandgap Copolymer. Journal of Physical Chemistry B, 2015, 119, 7666-7672.	1.2	17
76	Highly Branched Polymers with Layered Structures that Mimic Light-Harvesting Processes. Angewandte Chemie, 2018, 130, 525-529.	1.6	17
77	Amine-Functionalized Porous Polymer Network for Highly Selective Absorption of CO ₂ Over N ₂ . Macromolecular Chemistry and Physics, 2015, 216, 489-494.	1.1	15
78	Copolymer Nanofilters with Charge-Patterned Domains for Enhanced Electrolyte Transport. Chemistry of Materials, 2017, 29, 762-772.	3.2	15
79	Synthesis of Hyperbranched Polymers via Metal-Free ATRP in Solution and Microemulsion. Macromolecular Chemistry and Physics, 2020, 221, 2000008.	1.1	15
80	Synthesis of Linear Polymers in High Molecular Weights via Reaction-Enhanced Reactivity of Intermediates Using Friedel-Crafts Polycondensation. ACS Omega, 2021, 6, 4527-4533.	1.6	15
81	Magnetic Nanoplatfoms for Covalent Protein Immobilization Based on Spy Chemistry. ACS Applied Materials & Interfaces, 2021, 13, 44147-44156.	4.0	15
82	Preparation of water-soluble hyperbranched polymers with tunable thermosensitivity using chain-growth CuAAC copolymerization. Polymer Chemistry, 2016, 7, 7500-7505.	1.9	14
83	Synthesis of Hyperbranched Polymers with High Molecular Weight in the Homopolymerization of Polymerizable Trithiocarbonate Transfer Agent without Thermal Initiator. Macromolecules, 2016, 49, 6471-6479.	2.2	13
84	Preparation of a Water-Soluble Fluorescent Polymer. Journal of Macromolecular Science - Pure and Applied Chemistry, 2004, 41, 357-371.	1.2	12
85	Click Functionalization of Well-Defined Copolymers Prepared by Atom Transfer Radical Polymerization. ACS Symposium Series, 2006, , 140-152.	0.5	12
86	Chain-growth click copolymerization for the synthesis of branched copolymers with tunable branching densities. Polymer Chemistry, 2022, 13, 891-897.	1.9	12
87	Ligand effect in the synthesis of hyperbranched polymers via copper-catalyzed azide-alkyne cycloaddition polymerization (CuAAC). Journal of Polymer Science Part A, 2018, 56, 2238-2244.	2.5	11
88	Recyclable Palladium-Loaded Hyperbranched Polytriazoles as Efficient Polymer Catalysts for Heck Reaction. ACS Applied Polymer Materials, 2020, 2, 677-684.	2.0	11
89	Facile Production of Polypyrrole Nanofibers Using a Freeze-Drying Method. Macromolecular Chemistry and Physics, 2014, 215, 669-674.	1.1	10
90	Construction of semi-fluorinated amphiphilic graft copolymer bearing a poly(2-methyl-1,4-bis(trifluoromethoxy)benzene) backbone and poly(ethylene glycol) side chains via the grafting-onto strategy. RSC Advances, 2015, 5, 39668-39676.	1.7	10

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91	A Novel Chain-Growth CuAAC Polymerization: One-pot Synthesis of Dendritic Hyperbranched Polymers with Well-Defined Structures. <i>Synlett</i> , 2017, 28, 391-396.	1.0	10
92	High-yield Synthesis of Uniform Star Polymers—Is Controlled Radical Polymerization Always Needed?. <i>Chemistry - A European Journal</i> , 2009, 15, 6107-6111.	1.7	9
93	Thermal conductivity of organic bulk heterojunction solar cells: an unusual binary mixing effect. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 26359-26364.	1.3	9
94	Template synthesis of gold nanoparticles from hyperstar polymers and exploration of their catalytic function for hydrogen evolution reaction. <i>Polymer</i> , 2018, 153, 331-337.	1.8	9
95	Synthesis of multisegmented block copolymer by Friedel-Crafts hydroxyalkylation polymerization. <i>Polymer Chemistry</i> , 2020, 11, 2542-2549.	1.9	9
96	Recent Progress on Synthesis of Hyperbranched Polymers with Controlled Molecular Weight Distribution. <i>ACS Symposium Series</i> , 2015, , 135-147.	0.5	7
97	Tunable Fluorescence from a Responsive Hyperbranched Polymer with Spatially Arranged Fluorophore Arrays. <i>Chemistry - an Asian Journal</i> , 2018, 13, 3723-3728.	1.7	7
98	Shape and Mechanical Control of Poly(ethylene oxide) Based Polymersome with Polyoxometalates via Hydrogen Bond. <i>Journal of Physical Chemistry B</i> , 2017, 121, 1723-1730.	1.2	6
99	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.	2.0	6
100	Molecular dynamics in PBA/PEO miktoarm star copolymers. <i>Polymer</i> , 2013, 54, 3341-3349.	1.8	5
101	Designing Hydrogels by ATRP. <i>Series in Bioengineering</i> , 2015, , 69-105.	0.3	5
102	Synthesis of Highly Branched Copolymers in Microemulsion. <i>Macromolecular Chemistry and Physics</i> , 2019, 220, 1800546.	1.1	5
103	Structural studies of poly(butyl acrylate) - poly(ethylene oxide) miktoarm star polymers. <i>Polymer</i> , 2011, 52, 5513-5520.	1.8	4
104	Synthesize Hyperbranched Polymers Carrying Two Reactive Handles via CuAAC Reaction and Thiol-Ene Chemistry. <i>Macromolecular Chemistry and Physics</i> , 2019, 220, 1900221.	1.1	4
105	A personal journey on using polymerization in aqueous dispersed media to synthesize polymers with branched structures. <i>Chinese Chemical Letters</i> , 2019, 30, 1996-2002.	4.8	4
106	Combining Hyperbranched and Linear Structures in Solid Polymer Electrolytes to Enhance Mechanical Properties and Room-Temperature Ion Transport. <i>Frontiers in Chemistry</i> , 2021, 9, 563864.	1.8	4
107	Morphology and NMR Self-Diffusion in PBA/PEO Miktoarm Star Copolymers. <i>Zeitschrift Fur Physikalische Chemie</i> , 2012, 226, 1271-1292.	1.4	3
108	Recent Progress on Grafting-onto Synthesis of Molecular Brushes by Reversible Deactivation Radical Polymerization and CuAAC Coupling Reaction. <i>ACS Symposium Series</i> , 2018, , 263-280.	0.5	3

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109	Gelation in Atom Transfer Radical Copolymerization with a Divinyl Cross-linker. ACS Symposium Series, 2009, , 203-213.	0.5	2
110	Innentitelbild: Chain-Growth Click Polymerization of AB ₂ Monomers for the Formation of Hyperbranched Polymers with Low Polydispersities in a One-Pot Process (Angew. Chem. 26/2015). Angewandte Chemie, 2015, 127, 7562-7562.	1.6	1
111	Supramolecular Loading of a Broad Spectrum of Molecular Guests In Hyperbranched Polytriazole Nanoparticles with Cores Containing Multiple Functional Groups. Biomacromolecules, 2020, 21, 2165-2175.	2.6	1
112	Chain-growth polymerization of azide-alkyne difunctional monomer: Synthesis of star polymer with linear polytriazole arms from a core. Journal of Polymer Science, 2020, 58, 84-90.	2.0	0