Akira Hirao

List of Publications by Year in descending order

100 papers	2,925 citations	126858 33 h-index	197736 49 g-index
102 all docs	102 docs citations	102 times ranked	1918 citing authors

#	Article	IF	Citations
1	Seventeen-Armed Star Polystyrenes in Various Molecular Weights: Structural Details and Chain Characteristics. Polymers, 2020, 12, 1894.	2.0	3
2	Synthesis of novel block polymers with unusual block sequences by methodology combining living anionic polymerization and designed linking chemistry. Journal of Polymer Research, 2019, 26, 1.	1.2	9
3	Precise syntheses of structurally possible all tetrablock quaterpolymers by a methodology combining living anionic polymerization with linking chemistry using 1â€‰:â€‰1 addition reaction. Polymer Chemistry, 2018, 9, 834-844.	1.9	7
4	Anionic Polymerization of Divinylbenzenes Possessing Methoxy Group. Macromolecular Chemistry and Physics, 2017, 218, 1600550.	1.1	7
5	Synthesis and Characterization of an Exact Polystyrene-graft-polyisoprene: A Failure of Size Exclusion Chromatography Analysis. Macromolecules, 2017, 50, 2768-2776.	2.2	24
6	Precise Synthesis of Macromolecular Architectures by Novel Iterative Methodology Combining Living Anionic Polymerization with Specially Designed Linking Chemistry. Polymers, 2017, 9, 470.	2.0	30
7	Macromol. Chem. Phys. 5/2016. Macromolecular Chemistry and Physics, 2016, 217, 721-721.	1.1	0
8	Tailored Synthesis of Triblock Co- and Terpolymers Composed of Synthetically Difficult Sequence Orders by Combining Living Anionic Polymerization with Specially Designed Linking Reaction. Macromolecular Chemistry and Physics, 2016, 217, 622-635.	1.1	4
9	Syntheses of exactly-defined multi-graft polymers with two or more graft chains per branch point by a new iterative methodology. Polymer Chemistry, 2016, 7, 2078-2086.	1.9	16
10	Living Anionic Polymerization of Divinylbenzene Derivatives. Kobunshi Ronbunshu, 2015, 72, 395-409.	0.2	0
11	Successive Synthesis of Multiarmed and Multicomponent Starâ€Branched Polymers by New Iterative Methodology Based on Linking Reaction between Block Copolymer Inâ€Chain Anion and Î±â€Phenylacrylateâ€Functionalized Polymer. Macromolecular Chemistry and Physics, 2015, 216, 1523-1533.	1.1	15
12	Synthesis and Characterization of ABC-Type Asymmetric Star Polymers Comprised of Poly(3-hexylthiophene), Polystyrene, and Poly(2-vinylpyridine) Segments. Macromolecules, 2015, 48, 245-255.	2.2	33
13	Precise Synthesis of New Exactly Defined Graft Copolymers Made up of Poly(alkyl methacrylate)s by Iterative Methodology Using Living Anionic Polymerization. Macromolecules, 2015, 48, 8307-8314.	2.2	12
14	Living Anionic Polymerization of 1,4-Diisopropenylbenzene. Macromolecules, 2015, 48, 3230-3238.	2.2	13
15	Crystallization behavior of polyethylene/polystyrene A_mB_n miktoarm star copolymers. Polymers for Advanced Technologies, 2014, 25, 1257-1263.	1.6	2
16	Advances in Living Anionic Polymerization: From Functional Monomers, Polymerization Systems, to Macromolecular Architectures. Macromolecules, 2014, 47, 1883-1905.	2.2	220
17	Synthesis of well-controlled graft polymers by living anionic polymerization towards exact graft polymers. Polymer Chemistry, 2014, 5, 5523.	1.9	60
18	Precise Synthesis of Block Polymers Composed of Three or More Blocks by Specially Designed Linking Methodologies in Conjunction with Living Anionic Polymerization System. Polymers, 2013, 5, 1012-1040.	2.0	47

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19	Precise Synthesis of New Triblock Coâ€•and Terpolymers by a Methodology Combining Living Anionic Polymers with a Specially Designed Linking Reaction. Macromolecular Symposia, 2013, 323, 26-36.	0.4	14
20	Formation of Ultra Narrow Lamellar Structures in POSS-containing Triblock Terpolymers. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2013, 26, 39-44.	0.1	5
21	Side-Chain-Controlled Self-Assembly of Polystyreneâ€“Polypeptide Miktoarm Star Copolymers. Macromolecules, 2012, 45, 2850-2856.	2.2	46
22	Synthesis of Well-Defined Miktoarm Star-Branched Polymers Consisting of Perfluorinated Segments by a Novel Methodology Using Soluble In-Chain-Benzyl Bromide-Functionalized AB Diblock Copolymers as Key Building Blocks. Macromolecules, 2011, 44, 826-834.	2.2	21
23	Facile Synthetic Route for Well-Defined Poly(3-hexylthiophene)-block-poly(methyl methacrylate) Copolymer by Anionic Coupling Reaction. Macromolecules, 2011, 44, 1894-1899.	2.2	49
24	Facile Synthesis of Triblock Co- and Terpolymers of Styrene, 2-Vinylpyridine, and Methyl Methacrylate by a New Methodology Combining Living Anionic Diblock Copolymers with a Specially Designed Linking Reaction. Macromolecules, 2011, 44, 6345-6355.	2.2	30
25	Chain-end- and in-chain-functionalized AB diblock copolymers as key building blocks in the synthesis of well-defined architectural polymers. Polymer Chemistry, 2011, 2, 1219.	1.9	42
26	Facile Synthetic Approach to Exact Graft (Co)polymers and Double-Tailed Polystyrene: Linking Reaction of Living Anionic Polymers with Specially Designed In-Chain-Multifunctionalized Polystyrenes. Macromolecules, 2011, 44, 5638-5649.	2.2	34
27	Dendrimer-like star-branched polymers: novel structurally well-defined hyperbranched polymers. Polymer Journal, 2011, 43, 2-17.	1.3	62
28	Precise Synthesis of Novel Ferrocene-Based Star-Branched Polymers by Using Specially Designed 1,1-Diphenylethylene Derivatives in Conjunction with Living Anionic Polymerization. Journal of Inorganic and Organometallic Polymers and Materials, 2010, 20, 445-456.	1.9	21
29	Hierarchical Smectic Self-Assembly of an ABC Miktoarm Star Terpolymer with a Helical Polypeptide Arm. Macromolecules, 2010, 43, 9071-9076.	2.2	57
30	Synthesis of Well-Defined (AB)_nMultiblock Copolymers Composed of Polystyrene and Poly(methyl methacrylate) Segments Using Specially Designed Living AB Diblock Copolymer Anion. Macromolecules, 2010, 43, 1403-1410.	2.2	49
31	Precise Synthesis of Exact Graft Polystyrenes with Branches from Two to Five in Number by Iterative Methodology Based on Living Anionic Polymerization. Macromolecules, 2009, 42, 3973-3981.	2.2	26
32	X-ray scattering studies on molecular structures of star and dendritic polymers. Macromolecular Research, 2008, 16, 686-694.	1.0	19
33	Synthesis of wellâ€defined dendritic hyperbranched polymers by iterative methodologies using living/controlled polymerizations. Polymer International, 2008, 57, 554-570.	1.6	30
34	A Versatile Method for Adjusting Thermoresponsivity: Synthesis and â€˜Clickâ€™ Reaction of an Azido Endâ€Functionalized Poly(Nâ€‹isopropylacrylamide). Macromolecular Rapid Communications, 2008, 29, 1126-1133.	2.0	72
35	Facile Synthesis of ABA Triblock Copolymer Containing Regioregular Poly(3-hexylthiophene) and Polystyrene Segments via Linking Reaction of Poly(styryl)lithium. Macromolecules, 2008, 41, 9505-9507.	2.2	68
36	Controlled Polymerization of Glycidyl Methyl Ether Initiated by Onium Salt/Triisobutylaluminum and Investigation of the Polymer LCST. Macromolecular Symposia, 2007, 249-250, 392-397.	0.4	41

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37	End-functionalization of polystyrene by malto-oligosaccharide generating aggregation-tunable polymeric reverse micelle. Journal of Polymer Science Part A, 2006, 44, 4864-4879.	2.5	25
38	Precise synthesis of well-defined dendrimer-like star-branched polymers by iterative methodology based on living anionic polymerization. Journal of Polymer Science Part A, 2006, 44, 6659-6687.	2.5	67
39	Synthesis of well-defined miktoarm star polymers of poly(dimethylsiloxane) by the combination of chlorosilane and benzyl chloride linking chemistry. Journal of Polymer Science Part A, 2006, 44, 6587-6599.	2.5	38
40	Synthesis and characterization of model 3-miktoarm star copolymers of poly(dimethylsiloxane) and poly(2-vinylpyridine). Journal of Polymer Science Part A, 2006, 44, 614-619.	2.5	29
41	Synthesis of Block Copolymers and Asymmetric Star-Branched Polymers Comprised of Polyacetylene and Polystyrene Segments via Ionic Bond Formation. Monatshefte FÂ¼r Chemie, 2006, 137, 869-880.	0.9	24
42	Precise synthesis of dendron-like hyperbranched polymers and block copolymers by an iterative approach involving living anionic polymerization, coupling reaction, and transformation reaction. Macromolecular Research, 2006, 14, 272-286.	1.0	28
43	Successive synthesis of well-defined star-branched polymers by an iterative approach based on living anionic polymerization. Macromolecular Research, 2006, 14, 287-299.	1.0	35
44	Successive Synthesis of Regular and Asymmetric Star-Branched Polymers by Iterative Methodology Based on Living Anionic Polymerization Using Functionalized 1,1-Diphenylethylene Derivatives. Macromolecular Symposia, 2006, 240, 31-40.	0.4	18
45	Precise Synthesis of Dendrimer-Like Star-Branched Poly(methyl methacrylate)s with Different Branched Architectures up to Third-Generation by Iterative Methodology. Macromolecular Symposia, 2006, 245-246, 5-13.	0.4	10
46	Synthesis of Dendrimer-Like Star-Branched Poly(methyl methacrylate)s of Generations Consisting of Four Branched Polymer Chains at Each Junction by Iterative Methodology Involving Coupling and Transformation Reactions. Macromolecular Symposia, 2006, 240, 23-30.	0.4	24
47	Anionic Polymerization of New Dual-Functionalized Styrene and Î±-Methylstyrene Derivatives Having Styrene or Î±-Methylstyrene Moieties. Macromolecular Symposia, 2005, 226, 35-50.	0.4	2
48	Precise Synthesis of Dendrimer-like Star-Branched Poly(methyl methacrylate)s up to Seventh Generation by an Iterative Divergent Approach Involving Coupling and Transformation Reactions. Macromolecules, 2005, 38, 8701-8711.	2.2	81
49	Synthesis of asymmetric star-branched polymers consisting of three or four different segments in composition by means of living anionic polymerization with a new dual-functionalized 1,1-bis(3-chloromethylphenyl)ethylene. Journal of Polymer Science Part A, 2004, 42, 4535-4547.	2.5	41
50	Synthesis of Highly Branched Comblike Polymers Having One Branch in Each Repeating Unit by Linking Reaction of Polystyryllithium with Well-Defined New Epoxy-Functionalized Polystyrene. Macromolecular Symposia, 2004, 217, 17-28.	0.4	10
51	Precise Synthesis of Star-Branched Polymers by Means of Living Anionic Polymerization Using 1,1-Bis(3-chloromethylphenyl)ethylene. Macromolecular Symposia, 2004, 215, 57-66.	0.4	7
52	Precise Synthesis and Surface Characterization of Well-Defined Chain-End-Functionalized Polystyrenes with Two, Four, Eight, Sixteen and Thirty-Two Perfluorooctyl Groups. Macromolecular Symposia, 2004, 217, 1-16.	0.4	8
53	Synthesis of heteroarm star-branched polymers by means of anionic living polymerization. Polymers for Advanced Technologies, 2001, 12, 680-686.	1.6	24
54	Anionic living polymerization of functional monomers. Precise synthesis of various functionalized polystyrenes with monosaccharide residues by anionic living polymerization and living functionalization reaction. Macromolecular Symposia, 2000, 161, 45-52.	0.4	7

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55	Anionic polymerization of monomers containing functional groups, 14. Anionic polymerizations of aryl 4-vinylbenzoates. Macromolecular Chemistry and Physics, 2000, 201, 1077-1087.	1.1	14
56	Side-Chain LC Block Copolymers with Well Defined Structures Prepared by Living Anionic Polymerization. 3: Effect of the Composition on the Microdomin Structure and the Phase Behavior of the LC Segment. Molecular Crystals and Liquid Crystals, 2000, 347, 211-220.	0.3	6
57	Anionic Polymerizations of Perfluoroalkyl Methacrylates and Synthesis of Well-Defined ABC Triblock Copolymers of Methacrylates Containing Hydrophilic, Hydrophobic, and Perfluoroalkyl Groups. Polymer Journal, 1999, 31, 983-988.	1.3	75
58	Fixed crosslink formation and viscoelasticity of polystyrene networks. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 3319-3327.	2.4	2
59	Reactions of anionic living polymers with bromomethyl-functionalized benzoyl peroxides. Macromolecular Chemistry and Physics, 1999, 200, 71-76.	1.1	4
60	Synthesis of Side-Chain Liquid Crystalline Homopolymers and Block Copolymers with Cyanobiphenyl Moieties as the Mesogen by Living Anionic Polymerization and Their Thermotropic Phase Behavior. Macromolecules, 1999, 32, 282-289.	2.2	47
61	Synthesis of Star-Branched Polymers by Means of Anionic Living Polymerization Coupled with Functional Group Transformation. Macromolecules, 1999, 32, 2425-2433.	2.2	51
62	Synthesis of End-Functionalized Polymers by Means of Living Anionic Polymerization. 10. Reactions of Living Anionic Polymers with Halopropylstyrene Derivatives. Macromolecules, 1999, 32, 1325-1331.	2.2	33
63	Time-Resolved Surface Rearrangements of Poly(2-hydroxyethyl methacrylate-block-isoprene) in Response to Environmental Changes. Langmuir, 1999, 15, 1754-1762.	1.6	62
64	Relationship between Morphology of Microphase-Separated Structure and Phase Restructuring at the Surface of Poly[2-hydroxyethyl methacrylate-block-4-(7â€˜-octenyl)styrene] Diblock Copolymers Corresponding to Environmental Change. Langmuir, 1999, 15, 1763-1769.	1.6	36
65	Synthesis of Well-Defined Functionalized Polystyrenes with a Definite Number of Chloromethylphenyl Groups at Chain Ends or in Chains by Means of Anionic Living Polymerization in Conjunction with Functional Group Transformation. Macromolecules, 1999, 32, 6450-6460.	2.2	61
66	Synthesis of heteroarm star-branched polymers by means of anionic living polymerization in conjunction with functional group transformation. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 1999, 75, 93-96.	1.6	17
67	A Study of Three-Phase Structures in ABC Triblock Copolymers. Polymer Journal, 1999, 31, 989-994.	1.3	34
68	Anionic polymerization of monomers containing functional groups, 11. Anionic polymerizations of alkynyl methacrylates. Macromolecular Chemistry and Physics, 1998, 199, 1827-1834.	1.1	28
69	Radical polymerization of (phenylethynyl)styrenes and characterization of poly(phenylethynyl)styrenes as a thermally curable material. Polymer Bulletin, 1998, 40, 651-658.	1.7	13
70	Anionic Living Polymerization of 2,3-Diphenyl-1,3-butadiene. Macromolecules, 1998, 31, 9141-9145.	2.2	17
71	Protection and Polymerization of Functional Monomers. 28. Anionic Living Polymerization of Styrene Derivatives Containing Acetal-Protected Monosaccharide Residues. Macromolecules, 1998, 31, 9121-9126.	2.2	43
72	Side-Chain Liquid Crystal Block Copolymers with Well-Defined Structures Prepared by Living Anionic Polymerization I. Thermotropic Phase Behavior and Structures of Liquid Crystal Segment in Lamellar Type of Microphase Domain. Polymer Journal, 1998, 30, 23-30.	1.3	28

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73	Flow-Induced Reactive Self-Assembly. Macromolecules, 1997, 30, 1243-1246.	2.2	83
74	Anionic Polymerization of Monomers Containing Functional Groups. 9. Anionic Polymerizations of 4-Vinylphenyl Methyl Sulfide, 4-Vinylbenzyl Methyl Sulfide, and 2-(4â€˜-Vinylphenyl)ethyl Methyl Sulfide. Macromolecules, 1997, 30, 3728-3731.	2.2	14
75	Anionic Polymerization of Monomers Containing Functional Groups. 8. Anionic Living Polymerization of 4-Cyano-Î±-methylstyrene. Macromolecules, 1997, 30, 757-763.	2.2	12
76	Radical polymerization of (trimethylsilylethynyl)styrene and thermal properties of polystyrene with ethynyl group. Polymer Bulletin, 1997, 39, 173-178.	1.7	8
77	Protection and polymerization of functional monomers, 26. Synthesis of well-defined poly[4-(3â€²-butynyl)styrene] by means of anionic polymerization of 4-(4â€²-trimethylsilyl-3â€²-butynyl)styrene. Macromolecular Chemistry and Physics, 1996, 197, 1781-1791.	1.1	6
78	Synthesis of end-functionalized polymer by means of living anionic polymerization, 5. Syntheses of polystyrenes and polyisoprenes with hydroxy and mercapto end groups by reactions of the living polymers with haloalkanes containing silyl ether and silyl thioether functions. Macromolecular Chemistry and Physics, 1996, 197, 3135-3148.	1.1	41
79	Synthesis of end-functionalized polymer by means of living anionic polymerization, 7. Reaction of anionic living polymers with perfluoroalkyl halides. Macromolecular Chemistry and Physics, 1996, 197, 3149-3165.	1.1	29
80	Characterization of Poly(2-Hydroxyethyl Methacrylate) (PHEMA) by XPS. Surface Science Spectra, 1996, 4, 14-20.	0.3	8
81	Polymerization of monomers containing functional silyl groups. 12. Anionic polymerization of styrene derivatives para-substituted with pentamethyldisilyl (Si-Si), heptamethyltrisilyl (Si-Si-Si), and nonamethyltetrasilyl (Si-Si-Si-Si) groups. Macromolecular Symposia, 1995, 95, 293-301.	0.4	2
82	Synthesis of end-functionalized polymers by means of living anionic polymerization, 3. Synthesis of polystyrene and polyisoprene with 1,3-butadienyl termini by reaction of their anionic living polymers with 6-bromo-3-methylene-1-hexene. Macromolecular Chemistry and Physics, 1995, 196, 1687-1696.	1.1	39
83	Anionic polymerization of alkyl methacrylates in the presence of diethylzinc. Macromolecular Chemistry and Physics, 1995, 196, 2099-2111.	1.1	44
84	Synthesis of end-functionalized polymer by means of living anionic polymerization. 4. Synthesis of polyisoprene and polystyrene with epoxy termini by reaction of their anionic living polymers with 2-bromoethyloxirane. Polymer International, 1995, 37, 291-295.	1.6	24
85	Protection and polymerization of functional monomers, 22. Synthesis of well-defined poly(4-vinylbenzoic acid) by means of anionic living polymerization of N-(4-vinylbenzoyl)-Nâ€²-methylpiperazine, followed by deprotection. Macromolecular Chemistry and Physics, 1994, 195, 3173-3187.	1.1	18
86	Anionic polymerization of monomers containing functional groups. 6. Anionic block copolymerization of styrene derivatives para-substituted with electron-withdrawing groups. Macromolecules, 1993, 26, 6964-6975.	2.2	63
87	Anionic living polymerization of styrenes containing electron-withdrawing groups. Makromolekulare Chemie Macromolecular Symposia, 1993, 67, 223-236.	0.6	14
88	Title is missing!. Die Makromolekulare Chemie, 1992, 193, 1943-1953.	1.1	14
89	Title is missing!. Die Makromolekulare Chemie, 1989, 190, 2893-2901.	1.1	22
90	Radical copolymerization of 4-(tert-butyldimethylsilyloxy)styrene with styrene: Reactivity ratios. Journal of Polymer Science Part A, 1989, 27, 2811-2814.	2.5	6

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91	Synthesis of functional silyl group containing polymers with controllable molecular weights and narrow molecular weight distributions by means of anionic living polymerization.. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 1989, 47, 448-456.	0.0	2
92	Title is missing!. Die Makromolekulare Chemie Rapid Communications, 1987, 8, 203-207.	1.1	20
93	Conformational analysis of a synthetic carboxylic ionophore in solution by1H NMR spectroscopy. Magnetic Resonance in Chemistry, 1986, 24, 961-964.	1.1	5
94	Title is missing!. Die Makromolekulare Chemie, 1986, 187, 141-147.	1.1	27
95	Preparation of tailor-made functional polymers by anionic living polymerization.. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 1986, 44, 137-148.	0.0	5
96	Title is missing!. Die Makromolekulare Chemie, 1985, 186, 1157-1166.	1.1	95
97	Anionic and radical polymerization of p-triphenyl- and p-tributylgermyl-styrenes. Die Makromolekulare Chemie, 1983, 184, 961-967.	1.1	10
98	Title is missing!. Die Makromolekulare Chemie, 1983, 184, 1355-1362.	1.1	18
99	Title is missing!. Die Makromolekulare Chemie Rapid Communications, 1982, 3, 59-63.	1.1	42
100	Title is missing!. Die Makromolekulare Chemie Rapid Communications, 1982, 3, 673-676.	1.1	12