Hidetaka Tobita

List of Publications by Year
in descending order

116 papers	2,343 citations	185998 28 h-index	276539 41 g-index
133 all docs	133 docs citations	133 times ranked	637 citing authors

#	Article	IF	Citations
1	Dimensions of Crosslinked Polymers without Rings. Macromolecular Theory and Simulations, 2022, 31, .	0.6	6
2	Dimensions of Network Polymers. Macromolecular Theory and Simulations, 2022, 31, .	0.6	3
3	Relationship between Branched Structure and Viscoelastic Properties of Highly Branched Polyethylene Derived by Monte Carlo Molecular Simulation and the BoBâ€Rheology Simulation Methods. Macromolecular Theory and Simulations, 2021, 30, 2000069.	0.6	1
4	Effect of Branch Point Distribution on the Radius of Gyration in Batch Freeâ€Radical Polymerization with Chain Transfer to Polymer. Macromolecular Theory and Simulations, 2021, 30, 2000036.	0.6	2
5	Distributions of Molecular Weights and 3D Sizes of Hyperbranched Polymers Formed in Batch Selfâ€Condensing Vinyl Polymerization. Macromolecular Theory and Simulations, 2021, 30, 2000052.	0.6	1
6	Gel Point Properties in Batch Freeâ€Radical Vinyl/Divinyl Copolymerization. Macromolecular Reaction Engineering, 2021, 15, 2100018.	0.9	3
7	Bivariate Distribution and Related Analytical Solutions for Batch Stepâ€Growth Polymerization of AB 2 â€Type Monomer. Macromolecular Theory and Simulations, 2020, 29, 1900049.	0.6	2
8	Random Branching of Polymer Chains with Schulzâ€“Zimm Distribution. 1. Bivariate Distribution and Related Formulae. Macromolecular Theory and Simulations, 2020, 29, 1900056.	0.6	4
9	Random Branching of Polymer Chains with Schulzâ€“Zimm Distribution. 2. Radius of Gyration and Maximum Span Length. Macromolecular Theory and Simulations, 2020, 29, 1900057.	0.6	6
10	Universal Relationships in Branched Architecture Formed in Conventional and Living Emulsion Polymerization. Macromolecular Theory and Simulations, 2019, 28, 1900018.	0.6	7
11	Universal Relationships in Hyperbranched Polymer Architecture for Batch and Continuous Step Growth Polymerization of AB2-Type Monomers. Processes, 2019, 7, 220.	1.3	14
12	Detailed Structural Analysis of the Hyperbranched Polymers Formed in Selfâ€Condensing Vinyl Polymerization. Macromolecular Theory and Simulations, 2019, 28, 1800061.	0.6	13
13	Modelâ€Based Reactor Design to Control Hyperbranched Polymer Architecture. Macromolecular Reaction Engineering, 2018, 12, 1700065.	0.9	5
14	Hyperbranched Polymers Formed Through Selfâ€Condensing Vinyl Polymerization in a Continuous Stirredâ€Tank Reactor (CSTR): 2. Branched Architecture. Macromolecular Theory and Simulations, 2018, 27, 1800028.	0.6	3
15	Hyperbranched Polymers Formed Through Selfâ€Condensing Vinyl Polymerization in a Continuous Stirredâ€Tank Reactor (CSTR): 1. Molecular Weight Distribution. Macromolecular Theory and Simulations, 2018, 27, 1800027.	0.6	7
16	Effect of Chain Transfer to Polymer in Conventional and Living Emulsion Polymerization Process. Processes, 2018, 6, 14.	1.3	7
17	Hyperbranched Polymers Formed through Irreversible Step Polymerization of AB₂â€Type Monomer in a Continuous Flow Stirredâ€Tank Reactor (CSTR). Macromolecular Theory and Simulations, 2017, 26, 1600078.	0.6	9
18	Hyperbranched Polymers Formed Through Irreversible Step Polymerization of AB₂â€Type Monomer with Substitution Effect in a Continuous Flow Stirredâ€Tank Reactor (CSTR). Macromolecular Theory and Simulations, 2017, 26, 1700020.	0.6	9

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19	Molecular Weight Distribution of Core Cross-Linked Star Polymers. Macromolecular Theory and Simulations, 2017, 26, 1600037.	0.6	2
20	Effect of Small Reaction Locus in Free-Radical Polymerization: Conventional and Reversible-Deactivation Radical Polymerization. Polymers, 2016, 8, 155.	2.0	8
21	Universality in Branching Frequencies and Molecular Dimensions during Hyperbranched Polymer Formation: Step Polymerization of AB₂ Type Monomer with Equal Reactivity. Macromolecular Theory and Simulations, 2016, 25, 116-122.	0.6	12
22	Universality in Branching Frequencies and Molecular Dimensions during Hyperbranched Polymer Formation: 2. Step Polymerization of AB₂ Type Monomer with Different Reactivity for the Second B Group. Macromolecular Theory and Simulations, 2016, 25, 123-133.	0.6	10
23	Continuous Tanksâ€inâ€Series Process for Freeâ€Radical Polymerization with Longâ€Chain Branching and Scission: Effect of the Order of a Large Tank. Macromolecular Reaction Engineering, 2015, 9, 556-569.	0.9	8
24	Model-Based Reactor Design in Free-Radical Polymerization with Simultaneous Long-Chain Branching and Scission. Processes, 2015, 3, 731-748.	1.3	8
25	Markovian Approach to Freeâ€Radical Polymerization with Simultaneous Longâ€Chain Branching and Scission: Effect of Branching and Scission Kinetics. Macromolecular Reaction Engineering, 2015, 9, 245-258.	0.9	6
26	Markovian Approach to Selfâ€Condensing Vinyl Polymerization: Distributions of Molecular Weights, Degrees of Branching, and Molecular Dimensions. Macromolecular Theory and Simulations, 2015, 24, 117-132.	0.6	19
27	Experimental Method to Discriminate RAFT Models between Intermediate Termination and Slow Fragmentation via Comparison of Rates of Miniemulsion and Bulk Polymerization. Macromolecular Theory and Simulations, 2014, 23, 136-146.	0.6	20
28	Modeling and Simulation of Complex Polymerization Reactions. Macromolecular Theory and Simulations, 2014, 23, 107-109.	0.6	2
29	Continuous Freeâ€Radical Polymerization with Longâ€Chain Branching and Scission in a Tanksâ€inâ€Series Model. Macromolecular Theory and Simulations, 2014, 23, 182-197.	0.6	25
30	Freeâ€Radical Polymerization with Longâ€Chain Branching and Scission: Markovian Solution of the Weightâ€Average Molecular Weight. Macromolecular Theory and Simulations, 2014, 23, 477-489.	0.6	15
31	On the Discrimination of <scp>RAFT</scp> Models Using Miniemulsion Polymerization. Macromolecular Theory and Simulations, 2013, 22, 399-409.	0.6	10
32	Freeâ€Radical Polymerization with Longâ€Chain Branching and Scission in a Continuous Stirredâ€Tank Reactor. Macromolecular Reaction Engineering, 2013, 7, 181-192.	0.9	32
33	Experimental Validation of Intermediate Termination in RAFT Polymerization with Dithiobenzoate via Comparison of Miniemulsion and Bulk Polymerization Rates. Macromolecular Reaction Engineering, 2012, 6, 17-23.	0.9	27
34	3E1346 3-D FRET Analysis for Constructing An Atomic Model of the F-actin and Tn Core Domain Complex in the Reconstituted Thin Filament(3E Muscle 2,The 49th Annual Meeting of the Biophysical Society of) Tj ETQq0 0 0 rgBT /Overlock 10	0.0	0
35	Effects of Fluctuation and Segregation in the Rate Acceleration of ATRP Miniemulsion Polymerization. Macromolecular Theory and Simulations, 2011, 20, 179-190.	0.6	21
36	Effects of Retardation and Variation of Monomer Concentration in RAFT Miniemulsion Polymerization. Macromolecular Theory and Simulations, 2011, 20, 709-720.	0.6	11

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37	Threshold Particle Diameters in Miniemulsion Reversible-Deactivation Radical Polymerization. Polymers, 2011, 3, 1944-1971.	2.0	13
38	Change and Convergence of Polymer Distribution During Nonrandom Degradation. Macromolecular Reaction Engineering, 2010, 4, 333-341.	0.9	11
39	Modeling Controlled/Living Radical Polymerization Kinetics: Bulk and Miniemulsion. Macromolecular Reaction Engineering, 2010, 4, 643-662.	0.9	39
40	Fundamentals of RAFT Miniemulsion Polymerization Kinetics. Macromolecular Symposia, 2010, 288, 16-24.	0.4	18
41	Effects of Nano-Sized Polymerization Locus on the Kinetics of Controlled/Living Radical Polymerization. , 2010, , 263-305.		2
42	RAFT Miniemulsion Polymerization Kinetics, 1 â€“ Polymerization Rate. Macromolecular Theory and Simulations, 2009, 18, 108-119.	0.6	39
43	RAFT Miniemulsion Polymerization Kinetics, 2 â€“ Molecular Weight Distribution. Macromolecular Theory and Simulations, 2009, 18, 120-126.	0.6	32
44	Fundamental Molecular Weight Distribution of RAFT Polymers. Macromolecular Reaction Engineering, 2008, 2, 371-381.	0.9	26
45	Kinetics of Controlled/Living Radical Polymerization in Emulsified Systems. Macromolecular Symposia, 2008, 261, 36-45.	0.4	26
46	Polymer Distribution Change During Irreversible Depolymerization by Chain-End Scission. Macromolecular Theory and Simulations, 2007, 16, 399-406.	0.6	9
47	Monte Carlo Simulation of Controlled/Living Radical Polymerization in Emulsified Systems. Macromolecular Theory and Simulations, 2007, 16, 476-488.	0.6	87
48	Kinetics of Stable Free Radical Mediated Polymerization inside Submicron Particles. Macromolecular Theory and Simulations, 2007, 16, 810-823.	0.6	45
49	Molecular Weight Distribution of Living Radical Polymers. Macromolecular Theory and Simulations, 2006, 15, 12-22.	0.6	51
50	Molecular Weight Distribution of Living Radical Polymers. Macromolecular Theory and Simulations, 2006, 15, 23-31.	0.6	39
51	Power-law distribution of molecular weights of nonlinear emulsion polymers. E-Polymers, 2005, 5, .	1.3	3
52	Scale-Free Power-Law Distribution of Emulsion-Polymerized Branched Polymers: Power Exponent of the Molecular Weight Distribution. Macromolecular Materials and Engineering, 2005, 290, 363-371.	1.7	11
53	Scale-free power-law distribution of branched polymers formed in a continuously stirred tank reactor: Simple relationship for the exponent. E-Polymers, 2004, 4, .	1.3	0
54	Heterochain model for simultaneous long-chain branching and crosslinking. I. Matrix formula for the weight-average molecular weights. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 2780-2790.	2.4	3

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55	Heterochain model for simultaneous long-chain branching and crosslinking. II. Application to free-radical polymerization. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 2791-2800.	2.4	5
56	Heterochain model for simultaneous long-chain branching and crosslinking. III. Multicomponent polymerization. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 2801-2812.	2.4	2
57	Scale-Free Power-Law Distribution of Emulsion-Polymerized Nonlinear Polymers:â€‰ Free-Radical Polymerization with Chain Transfer to Polymer. Macromolecules, 2004, 37, 585-589.	2.2	13
58	Scale-free power-law distribution of nonlinear polymers formed in a homeostatic system. E-Polymers, 2004, 4, .	1.3	0
59	Multivariate Composition Distribution in Free-Radical Multicomponent Polymerization, 1. Macromolecular Theory and Simulations, 2003, 12, 463-469.	0.6	8
60	Multivariate Composition Distribution in Free-Radical Multicomponent Polymerization, 2. Macromolecular Theory and Simulations, 2003, 12, 470-475.	0.6	4
61	Molecular Weight Development during Simultaneous Chain Scission, Long-Chain Branching and Crosslinking, 1. Macromolecular Theory and Simulations, 2003, 12, 24-31.	0.6	12
62	Molecular Weight Development during Simultaneous Chain Scission, Long-Chain Branching and Crosslinking, 2. Macromolecular Theory and Simulations, 2003, 12, 32-41.	0.6	23
63	Distribution of molecular weight and composition in diblock copolymers. E-Polymers, 2003, 3, .	1.3	0
64	Simulation of size exclusion chromatography for branched polymers formed by simultaneous long-chain branching and random scission. E-Polymers, 2002, 2, .	1.3	5
65	Bimodal molecular weight distribution formed in the emulsion polymerization of ethylene. Journal of Polymer Science Part A, 2002, 40, 3426-3433.	2.5	12
66	Dimensions of branched polymers formed in simultaneous long-chain branching and random scission. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 2960-2968.	2.4	34
67	Simultaneous long-chain branching and random scission: I. Monte Carlo simulation. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 391-403.	2.4	78
68	Simultaneous long-chain branching and random scission. II. Analytic expression for the weight-average molecular weights. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 404-414.	2.4	14
69	Molecular Weight Development in Free-Radical Polymerization with Polyfunctional Chain-Transfer Agents, 1. Equal Reactivity Model. Macromolecular Theory and Simulations, 2001, 10, 573-580.	0.6	4
70	Monte Carlo simulation of size exclusion chromatography for branched polymers formed through free-radical polymerization with chain transfer to polymer. Macromolecular Theory and Simulations, 2000, 9, 453-462.	0.6	26
71	Monte Carlo simulation of size exclusion chromatography for randomly branched and crosslinked polymers. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 2009-2018.	2.4	27
72	Postgel properties in the statistical crosslinking of heterochains. I. Systems withN types of chains. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 2333-2341.	2.4	3

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73	Postgel properties in the statistical crosslinking of heterochains. II. Free-radical crosslinking copolymerization. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 2342-2350.	2.4	4
74	Molecular weight distribution formed during free-radical polymerization in the presence of polyfunctional chain transfer agents. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 1267-1275.	2.4	4
75	Comb-Branched Polymer Formation During Copolymerization with Macromonomer. Polymer-Plastics Technology and Engineering, 1999, 7, 577-605.	0.7	3
76	Markovian approach to nonlinear polymer formation: Free-radical polymerization with chain transfer to polymer. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 357-371.	2.4	12
77	Structural requirements for gel formation. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 2015-2018.	2.4	20
78	General matrix formula for the weight-average molecular weights of crosslinked polymer systems. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 2423-2433.	2.4	13
79	Molecular weight distribution formed through chain-length-dependent crosslinking reactions. Macromolecular Theory and Simulations, 1998, 7, 225-232.	0.6	23
80	Markovian approach to nonlinear polymer formation: Free-radical crosslinking copolymerization. Macromolecular Theory and Simulations, 1998, 7, 675-684.	0.6	16
81	Copolymerization with Chain Transfer Monomer. 2. Molecular Weight Distribution. Macromolecules, 1997, 30, 1693-1700.	2.2	19
82	Production of Homogeneously Branched Polymers by Using a Chain-Transfer Monomer. Industrial & Engineering Chemistry Research, 1997, 36, 1181-1190.	1.8	3
83	Copolymerization with Chain Transfer Monomer. 1. Distribution of Branch Points. Macromolecules, 1997, 30, 1685-1692.	2.2	11
84	Statistical branching of heterochains. Macromolecular Theory and Simulations, 1997, 6, 451-465.	0.6	6
85	Statistical derivation of kinetic molecular weight development equations in nonlinear free-radical polymerization. Macromolecular Theory and Simulations, 1997, 6, 641-654.	0.6	3
86	Molecular weight distribution in nonlinear emulsion polymerization. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 1515-1532.	2.4	17
87	Random Degradation of Branched Polymers. 1. Star Polymers. Macromolecules, 1996, 29, 3000-3009.	2.2	37
88	Random Degradation of Branched Polymers. 2. Multiple Branches. Macromolecules, 1996, 29, 3010-3021.	2.2	43
89	Kinetics of Free-Radical Polymerization with Chain-Length-Dependent Bimolecular Termination under Unstationary Conditions. Macromolecules, 1996, 29, 3073-3080.	2.2	15
90	Random Sampling Technique To Predict the Molecular Weight Distribution in Free-Radical Polymerization That Involves Polyfunctional Chain Transfer Agents. Macromolecules, 1996, 29, 693-704.	2.2	28

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91	Random sampling technique to predict the molecular weight distribution in nonlinear polymerization. Macromolecular Theory and Simulations, 1996, 5, 1167-1194.	0.6	39
92	Molecular weight distribution in random branching of polymer chains. Macromolecular Theory and Simulations, 1996, 5, 129-144.	0.6	67
93	Branched structure formation in free radical polymerization of vinyl acetate. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 671-681.	2.4	27
94	Microgel formation in emulsion copolymerization. I. Polymerization without seed latex. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 1403-1413.	2.4	12
95	Microgel formation in emulsion copolymerization: 2. Seeded polymerization. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 1415-1422.	2.4	9
96	Polyradical distribution in free radical crosslinking of polymer chains. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 2099-2104.	2.4	18
97	Simulation model for the molecular weight distribution in emulsion polymerization. Journal of Polymer Science Part A, 1995, 33, 441-453.	2.5	26
98	Long-chain branching in free-radical polymerization due to chain transfer to polymer. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 841-853.	2.4	40
99	Molecular weight distribution in random crosslinking of polymer chains. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 1191-1202.	2.4	32
100	Kinetics of long-chain branching in emulsion polymerization: 1. Chain transfer to polymer. Polymer, 1994, 35, 3023-3031.	1.8	34
101	A simulation model for long-chain branching in vinyl acetate polymerization: 1. Batch polymerization. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 901-910.	2.4	34
102	A simulation model for long-chain branching in vinyl acetate polymerization: 2. Continuous polymerization in a stirred tank reactor. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 911-919.	2.4	35
103	Molecular weight distribution in random crosslinking of polymers: Modality of the molecular weight distribution. Macromolecular Theory and Simulations, 1994, 3, 1033-1049.	0.6	23
104	Network Formation in Emulsion Crosslinking Copolymerization. Macromolecules, 1994, 27, 3389-3396.	2.2	55
105	Molecular Weight Distribution in Emulsion Polymerization. Macromolecules, 1994, 27, 3804-3811.	2.2	62
106	Simulation model for network formation in free-radical crosslinking copolymerization: Pregelation period. Die Makromolekulare Chemie Theory and Simulations, 1993, 2, 761-776.	1.0	30
107	Molecular weight distribution in free radical polymerization with long-chain branching. Journal of Polymer Science, Part B: Polymer Physics, 1993, 31, 1363-1371.	2.4	87
108	Crosslinking kinetics in emulsion polymerization. Polymer International, 1993, 30, 177-183.	1.6	8

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109	Control of network structure in emulsion crosslinking copolymerization. Polymer International, 1993, 30, 195-201.	1.6	6
110	Kinetics of network formation in free-radical crosslinking copolymerization. Macromolecules, 1993, 26, 5427-5435.	2.2	41
111	Molecular weight distribution in free-radical crosslinking copolymerization. Macromolecules, 1993, 26, 836-841.	2.2	100
112	R&D Note: On the Calculation of Molecular Weight Distribution from the Moments Using Laguerre Polynomials. Polymer-Plastics Technology and Engineering, 1993, 1, 407-425.	0.7	23
113	Kinetics of Long-Chain Branching via Chain Transfer to Polymer: I. Branched Structure. Polymer-Plastics Technology and Engineering, 1993, 1, 357-378.	0.7	33
114	Crosslinking kinetics in emulsion copolymerization. Macromolecules, 1992, 25, 2671-2678.	2.2	57
115	Kinetics of free-radical copolymerization: the pseudo-kinetic rate constant method. Polymer, 1991, 32, 2641-2647.	1.8	81
116	Controllable Powerâ€Law Distribution in Freeâ€Radical Vinyl/Divinyl Copolymerization by Using a Continuous Stirred Tank Reactor. Macromolecular Theory and Simulations, 0, , 2100030.	0.6	2