Robert Gilbert

List of Publications by Year
in descending order

512 papers	27,953 citations	6486 82 h-index	11946 139 g-index
525 all docs	525 docs citations	525 times ranked	13645 citing authors

#	Article	IF	Citations
1	Polyaniline. Preparation of a conducting polymer(IUPAC Technical Report). Pure and Applied Chemistry, 2002, 74, 857-867.	0.9	1,175
2	Critically evaluated rate coefficients for free-radical polymerization, 1. Propagation rate coefficient for styrene. Macromolecular Chemistry and Physics, 1995, 196, 3267-3280.	1.1	617
3	Ab Initio Emulsion Polymerization by RAFT-Controlled Self-Assembly. Macromolecules, 2005, 38, 2191-2204.	2.2	592
4	Critically evaluated rate coefficients for free-radical polymerization, 2.. Propagation rate coefficients for methyl methacrylate. Macromolecular Chemistry and Physics, 1997, 198, 1545-1560.	1.1	524
5	Structure and physicochemical properties of octenyl succinic anhydride modified starches: A review. Carbohydrate Polymers, 2013, 92, 905-920.	5.1	484
6	Effective ab Initio Emulsion Polymerization under RAFT Control. Macromolecules, 2002, 35, 9243-9245.	2.2	394
7	The importance of amylose and amylopectin fine structure for textural properties of cooked rice grains. Food Chemistry, 2016, 196, 702-711.	4.2	363
8	Critically Evaluated Rate Coefficients for Free-Radical Polymerization, 5,. Macromolecular Chemistry and Physics, 2004, 205, 2151-2160.	1.1	360
9	Emulsion polymerization: State of the art in kinetics and mechanisms. Polymer, 2007, 48, 6965-6991.	1.8	350
10	Molecular Weight Characterization of Poly(N-isopropylacrylamide) Prepared by Living Free-Radical Polymerization. Macromolecules, 2000, 33, 6738-6745.	2.2	331
11	Entry of free radicals into latex particles in emulsion polymerization. Macromolecules, 1991, 24, 1629-1640.	2.2	308
12	Characterization of Starch by Size-Exclusion Chromatography: The Limitations Imposed by Shear Scission. Biomacromolecules, 2009, 10, 2245-2253.	2.6	308
13	Digestion of starch: In vivo and in vitro kinetic models used to characterise oligosaccharide or glucose release. Carbohydrate Polymers, 2010, 80, 599-617.	5.1	296
14	The importance of amylose and amylopectin fine structures for starch digestibility in cooked rice grains. Food Chemistry, 2013, 136, 742-749.	4.2	287
15	Critically evaluated rate coefficients for free-radical polymerization, 3. Propagation rate coefficients for alkyl methacrylates. Macromolecular Chemistry and Physics, 2000, 201, 1355-1364.	1.1	274
16	Synthesis of Anisotropic Nanoparticles by Seeded Emulsion Polymerization. Langmuir, 2006, 22, 4037-4043.	1.6	263
17	Mechanism of Degradation of Starch, a Highly Branched Polymer, during Extrusion. Macromolecules, 2010, 43, 2855-2864.	2.2	227
18	Effect of particle size on kinetics of starch digestion in milled barley and sorghum grains by porcine alpha-amylase. Journal of Cereal Science, 2009, 50, 198-204.	1.8	218

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19	Molecular Weight Distributions in Free-Radical Polymerizations. 1. Model Development and Implications for Data Interpretation. Macromolecules, 1995, 28, 552-569.	2.2	215
20	Characterization of branched polysaccharides using multipleâ€detection size separation techniques. Journal of Separation Science, 2010, 33, 3537-3554.	1.3	212
21	Terminology of polymers and polymerization processes in dispersed systems (IUPAC Recommendations) Tj ETQq1 1 0.784314 rgBT /Ov	0.9	206
22	A Priori Prediction of Propagation Rate Coefficients in Free-Radical Polymerizations: Propagation of Ethylene. Macromolecules, 1995, 28, 8771-8781.	2.2	205
23	Consistent values of rate parameters in free radical polymerization systems. II. Outstanding dilemmas and recommendations. Journal of Polymer Science Part A, 1992, 30, 851-863.	2.5	199
24	Amylose content in starches: Toward optimal definition and validating experimental methods. Carbohydrate Polymers, 2012, 88, 103-111.	5.1	196
25	Combined techniques for characterising pasta structure reveals how the gluten network slows enzymic digestion rate. Food Chemistry, 2015, 188, 559-568.	4.2	189
26	Coagulative nucleation and particle size distributions in emulsion polymerization. Macromolecules, 1984, 17, 2520-2529.	2.2	186
27	Starch molecular structure: The basis for an improved understanding of cooked rice texture. Carbohydrate Polymers, 2018, 195, 9-17.	5.1	182
28	Trajectory simulations of collisional energy transfer in highly excited benzene and hexafluorobenzene. Journal of Chemical Physics, 1995, 103, 626-641.	1.2	180
29	Critically Evaluated Termination Rate Coefficients for Free-Radical Polymerization, 1. Macromolecular Chemistry and Physics, 2002, 203, 2570-2582.	1.1	178
30	New ¹H NMR Procedure for the Characterization of Native and Modified Food-Grade Starches. Journal of Agricultural and Food Chemistry, 2011, 59, 6913-6919.	2.4	169
31	Exploring extraction/dissolution procedures for analysis of starch chain-length distributions. Carbohydrate Polymers, 2014, 114, 36-42.	5.1	169
32	How amylose molecular fine structure of rice starch affects functional properties. Carbohydrate Polymers, 2019, 204, 24-31.	5.1	167
33	Seeded emulsion polymerization of styrene. Journal of the Chemical Society Faraday Transactions I, 1980, 76, 1323.	1.0	164
34	Termination in free-radical polymerizing systems at high conversion. Macromolecules, 1988, 21, 2133-2140.	2.2	161
35	Two-Dimensional Size/Branch Length Distributions of a Branched Polymer. Macromolecules, 2010, 43, 7321-7329.	2.2	159
36	Classical trajectory studies of the reaction CH4+Hâ†'CH3+H2. Journal of Chemical Physics, 1995, 102, 5669-5682.	1.2	157

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37	Successful Use of RAFT Techniques in Seeded Emulsion Polymerization of Styrene:â€‰ Living Character, RAFT Agent Transport, and Rate of Polymerization. Macromolecules, 2002, 35, 5417-5425.	2.2	155
38	Chain-length-dependent termination rate processes in free-radical polymerizations. 1. Theory. Macromolecules, 1992, 25, 2459-2469.	2.2	153
39	Milling of Rice Grains. The Degradation on Three Structural Levels of Starch in Rice Flour Can Be Independently Controlled during Grinding. Journal of Agricultural and Food Chemistry, 2011, 59, 3964-3973.	2.4	144
40	Kinetics of emulsion polymerization of methyl methacrylate. Journal of Polymer Science: Polymer Chemistry Edition, 1984, 22, 3225-3253.	0.8	140
41	Pulsed-Laser Polymerization Measurements of the Propagation Rate Coefficient for Butyl Acrylate. Macromolecules, 1996, 29, 1918-1927.	2.2	140
42	Surfactant-free emulsion polymerizations: predictions of the coagulative nucleation theory. Macromolecules, 1987, 20, 2922-2930.	2.2	139
43	Measurement of Transfer Constant for Butyl Acrylate Free-Radical Polymerization. Macromolecules, 1998, 31, 4410-4418.	2.2	139
44	Physicochemical and structural properties of pregelatinized starch prepared by improved extrusion cooking technology. Carbohydrate Polymers, 2017, 175, 265-272.	5.1	138
45	The mechanisms of latex particle formation and growth in the emulsion polymerization of styrene using the surfactant sodium dodecyl sulfate. Journal of Polymer Science: Polymer Chemistry Edition, 1983, 21, 269-291.	0.8	137
46	Starchâ€"gluten interactions during gelatinization and its functionality in dough like model systems. Food Hydrocolloids, 2016, 54, 196-201.	5.6	137
47	Distribution of short to medium amylose chains are major controllers of in vitro digestion of retrograded rice starch. Food Hydrocolloids, 2019, 96, 634-643.	5.6	137
48	Variation in Amylose Fine Structure of Starches from Different Botanical Sources. Journal of Agricultural and Food Chemistry, 2014, 62, 4443-4453.	2.4	134
49	Critically Evaluated Rate Coefficients for Free-Radical Polymerization, 4. Macromolecular Chemistry and Physics, 2003, 204, 1338-1350.	1.1	130
50	Initiator efficiencies in high-conversion bulk polymerizations. Macromolecules, 1988, 21, 2141-2148.	2.2	127
51	In Vivo and In Vitro Starch Digestion: Are Current in Vitro Techniques Adequate?. Biomacromolecules, 2010, 11, 3600-3608.	2.6	127
52	RAFT in Emulsion Polymerization: What Makes it Different?. Australian Journal of Chemistry, 2002, 55, 415.	0.5	126
53	Reliable measurements of the size distributions of starch molecules in solution: Current dilemmas and recommendations. Carbohydrate Polymers, 2010, 79, 255-261.	5.1	126
54	A Parameterized Model of Amylopectin Synthesis Provides Key Insights into the Synthesis of Granular Starch. PLoS ONE, 2013, 8, e65768.	1.1	126

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55	Relations between Molecular, Crystalline, and Lamellar Structures of Amylopectin. Biomacromolecules, 2012, 13, 4273-4282.	2.6	124
56	Controlled Radical Polymerization in Aqueous Dispersed Media. Australian Journal of Chemistry, 2006, 59, 693.	0.5	123
57	Modelling particle size distributions and secondary particle formation in emulsion polymerisation. Polymer, 1998, 39, 7099-7112.	1.8	119
58	The adsorption of Î±-amylase on barley proteins affects the in vitro digestion of starch in barley flour. Food Chemistry, 2018, 241, 493-501.	4.2	118
59	High-amylose rice: Starch molecular structural features controlling cooked rice texture and preference. Carbohydrate Polymers, 2019, 219, 251-260.	5.1	117
60	Measurement of Diffusion Coefficients of Oligomeric Penetrants in Rubbery Polymer Matrixes. Macromolecules, 1998, 31, 7835-7844.	2.2	110
61	Molecular Weight and Functional End Group Control by RAFT Polymerization of a Bisubstituted Acrylamide Derivative. Macromolecules, 2003, 36, 621-629.	2.2	110
62	Mechanistic Information from Analysis of Molecular Weight Distributions of Starch. Biomacromolecules, 2005, 6, 2248-2259.	2.6	109
63	Shear degradation of molecular, crystalline, and granular structures of starch during extrusion. Starch/Staerke, 2014, 66, 595-605.	1.1	109
64	Critically-evaluated propagation rate coefficients in free radical polymerizations I. Styrene and methyl methacrylate (Technical Report). Pure and Applied Chemistry, 1996, 68, 1491-1494.	0.9	108
65	Instrumental measurement of cooked rice texture by dynamic rheological testing and its relation to the fine structure of rice starch. Carbohydrate Polymers, 2016, 146, 253-263.	5.1	108
66	The Direct Determination of Kinetic Parameters in Emulsion Polymerization Systems. Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics, 1983, 23, 127-186.	2.2	106
67	Relationships between amylopectin molecular structures andÂfunctional properties of different-sized fractions of normal andÂhigh-amylose maize starches. Food Hydrocolloids, 2016, 52, 359-368.	5.6	105
68	The molecular structural features controlling stickiness in cooked rice, a major palatability determinant. Scientific Reports, 2017, 7, 43713.	1.6	101
69	Mechanisms for supercollisions. Faraday Discussions, 1995, 102, 423.	1.6	99
70	Propagation rate coefficients from electron spin resonance studies of the emulsion polymerization of methyl methacrylate. Macromolecules, 1986, 19, 1303-1308.	2.2	98
71	Mathematical modeling of emulsion copolymerization reactors. Journal of Applied Polymer Science, 1989, 37, 2727-2756.	1.3	98
72	Chain-length-dependent termination rate processes in free-radical polymerizations. 2. Modeling methodology and application to methyl methacrylate emulsion polymerizations. Macromolecules, 1993, 26, 3538-3552.	2.2	98

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73	Determination of Arrhenius Parameters for Propagation in Free-Radical Polymerizations:â€‰ An Assessment of ab Initio Procedures. The Journal of Physical Chemistry, 1996, 100, 18997-19006.	2.9	95
74	Measurement of the Molecular Weight Distribution of Debranched Starch. Biomacromolecules, 2005, 6, 2260-2270.	2.6	94
75	Molecular Weight Distributions of Starch Branches Reveal Genetic Constraints on Biosynthesis. Biomacromolecules, 2010, 11, 3539-3547.	2.6	94
76	Theory of Multiple-Detection Size-Exclusion Chromatography of Complex Branched Polymers. Macromolecular Theory and Simulations, 2007, 16, 13-28.	0.6	93
77	Assessment of the Extent of Starch Dissolution in Dimethyl Sulfoxide by ¹H NMR Spectroscopy. Macromolecular Bioscience, 2009, 9, 506-514.	2.1	91
78	Dendrobium officinale polysaccharide ameliorates diabetic hepatic glucose metabolism via glucagon-mediated signaling pathways and modifying liver-glycogen structure. Journal of Ethnopharmacology, 2020, 248, 112308.	2.0	91
79	Improved methodology for analyzing relations between starch digestion kinetics and molecular structure. Food Chemistry, 2018, 264, 284-292.	4.2	87
80	Using starch molecular fine structure to understand biosynthesis-structure-property relations. Trends in Food Science and Technology, 2019, 86, 530-536.	7.8	86
81	Parameterizing amylose chain-length distributions for biosynthesis-structure-property relations. Analytical and Bioanalytical Chemistry, 2017, 409, 6813-6819.	1.9	84
82	Relationships between protein content, starch molecular structure and grain size in barley. Carbohydrate Polymers, 2017, 155, 271-279.	5.1	84
83	Synthesis and properties of composites of starch and chemically modified natural rubber. Polymer, 2004, 45, 7813-7820.	1.8	83
84	Pulsed laser polymerization study of the propagation kinetics of acrylamide in water. Journal of Polymer Science Part A, 2005, 43, 1357-1368.	2.5	83
85	A Kinetic Investigation of Seeded Emulsion Polymerization of Styrene Using Reversible Additionâˆ’Fragmentation Chain Transfer (RAFT) Agents with a Low Transfer Constant. Macromolecules, 2003, 36, 4309-4318.	2.2	82
86	Improved Methods for the Structural Analysis of the Amylose-Rich Fraction from Rice Flour. Biomacromolecules, 2006, 7, 866-876.	2.6	81
87	Angular momentum conservation in unimolecular and recombination reactions. International Journal of Chemical Kinetics, 1988, 20, 307-329.	1.0	79
88	Fokker-Planck interpretation of picosecond intramolecular dynamics in solutions. Chemical Physics, 1979, 44, 389-402.	0.9	78
89	Starch Digestion Mechanistic Information from the Time Evolution of Molecular Size Distributions. Journal of Agricultural and Food Chemistry, 2010, 58, 8444-8452.	2.4	78
90	Chain Transfer to Monomer in the Free-Radical Polymerizations of Methyl Methacrylate, Styrene, and Î±-Methylstyrene. Macromolecules, 1998, 31, 994-999.	2.2	77

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91	Separation of complex branched polymers by size-exclusion chromatography probed with multiple detection. Journal of Chromatography A, 2008, 1190, 215-223.	1.8	77
92	Polymerization within styrene emulsion droplets. Journal of the Chemical Society Faraday Transactions I, 1982, 78, 591.	1.0	75
93	Propagation Rate Coefficient of Poly(N-isopropylacrylamide) in Water below Its Lower Critical Solution Temperature. Macromolecules, 2000, 33, 8589-8596.	2.2	75
94	Operation of semi-batch emulsion polymerisation reactors: Modelling, validation and effect of operating conditions. Chemical Engineering Science, 2002, 57, 2955-2969.	1.9	75
95	The biosynthesis, structure and gelatinization properties of starches from wild and cultivated African rice species (Oryza barthii and Oryza glaberrima). Carbohydrate Polymers, 2015, 129, 92-100.	5.1	75
96	Compact structure and proteins of pasta retard in vitro digestive evolution of branched starch molecular structure. Carbohydrate Polymers, 2016, 152, 441-449.	5.1	75
97	Altering starch branching enzymes in wheat generates high-amylose starch with novel molecular structure and functional properties. Food Hydrocolloids, 2019, 92, 51-59.	5.6	75
98	Trajectory simulations of collisional energy transfer of highly vibrationally excited azulene. The Journal of Physical Chemistry, 1990, 94, 77-84.	2.9	74
99	Nature of Î± and Î² Particles in Glycogen Using Molecular Size Distributions. Biomacromolecules, 2010, 11, 1094-1100.	2.6	72
100	Effects of pectin on molecular structural changes in starch during digestion. Food Hydrocolloids, 2017, 69, 10-18.	5.6	72
101	Electrosteric Stabilization with Poly(Acrylic) Acid in Emulsion Polymerization:â€‰ Effect on Kinetics and Secondary Particle Formation. Macromolecules, 2000, 33, 6693-6703.	2.2	71
102	Effect of surfactants used for binder synthesis on the properties of latex paints. Progress in Organic Coatings, 2005, 53, 112-118.	1.9	70
103	Transition-State Theory Model for the Diffusion Coefficients of Small Penetrants in Glassy Polymers. Macromolecules, 1997, 30, 7296-7306.	2.2	69
104	Relaxation studies of the seeded emulsion polymerization of styrene initiated by Î³-radiolysis. Journal of the Chemical Society Faraday Transactions I, 1980, 76, 1344.	1.0	68
105	Penultimate Unit Effect in Free-Radical Copolymerization. Macromolecules, 1997, 30, 726-736.	2.2	68
106	Mechanistic Investigation of a Starch-Branching Enzyme Using Hydrodynamic Volume SEC Analysis. Biomacromolecules, 2008, 9, 954-965.	2.6	67
107	Effects of Poly(acrylic acid) Electrosteric Stabilizer on Entry and Exit in Emulsion Polymerization. Macromolecules, 1996, 29, 5128-5135.	2.2	66
108	The relationship between recombination, chemical activation and unimolecular dissociation rate coefficients. Journal of Chemical Physics, 1989, 90, 4265-4273.	1.2	64

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109	Molecular weight distribution in emulsion polymerizations. Journal of Polymer Science: Polymer Chemistry Edition, 1980, 18, 1297-1323.	0.8	63
110	Calculation of collisional-energy-transfer rates in highly excited molecules. The Journal of Physical Chemistry, 1990, 94, 72-77.	2.9	63
111	Diffusion and viscosity in arabinoxylan solutions: Implications for nutrition. Carbohydrate Polymers, 2010, 82, 46-53.	5.1	63
112	Molecular Watchmaking:ab initio Emulsion Polymerization by RAFT-controlled Self-assembly. Macromolecular Symposia, 2005, 231, 84-93.	0.4	62
113	Collisional energy exchange in highly vibrationally excited molecules: The biased random walk model. Journal of Chemical Physics, 1984, 80, 5501-5509.	1.2	61
114	Supercollision events in weak collisional energy transfer of highly excited species. Chemical Physics Letters, 1991, 182, 357-362.	1.2	61
115	Diffusion of oligomeric species in polymer solutions. Macromolecules, 1993, 26, 4472-4477.	2.2	61
116	Modification of Natural Rubber by Grafting with Hydrophilic Vinyl Monomers. Macromolecular Chemistry and Physics, 2005, 206, 2450-2460.	1.1	61
117	Radical Loss in RAFT-Mediated Emulsion Polymerizations. Macromolecules, 2005, 38, 4901-4912.	2.2	61
118	High-amylose wheat starch: Structural basis for water absorption and pasting properties. Carbohydrate Polymers, 2020, 245, 116557.	5.1	61
119	The effects of processing and organoclay properties on the structure of poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 342	1.8	60
120	Starch reâ€crystallization kinetics as a function of various cations. Starch/Staerke, 2011, 63, 792-800.	1.1	60
121	Entry in Emulsion Polymerization:Â Effects of Initiator and Particle Surface Charge. Macromolecules, 2003, 36, 3921-3931.	2.2	59
122	What Is Being Learned About Starch Properties from Multipleâ€Level Characterization. Cereal Chemistry, 2013, 90, 312-325.	1.1	59
123	Roles of GBSSI and SSIIa in determining amylose fine structure. Carbohydrate Polymers, 2015, 127, 264-274.	5.1	59
124	The a priori calculation of collisional energy transfer in highly vibrationally excited molecules: The biased random walk model. Journal of Chemical Physics, 1986, 84, 6129-6140.	1.2	58
125	Propagation rate coefficient of acrylic acid: theoretical investigation of the solvent effect. Polymer, 2004, 45, 6993-6999.	1.8	57
126	First-principles calculation of particle formation in emulsion polymerization: pseudo-bulk systems. Polymer, 2004, 45, 3595-3608.	1.8	56

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127	Characterization Methods for Starch-Based Materials: State of the Art and Perspectives. Australian Journal of Chemistry, 2013, 66, 1550.	0.5	56
128	Effect of pulsed electrical fields on the structural properties that affect french fry texture during processing. Trends in Food Science and Technology, 2017, 67, 1-11.	7.8	56
129	Modeling collisional energy transfer in highly excited molecules. Journal of Chemical Physics, 1990, 92, 1819-1830.	1.2	55
130	Synthesis of Comblike Poly(butyl methacrylate) Using Reversible Additionâ˘'Fragmentation Chain Transfer and an Activated Ester. Macromolecules, 2004, 37, 2371-2382.	2.2	55
131	Effect of polymerization kinetics on particle morphology in heterogeneous systems. Macromolecules, 1990, 23, 4247-4257.	2.2	54
132	Free radical exit in emulsion polymerization. I. Theoretical model. Journal of Polymer Science Part A, 1994, 32, 605-630.	2.5	54
133	Modification of Natural and Artificial Polymer Colloids by â€œTopology-Controlledâ€•Emulsion Polymerization. Biomacromolecules, 2001, 2, 518-525.	2.6	54
134	Biodegradation of starch films: The roles of molecular and crystalline structure. Carbohydrate Polymers, 2015, 122, 115-122.	5.1	54
135	Molecular Weight Distributions in Emulsion Polymerizations: Evidence for Coagulative Nucleation. Australian Journal of Chemistry, 1991, 44, 1133.	0.5	54
136	Solvent effects on the propagation rate coefficient for free radical polymerization. Macromolecules, 1993, 26, 4368-4372.	2.2	53
137	A more general approach to fitting digestion kinetics of starch in food. Carbohydrate Polymers, 2019, 225, 115244.	5.1	53
138	Chain-Length-Dependent Termination Rate Processes in Free-Radical Polymerizations. 3. Styrene Polymerizations with and without Added Inert Diluent as an Experimental Test of Model. Macromolecules, 1995, 28, 3637-3649.	2.2	52
139	A Theoretical Study of Propagation Rate Coefficients for Methacrylonitrile and Acrylonitrile. Macromolecules, 1998, 31, 5175-5187.	2.2	52
140	Fecal microbiota responses to rice RS3 are specific to amylose molecular structure. Carbohydrate Polymers, 2020, 243, 116475.	5.1	52
141	Entry rate coefficients in emulsion polymerization systems. Journal of the Chemical Society Faraday Transactions I, 1986, 82, 2247.	1.0	51
142	Kinetics of particle growth in emulsion polymerization systems with surface-active initiators. Macromolecules, 1992, 25, 7043-7050.	2.2	51
143	Synthesis of latices with polystyrene cores and poly(vinyl acetate) shells. 1. Use of polystyrene seeds. Polymer, 2002, 43, 6371-6382.	1.8	51
144	Effect of a gibberellin-biosynthesis inhibitor treatment on the physicochemical properties of sorghum starch. Journal of Cereal Science, 2011, 53, 328-334.	1.8	51

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145	Measurement of propagation rate coefficients using pulsed-laser polymerization and matrix-assisted laser desorption/ionization mass spectrometry. Macromolecules, 1993, 26, 6684-6685.	2.2	50
146	Free radical exit in emulsion polymerization. II. Model discrimination via experiment. Journal of Polymer Science Part A, 1994, 32, 631-649.	2.5	50
147	Kinetic aspects of the emulsion polymerization of butadiene. Macromolecules, 1991, 24, 1622-1628.	2.2	49
148	Effect of surfactant systems on the water sensitivity of latex films. Journal of Applied Polymer Science, 2004, 92, 1813-1823.	1.3	49
149	Causal Relations Among Starch Biosynthesis, Structure, and Properties. Springer Science Reviews, 2014, 2, 15-33.	1.3	49
150	The role of thermostable proteinaceous Î±-amylase inhibitors in slowing starch digestion in pasta. Food Hydrocolloids, 2019, 90, 241-247.	5.6	49
151	Gas/gas and gas/wall average energy transfer from very low-pressure pyrolysis. Chemical Physics, 1980, 49, 367-375.	0.9	48
152	Bimolecular termination events in the seeded emulsion polymerization of styrene. Macromolecules, 1990, 23, 4624-4634.	2.2	48
153	Theory of collisional energy transfer of highly excited molecules. International Reviews in Physical Chemistry, 1991, 10, 319-347.	0.9	48
154	Collisional energy transfer in highly excited molecules: Calculations of the dependence on temperature and internal, rotational, and translational energy. Journal of Chemical Physics, 1992, 96, 5983-5998.	1.2	48
155	The role of aqueous-phase kinetics in emulsion polymerizations. Progress in Polymer Science, 1993, 18, 1041-1096.	11.8	48
156	Catalytic chain transfer for molecular weight control in the emulsion homo- and copolymerizations of methyl methacrylate and butyl methacrylate. Journal of Polymer Science Part A, 1997, 35, 859-878.	2.5	48
157	Size-separation characterization of starch and glycogen for biosynthesisâ€“structureâ€“property relationships. Analytical and Bioanalytical Chemistry, 2011, 399, 1425-1438.	1.9	48
158	Mechanistic understanding of the relationships between molecular structure and emulsification properties of octenyl succinic anhydride (OSA) modified starches. Food Hydrocolloids, 2018, 74, 168-175.	5.6	48
159	Relations between changes in starch molecular fine structure and in thermal properties during rice grain storage. Food Chemistry, 2019, 295, 484-492.	4.2	48
160	Termination-rate coefficients in methyl methacrylate polymerizations. Journal of Polymer Science Part A, 1986, 24, 1027-1041.	2.5	47
161	Rigorous derivation of reaction path degeneracy in transition state theory. Chemical Physics Letters, 1992, 193, 181-184.	1.2	47
162	Pulsed laser study of the propagation kinetics of acrylamide and its derivatives in water. Macromolecules, 1993, 26, 4572-4576.	2.2	47

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163	Application of Transition-State Theory to Gas-Surface Reactions: Barrierless Adsorption on Clean Surfaces. The Journal of Physical Chemistry, 1994, 98, 13001-13010.	2.9	47
164	The influence of macromolecular architecture on the critical aggregation concentration of large amphiphilic starch derivatives. Food Hydrocolloids, 2013, 31, 365-374.	5.6	47
165	Consistent values of rate parameters in free radical polymerization systems (Technical Report). Pure and Applied Chemistry, 1992, 64, 1563-1567.	0.9	46
166	Modelling secondary particle formation in emulsion polymerisation: application to making coreâ€“shell morphologies. Polymer, 2002, 43, 4557-4570.	1.8	46
167	Molecular structure of glycogen in diabetic liver. Glycoconjugate Journal, 2015, 32, 113-118.	1.4	46
168	SEC Analysis of Poly(Acrylic Acid) and Poly(Methacrylic Acid). Macromolecular Chemistry and Physics, 2015, 216, 23-37.	1.1	46
169	Diffusion and rheology characteristics of barley mixed linkage Î²-glucan and possible implications for digestion. Carbohydrate Polymers, 2011, 86, 1732-1738.	5.1	45
170	Changes in Glycogen Structure over Feeding Cycle Sheds New Light on Blood-Glucose Control. Biomacromolecules, 2014, 15, 660-665.	2.6	45
171	New insights into amylose and amylopectin biosynthesis in rice endosperm. Carbohydrate Polymers, 2020, 230, 115656.	5.1	45
172	Pulsed laser study of the propagation kinetics of acrylamide and methacrylamide in water. Macromolecules, 1990, 23, 5161-5163.	2.2	44
173	Transfer constants from complete molecular weight distributions. Macromolecular Chemistry and Physics, 1996, 197, 403-412.	1.1	44
174	Molecular Weight Distributions in Free-Radical Polymerizations. 2. Low-Conversion Bulk Polymerization. Macromolecules, 1997, 30, 1935-1946.	2.2	44
175	Molecular Weight Distributions and Chain-Stopping Events in the Free-Radical Polymerization of Methyl Methacrylate. Macromolecules, 2005, 38, 3214-3224.	2.2	44
176	Rate Optimization in Controlled Radical Emulsion Polymerization Using RAFT. Macromolecular Theory and Simulations, 2006, 15, 70-86.	0.6	44
177	The effects of the chain-length distributions of starch molecules on rheological and thermal properties of wheat flour paste. Food Hydrocolloids, 2020, 101, 105563.	5.6	44
178	Acid Hydrolysis and Molecular Density of Phytoglycogen and Liver Glycogen Helps Understand the Bonding in Glycogen Î± (Composite) Particles. PLoS ONE, 2015, 10, e0121337.	1.1	44
179	Emulsion polymerization of butyl acrylate. Kinetics of particle growth. Journal of the Chemical Society Faraday Transactions I, 1987, 83, 1449.	1.0	43
180	Effect of branching and molecular weight on the viscoelastic properties of poly(butyl acrylate). Journal of Polymer Science Part A, 2002, 40, 3335-3349.	2.5	43

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181	A new NMR method for directly monitoring and quantifying the dissolution kinetics of starch in DMSO. Carbohydrate Research, 2007, 342, 2604-2610.	1.1	43
182	Toward a full characterization of native starch: Separation and detection by size-exclusion chromatography. Journal of Chromatography A, 2008, 1205, 60-70.	1.8	43
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