Robert G Gilbert

List of Publications by Year
in descending order

431 papers	24,251 citations	7069 78 h-index	12910 131 g-index
440 all docs	440 docs citations	440 times ranked	9849 citing authors

#	Article	IF	Citations
1	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
2	Ab Initio Emulsion Polymerization by RAFT-Controlled Self-Assembly. Macromolecules, 2005, 38, 2191-2204.	2.2	592
3	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
4	Structure and physicochemical properties of octenyl succinic anhydride modified starches: A review. Carbohydrate Polymers, 2013, 92, 905-920.	5.1	484
5	Effective ab Initio Emulsion Polymerization under RAFT Control. Macromolecules, 2002, 35, 9243-9245.	2.2	394
6	The importance of amylose and amylopectin fine structure for textural properties of cooked rice grains. Food Chemistry, 2016, 196, 702-711.	4.2	363
7	Critically Evaluated Rate Coefficients for Free-Radical Polymerization, 5,. Macromolecular Chemistry and Physics, 2004, 205, 2151-2160.	1.1	360
8	Emulsion polymerization: State of the art in kinetics and mechanisms. Polymer, 2007, 48, 6965-6991.	1.8	350
9	Molecular Weight Characterization of Poly(N-isopropylacrylamide) Prepared by Living Free-Radical Polymerization. Macromolecules, 2000, 33, 6738-6745.	2.2	331
10	Entry of free radicals into latex particles in emulsion polymerization. Macromolecules, 1991, 24, 1629-1640.	2.2	308
11	Characterization of Starch by Size-Exclusion Chromatography: The Limitations Imposed by Shear Scission. Biomacromolecules, 2009, 10, 2245-2253.	2.6	308
12	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
13	The importance of amylose and amylopectin fine structures for starch digestibility in cooked rice grains. Food Chemistry, 2013, 136, 742-749.	4.2	287
14	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
15	Synthesis of Anisotropic Nanoparticles by Seeded Emulsion Polymerization. Langmuir, 2006, 22, 4037-4043.	1.6	263
16	Mechanism of Degradation of Starch, a Highly Branched Polymer, during Extrusion. Macromolecules, 2010, 43, 2855-2864.	2.2	227
17	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
18	Molecular Weight Distributions in Free-Radical Polymerizations. 1. Model Development and Implications for Data Interpretation. Macromolecules, 1995, 28, 552-569.	2.2	215

#	Article	IF	Citations
19	Characterization of branched polysaccharides using multipleâ€detection size separation techniques. Journal of Separation Science, 2010, 33, 3537-3554.	1.3	212
20	A Priori Prediction of Propagation Rate Coefficients in Free-Radical Polymerizations: Propagation of Ethylene. Macromolecules, 1995, 28, 8771-8781.	2.2	205
21	Amylose content in starches: Toward optimal definition and validating experimental methods. Carbohydrate Polymers, 2012, 88, 103-111.	5.1	196
22	Combined techniques for characterising pasta structure reveals how the gluten network slows enzymic digestion rate. Food Chemistry, 2015, 188, 559-568.	4.2	189
23	Coagulative nucleation and particle size distributions in emulsion polymerization. Macromolecules, 1984, 17, 2520-2529.	2.2	186
24	Starch molecular structure: The basis for an improved understanding of cooked rice texture. Carbohydrate Polymers, 2018, 195, 9-17.	5.1	182
25	Trajectory simulations of collisional energy transfer in highly excited benzene and hexafluorobenzene. Journal of Chemical Physics, 1995, 103, 626-641.	1.2	180
26	Critically Evaluated Termination Rate Coefficients for Free-Radical Polymerization, 1. Macromolecular Chemistry and Physics, 2002, 203, 2570-2582.	1.1	178
27	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
28	Exploring extraction/dissolution procedures for analysis of starch chain-length distributions. Carbohydrate Polymers, 2014, 114, 36-42.	5.1	169
29	How amylose molecular fine structure of rice starch affects functional properties. Carbohydrate Polymers, 2019, 204, 24-31.	5.1	167
30	Seeded emulsion polymerization of styrene. Journal of the Chemical Society Faraday Transactions I, 1980, 76, 1323.	1.0	164
31	Termination in free-radical polymerizing systems at high conversion. Macromolecules, 1988, 21, 2133-2140.	2.2	161
32	Two-Dimensional Size/Branch Length Distributions of a Branched Polymer. Macromolecules, 2010, 43, 7321-7329.	2.2	159
33	Classical trajectory studies of the reaction CH4+Hâ†’CH3+H2. Journal of Chemical Physics, 1995, 102, 5669-5682.	1.2	157
34	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
35	Chain-length-dependent termination rate processes in free-radical polymerizations. 1. Theory. Macromolecules, 1992, 25, 2459-2469.	2.2	153
36	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

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37	Kinetics of emulsion polymerization of methyl methacrylate. Journal of Polymer Science: Polymer Chemistry Edition, 1984, 22, 3225-3253.	0.8	140
38	Pulsed-Laser Polymerization Measurements of the Propagation Rate Coefficient for Butyl Acrylate. Macromolecules, 1996, 29, 1918-1927.	2.2	140
39	Surfactant-free emulsion polymerizations: predictions of the coagulative nucleation theory. Macromolecules, 1987, 20, 2922-2930.	2.2	139
40	Measurement of Transfer Constant for Butyl Acrylate Free-Radical Polymerization. Macromolecules, 1998, 31, 4410-4418.	2.2	139
41	Physicochemical and structural properties of pregelatinized starch prepared by improved extrusion cooking technology. Carbohydrate Polymers, 2017, 175, 265-272.	5.1	138
42	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
43	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
44	Variation in Amylose Fine Structure of Starches from Different Botanical Sources. Journal of Agricultural and Food Chemistry, 2014, 62, 4443-4453.	2.4	134
45	Critically Evaluated Rate Coefficients for Free-Radical Polymerization, 4. Macromolecular Chemistry and Physics, 2003, 204, 1338-1350.	1.1	130
46	Initiator efficiencies in high-conversion bulk polymerizations. Macromolecules, 1988, 21, 2141-2148.	2.2	127
47	In Vivo and In Vitro Starch Digestion: Are Current in Vitro Techniques Adequate?. Biomacromolecules, 2010, 11, 3600-3608.	2.6	127
48	Reliable measurements of the size distributions of starch molecules in solution: Current dilemmas and recommendations. Carbohydrate Polymers, 2010, 79, 255-261.	5.1	126
49	A Parameterized Model of Amylopectin Synthesis Provides Key Insights into the Synthesis of Granular Starch. PLoS ONE, 2013, 8, e65768.	1.1	126
50	Relations between Molecular, Crystalline, and Lamellar Structures of Amylopectin. Biomacromolecules, 2012, 13, 4273-4282.	2.6	124
51	Controlled Radical Polymerization in Aqueous Dispersed Media. Australian Journal of Chemistry, 2006, 59, 693.	0.5	123
52	Modelling particle size distributions and secondary particle formation in emulsion polymerisation. Polymer, 1998, 39, 7099-7112.	1.8	119
53	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
54	High-amylose rice: Starch molecular structural features controlling cooked rice texture and preference. Carbohydrate Polymers, 2019, 219, 251-260.	5.1	117

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55	Measurement of Diffusion Coefficients of Oligomeric Penetrants in Rubbery Polymer Matrixes. Macromolecules, 1998, 31, 7835-7844.	2.2	110
56	Molecular Weight and Functional End Group Control by RAFT Polymerization of a Bisubstituted Acrylamide Derivative. Macromolecules, 2003, 36, 621-629.	2.2	110
57	Mechanistic Information from Analysis of Molecular Weight Distributions of Starch. Biomacromolecules, 2005, 6, 2248-2259.	2.6	109
58	Shear degradation of molecular, crystalline, and granular structures of starch during extrusion. Starch/Staerke, 2014, 66, 595-605.	1.1	109
59	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
60	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
61	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
62	The molecular structural features controlling stickiness in cooked rice, a major palatability determinant. Scientific Reports, 2017, 7, 43713.	1.6	101
63	Propagation rate coefficients from electron spin resonance studies of the emulsion polymerization of methyl methacrylate. Macromolecules, 1986, 19, 1303-1308.	2.2	98
64	Mathematical modeling of emulsion copolymerization reactors. Journal of Applied Polymer Science, 1989, 37, 2727-2756.	1.3	98
65	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
66	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
67	Measurement of the Molecular Weight Distribution of Debranched Starch. Biomacromolecules, 2005, 6, 2260-2270.	2.6	94
68	Molecular Weight Distributions of Starch Branches Reveal Genetic Constraints on Biosynthesis. Biomacromolecules, 2010, 11, 3539-3547.	2.6	94
69	Theory of Multiple-Detection Size-Exclusion Chromatography of Complex Branched Polymers. Macromolecular Theory and Simulations, 2007, 16, 13-28.	0.6	93
70	Assessment of the Extent of Starch Dissolution in Dimethyl Sulfoxide by ¹H NMR Spectroscopy. Macromolecular Bioscience, 2009, 9, 506-514.	2.1	91
71	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
72	Improved methodology for analyzing relations between starch digestion kinetics and molecular structure. Food Chemistry, 2018, 264, 284-292.	4.2	87

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73	Using starch molecular fine structure to understand biosynthesis-structure-property relations. Trends in Food Science and Technology, 2019, 86, 530-536.	7.8	86
74	Parameterizing amylose chain-length distributions for biosynthesis-structure-property relations. Analytical and Bioanalytical Chemistry, 2017, 409, 6813-6819.	1.9	84
75	Relationships between protein content, starch molecular structure and grain size in barley. Carbohydrate Polymers, 2017, 155, 271-279.	5.1	84
76	Synthesis and properties of composites of starch and chemically modified natural rubber. Polymer, 2004, 45, 7813-7820.	1.8	83
77	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
78	A Kinetic Investigation of Seeded Emulsion Polymerization of Styrene Using Reversible Additionâ˘'Fragmentation Chain Transfer (RAFT) Agents with a Low Transfer Constant. Macromolecules, 2003, 36, 4309-4318.	2.2	82
79	Improved Methods for the Structural Analysis of the Amylose-Rich Fraction from Rice Flour. Biomacromolecules, 2006, 7, 866-876.	2.6	81
80	Angular momentum conservation in unimolecular and recombination reactions. International Journal of Chemical Kinetics, 1988, 20, 307-329.	1.0	79
81	Fokker-Planck interpretation of picosecond intramolecular dynamics in solutions. Chemical Physics, 1979, 44, 389-402.	0.9	78
82	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
83	Chain Transfer to Monomer in the Free-Radical Polymerizations of Methyl Methacrylate, Styrene, and Î±-Methylstyrene. Macromolecules, 1998, 31, 994-999.	2.2	77
84	Separation of complex branched polymers by size-exclusion chromatography probed with multiple detection. Journal of Chromatography A, 2008, 1190, 215-223.	1.8	77
85	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
86	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
87	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
88	Trajectory simulations of collisional energy transfer of highly vibrationally excited azulene. The Journal of Physical Chemistry, 1990, 94, 77-84.	2.9	74
89	Nature of Î± and Î² Particles in Glycogen Using Molecular Size Distributions. Biomacromolecules, 2010, 11, 1094-1100.	2.6	72
90	Effects of pectin on molecular structural changes in starch during digestion. Food Hydrocolloids, 2017, 69, 10-18.	5.6	72

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91	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
92	Effect of surfactants used for binder synthesis on the properties of latex paints. Progress in Organic Coatings, 2005, 53, 112-118.	1.9	70
93	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
94	Penultimate Unit Effect in Free-Radical Copolymerization. Macromolecules, 1997, 30, 726-736.	2.2	68
95	Mechanistic Investigation of a Starch-Branching Enzyme Using Hydrodynamic Volume SEC Analysis. Biomacromolecules, 2008, 9, 954-965.	2.6	67
96	Effects of Poly(acrylic acid) Electrosteric Stabilizer on Entry and Exit in Emulsion Polymerization. Macromolecules, 1996, 29, 5128-5135.	2.2	66
97	The relationship between recombination, chemical activation and unimolecular dissociation rate coefficients. Journal of Chemical Physics, 1989, 90, 4265-4273.	1.2	64
98	Molecular weight distribution in emulsion polymerizations. Journal of Polymer Science: Polymer Chemistry Edition, 1980, 18, 1297-1323.	0.8	63
99	Calculation of collisional-energy-transfer rates in highly excited molecules. The Journal of Physical Chemistry, 1990, 94, 72-77.	2.9	63
100	Diffusion and viscosity in arabinoxylan solutions: Implications for nutrition. Carbohydrate Polymers, 2010, 82, 46-53.	5.1	63
101	Molecular Watchmaking:ab initio Emulsion Polymerization by RAFT-controlled Self-assembly. Macromolecular Symposia, 2005, 231, 84-93.	0.4	62
102	Collisional energy exchange in highly vibrationally excited molecules: The biased random walk model. Journal of Chemical Physics, 1984, 80, 5501-5509.	1.2	61
103	Supercollision events in weak collisional energy transfer of highly excited species. Chemical Physics Letters, 1991, 182, 357-362.	1.2	61
104	Diffusion of oligomeric species in polymer solutions. Macromolecules, 1993, 26, 4472-4477.	2.2	61
105	Modification of Natural Rubber by Grafting with Hydrophilic Vinyl Monomers. Macromolecular Chemistry and Physics, 2005, 206, 2450-2460.	1.1	61
106	Radical Loss in RAFT-Mediated Emulsion Polymerizations. Macromolecules, 2005, 38, 4901-4912.	2.2	61
107	High-amylose wheat starch: Structural basis for water absorption and pasting properties. Carbohydrate Polymers, 2020, 245, 116557.	5.1	61
108	Entry in Emulsion Polymerization:Â Effects of Initiator and Particle Surface Charge. Macromolecules, 2003, 36, 3921-3931.	2.2	59

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109	What Is Being Learned About Starch Properties from Multipleâ€Level Characterization. Cereal Chemistry, 2013, 90, 312-325.	1.1	59
110	Roles of GBSSI and SSIIa in determining amylose fine structure. Carbohydrate Polymers, 2015, 127, 264-274.	5.1	59
111	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
112	Propagation rate coefficient of acrylic acid: theoretical investigation of the solvent effect. Polymer, 2004, 45, 6993-6999.	1.8	57
113	First-principles calculation of particle formation in emulsion polymerization: pseudo-bulk systems. Polymer, 2004, 45, 3595-3608.	1.8	56
114	Characterization Methods for Starch-Based Materials: State of the Art and Perspectives. Australian Journal of Chemistry, 2013, 66, 1550.	0.5	56
115	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
116	Modeling collisional energy transfer in highly excited molecules. Journal of Chemical Physics, 1990, 92, 1819-1830.	1.2	55
117	Synthesis of Comblike Poly(butyl methacrylate) Using Reversible Additionâ^'Fragmentation Chain Transfer and an Activated Ester. Macromolecules, 2004, 37, 2371-2382.	2.2	55
118	Free radical exit in emulsion polymerization. I. Theoretical model. Journal of Polymer Science Part A, 1994, 32, 605-630.	2.5	54
119	Modification of Natural and Artificial Polymer Colloids by â€œTopology-Controlledâ€•Emulsion Polymerization. Biomacromolecules, 2001, 2, 518-525.	2.6	54
120	Biodegradation of starch films: The roles of molecular and crystalline structure. Carbohydrate Polymers, 2015, 122, 115-122.	5.1	54
121	Solvent effects on the propagation rate coefficient for free radical polymerization. Macromolecules, 1993, 26, 4368-4372.	2.2	53
122	A more general approach to fitting digestion kinetics of starch in food. Carbohydrate Polymers, 2019, 225, 115244.	5.1	53
123	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
124	A Theoretical Study of Propagation Rate Coefficients for Methacrylonitrile and Acrylonitrile. Macromolecules, 1998, 31, 5175-5187.	2.2	52
125	Fecal microbiota responses to rice RS3 are specific to amylose molecular structure. Carbohydrate Polymers, 2020, 243, 116475.	5.1	52
126	Entry rate coefficients in emulsion polymerization systems. Journal of the Chemical Society Faraday Transactions I, 1986, 82, 2247.	1.0	51

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127	Kinetics of particle growth in emulsion polymerization systems with surface-active initiators. Macromolecules, 1992, 25, 7043-7050.	2.2	51
128	Synthesis of latices with polystyrene cores and poly(vinyl acetate) shells. 1. Use of polystyrene seeds. Polymer, 2002, 43, 6371-6382.	1.8	51
129	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
130	Free radical exit in emulsion polymerization. II. Model discrimination via experiment. Journal of Polymer Science Part A, 1994, 32, 631-649.	2.5	50
131	Kinetic aspects of the emulsion polymerization of butadiene. Macromolecules, 1991, 24, 1622-1628.	2.2	49
132	Effect of surfactant systems on the water sensitivity of latex films. Journal of Applied Polymer Science, 2004, 92, 1813-1823.	1.3	49
133	Causal Relations Among Starch Biosynthesis, Structure, and Properties. Springer Science Reviews, 2014, 2, 15-33.	1.3	49
134	The role of thermostable proteinaceous Î±-amylase inhibitors in slowing starch digestion in pasta. Food Hydrocolloids, 2019, 90, 241-247.	5.6	49
135	Gas/gas and gas/wall average energy transfer from very low-pressure pyrolysis. Chemical Physics, 1980, 49, 367-375.	0.9	48
136	Bimolecular termination events in the seeded emulsion polymerization of styrene. Macromolecules, 1990, 23, 4624-4634.	2.2	48
137	Theory of collisional energy transfer of highly excited molecules. International Reviews in Physical Chemistry, 1991, 10, 319-347.	0.9	48
138	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
139	The role of aqueous-phase kinetics in emulsion polymerizations. Progress in Polymer Science, 1993, 18, 1041-1096.	11.8	48
140	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
141	Size-separation characterization of starch and glycogen for biosynthesisâ€"structureâ€"property relationships. Analytical and Bioanalytical Chemistry, 2011, 399, 1425-1438.	1.9	48
142	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
143	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
144	Termination-rate coefficients in methyl methacrylate polymerizations. Journal of Polymer Science Part A, 1986, 24, 1027-1041.	2.5	47

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145	Pulsed laser study of the propagation kinetics of acrylamide and its derivatives in water. Macromolecules, 1993, 26, 4572-4576.	2.2	47
146	The influence of macromolecular architecture on the critical aggregation concentration of large amphiphilic starch derivatives. Food Hydrocolloids, 2013, 31, 365-374.	5.6	47
147	Modelling secondary particle formation in emulsion polymerisation: application to making coreâ€“shell morphologies. Polymer, 2002, 43, 4557-4570.	1.8	46
148	Molecular structure of glycogen in diabetic liver. Glycoconjugate Journal, 2015, 32, 113-118.	1.4	46
149	SEC Analysis of Poly(Acrylic Acid) and Poly(Methacrylic Acid). Macromolecular Chemistry and Physics, 2015, 216, 23-37.	1.1	46
150	Diffusion and rheology characteristics of barley mixed linkage Î²-glucan and possible implications for digestion. Carbohydrate Polymers, 2011, 86, 1732-1738.	5.1	45
151	Changes in Glycogen Structure over Feeding Cycle Sheds New Light on Blood-Glucose Control. Biomacromolecules, 2014, 15, 660-665.	2.6	45
152	New insights into amylose and amylopectin biosynthesis in rice endosperm. Carbohydrate Polymers, 2020, 230, 115656.	5.1	45
153	Pulsed laser study of the propagation kinetics of acrylamide and methacrylamide in water. Macromolecules, 1990, 23, 5161-5163.	2.2	44
154	Transfer constants from complete molecular weight distributions. Macromolecular Chemistry and Physics, 1996, 197, 403-412.	1.1	44
155	Molecular Weight Distributions in Free-Radical Polymerizations. 2. Low-Conversion Bulk Polymerization. Macromolecules, 1997, 30, 1935-1946.	2.2	44
156	Molecular Weight Distributions and Chain-Stopping Events in the Free-Radical Polymerization of Methyl Methacrylate. Macromolecules, 2005, 38, 3214-3224.	2.2	44
157	Rate Optimization in Controlled Radical Emulsion Polymerization Using RAFT. Macromolecular Theory and Simulations, 2006, 15, 70-86.	0.6	44
158	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
159	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
160	Emulsion polymerization of butyl acrylate. Kinetics of particle growth. Journal of the Chemical Society Faraday Transactions I, 1987, 83, 1449.	1.0	43
161	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
162	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

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163	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
164	Controlled/living radical polymerization of isoprene and butadiene in emulsion. European Polymer Journal, 2009, 45, 3149-3163.	2.6	43
165	Molecular Structural Differences between Type-2-Diabetic and Healthy Glycogen. Biomacromolecules, 2011, 12, 1983-1986.	2.6	43
166	Two-dimensional macromolecular distributions reveal detailed architectural features in high-amylose starches. Carbohydrate Polymers, 2014, 113, 539-551.	5.1	43
167	Improved methods for solving the smith â€" ewart equations in the steady state. Journal of Polymer Science, Polymer Letters Edition, 1981, 19, 533-537.	0.4	42
168	Styrene emulsion polymerization: Particle-size distributions. Journal of Polymer Science: Polymer Chemistry Edition, 1981, 19, 925-938.	0.8	42
169	Conditions for secondary particle formation in emulsion polymerization systems. Macromolecular Symposia, 1995, 92, 13-30.	0.4	42
170	Molecular Insights into Glycogen Î±-Particle Formation. Biomacromolecules, 2012, 13, 3805-3813.	2.6	42
171	Structures of octenylsuccinylated starches: Effects on emulsions containing Î²-carotene. Carbohydrate Polymers, 2014, 112, 85-93.	5.1	42
172	Poly(dimethylaminoethyl methacrylate) grafted natural rubber from seeded emulsion polymerization. Polymer, 2005, 46, 1105-1111.	1.8	41
173	Pea starch (Pisum sativum L.) with slow digestion property produced using Î²-amylase and transglucosidase. Food Chemistry, 2014, 164, 317-323.	4.2	41
174	Progress in controlling starch structure by modifying starch-branching enzymes. Planta, 2016, 243, 13-22.	1.6	41
175	Nanocomposites with functionalised polysaccharide nanocrystals through aqueous free radical polymerisation promoted by ozonolysis. Carbohydrate Polymers, 2016, 135, 256-266.	5.1	41
176	Mechanism of Radical Entry in Electrosterically Stabilized Emulsion Polymerization Systems. Macromolecules, 2006, 39, 6495-6504.	2.2	40
177	Investigating cooked rice textural properties by instrumental measurements. Food Science and Human Wellness, 2020, 9, 130-135.	2.2	40
178	Effects of amylose and amylopectin fine structure on sugar-snap cookie dough rheology and cookie quality. Carbohydrate Polymers, 2020, 241, 116371.	5.1	40
179	Latex particles bearing hydrophilic grafted hairs with controlled chain length and functionality synthesized by reversible addition-fragmentation chain transfer. Journal of Polymer Science Part A, 2003, 41, 1188-1195.	2.5	39
180	Randomly Hyperbranched Polymers. Physical Review Letters, 2007, 98, 238301.	2.9	39

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181	The effects of variable nitrogen application on barley starch structure under drought stress. Journal of the Institute of Brewing, 2015, 121, 502-509.	0.8	39
182	Amylopectin chain length distribution in grains of japonica rice as affected by nitrogen fertilizer and genotype. Journal of Cereal Science, 2016, 71, 230-238.	1.8	39
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