

Robert Gilbert

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508
papers

22,690
citations

75
h-index

125
g-index

525
ext. papers

24,977
ext. citations

5.1
avg, IF

7.12
L-index

#	Paper	IF	Citations
508	Polyaniline. Preparation of a conducting polymer(IUPAC Technical Report). <i>Pure and Applied Chemistry</i> , 2002 , 74, 857-867	2.1	1041
507	Critically evaluated rate coefficients for free-radical polymerization, 1. Propagation rate coefficient for styrene. <i>Macromolecular Chemistry and Physics</i> , 1995 , 196, 3267-3280	2.6	555
506	Ab Initio Emulsion Polymerization by RAFT-Controlled Self-Assembly. <i>Macromolecules</i> , 2005 , 38, 2191-2204	3.9	531
505	Critically evaluated rate coefficients for free-radical polymerization, 2.. Propagation rate coefficients for methyl methacrylate. <i>Macromolecular Chemistry and Physics</i> , 1997 , 198, 1545-1560	2.6	474
504	Structure and physicochemical properties of octenyl succinic anhydride modified starches: a review. <i>Carbohydrate Polymers</i> , 2013 , 92, 905-20	10.3	381
503	Effective ab Initio Emulsion Polymerization under RAFT Control. <i>Macromolecules</i> , 2002 , 35, 9243-9245	5.5	346
502	Critically Evaluated Rate Coefficients for Free-Radical Polymerization, 5,. <i>Macromolecular Chemistry and Physics</i> , 2004 , 205, 2151-2160	2.6	332
501	Molecular Weight Characterization of Poly(N-isopropylacrylamide) Prepared by Living Free-Radical Polymerization. <i>Macromolecules</i> , 2000 , 33, 6738-6745	5.5	314
500	Emulsion polymerization: State of the art in kinetics and mechanisms. <i>Polymer</i> , 2007 , 48, 6965-6991	3.9	296
499	Entry of free radicals into latex particles in emulsion polymerization. <i>Macromolecules</i> , 1991 , 24, 1629-1640	5.5	260
498	Critically evaluated rate coefficients for free-radical polymerization, 3. Propagation rate coefficients for alkyl methacrylates. <i>Macromolecular Chemistry and Physics</i> , 2000 , 201, 1355-1364	2.6	245
497	Characterization of starch by size-exclusion chromatography: the limitations imposed by shear scission. <i>Biomacromolecules</i> , 2009 , 10, 2245-53	6.9	243
496	Synthesis of anisotropic nanoparticles by seeded emulsion polymerization. <i>Langmuir</i> , 2006 , 22, 4037-43	4	243
495	Digestion of starch: In vivo and in vitro kinetic models used to characterise oligosaccharide or glucose release. <i>Carbohydrate Polymers</i> , 2010 , 80, 599-617	10.3	241
494	The importance of amylose and amylopectin fine structure for textural properties of cooked rice grains. <i>Food Chemistry</i> , 2016 , 196, 702-11	8.5	234
493	The importance of amylose and amylopectin fine structures for starch digestibility in cooked rice grains. <i>Food Chemistry</i> , 2013 , 136, 742-9	8.5	221
492	Molecular Weight Distributions in Free-Radical Polymerizations. 1. Model Development and Implications for Data Interpretation. <i>Macromolecules</i> , 1995 , 28, 552-569	5.5	193

491	Mechanism of Degradation of Starch, a Highly Branched Polymer, during Extrusion. <i>Macromolecules</i> , 2010 , 43, 2855-2864	5.5	183
490	A Priori Prediction of Propagation Rate Coefficients in Free-Radical Polymerizations: Propagation of Ethylene. <i>Macromolecules</i> , 1995 , 28, 8771-8781	5.5	182
489	Effect of particle size on kinetics of starch digestion in milled barley and sorghum grains by porcine alpha-amylase. <i>Journal of Cereal Science</i> , 2009 , 50, 198-204	3.8	181
488	Characterization of branched polysaccharides using multiple-detection size separation techniques. <i>Journal of Separation Science</i> , 2010 , 33, 3537-54	3.4	179
487	Trajectory simulations of collisional energy transfer in highly excited benzene and hexafluorobenzene. <i>Journal of Chemical Physics</i> , 1995 , 103, 626-641	3.9	162
486	Terminology of polymers and polymerization processes in dispersed systems (IUPAC Recommendations 2011). <i>Pure and Applied Chemistry</i> , 2011 , 83, 2229-2259	2.1	161
485	Critically Evaluated Termination Rate Coefficients for Free-Radical Polymerization, 1. The Current Situation. <i>Macromolecular Chemistry and Physics</i> , 2002 , 203, 2570-2582	2.6	161
484	Amylose content in starches: Toward optimal definition and validating experimental methods. <i>Carbohydrate Polymers</i> , 2012 , 88, 103-111	10.3	148
483	Classical trajectory studies of the reaction CH ₄ +H-CH ₃ +H ₂ . <i>Journal of Chemical Physics</i> , 1995 , 102, 5669-5682	3.9	148
482	Consistent values of rate parameters in free radical polymerization systems. II. Outstanding dilemmas and recommendations. <i>Journal of Polymer Science Part A</i> , 1992 , 30, 851-863	2.5	148
481	Coagulative nucleation and particle size distributions in emulsion polymerization. <i>Macromolecules</i> , 1984 , 17, 2520-2529	5.5	146
480	Successful Use of RAFT Techniques in Seeded Emulsion Polymerization of Styrene: Living Character, RAFT Agent Transport, and Rate of Polymerization. <i>Macromolecules</i> , 2002 , 35, 5417-5425	5.5	141
479	New (1)h NMR procedure for the characterization of native and modified food-grade starches. <i>Journal of Agricultural and Food Chemistry</i> , 2011 , 59, 6913-9	5.7	136
478	Two-Dimensional Size/Branch Length Distributions of a Branched Polymer. <i>Macromolecules</i> , 2010 , 43, 7321-7329	5.5	133
477	Termination in free-radical polymerizing systems at high conversion. <i>Macromolecules</i> , 1988 , 21, 2133-2140	5.5	133
476	Chain-length-dependent termination rate processes in free-radical polymerizations. 1. Theory. <i>Macromolecules</i> , 1992 , 25, 2459-2469	5.5	128
475	Measurement of Transfer Constant for Butyl Acrylate Free-Radical Polymerization. <i>Macromolecules</i> , 1998 , 31, 4410-4418	5.5	126
474	Combined techniques for characterising pasta structure reveals how the gluten network slows enzymic digestion rate. <i>Food Chemistry</i> , 2015 , 188, 559-68	8.5	125

- 473 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, 3964-73 5.7 125
- 472 Critically Evaluated Rate Coefficients for Free-Radical Polymerization, 4. *Macromolecular Chemistry and Physics*, **2003**, 204, 1338-1350 2.6 120
- 471 Pulsed-Laser Polymerization Measurements of the Propagation Rate Coefficient for Butyl Acrylate. *Macromolecules*, **1996**, 29, 1918-1927 5.5 120
- 470 Seeded emulsion polymerization of styrene. *Journal of the Chemical Society Faraday Transactions I*, **1980**, 76, 1323 120
- 469 Controlled Radical Polymerization in Aqueous Dispersed Media. *Australian Journal of Chemistry*, **2006**, 59, 693 1.2 117
- 468 Surfactant-free emulsion polymerizations: predictions of the coagulative nucleation theory. *Macromolecules*, **1987**, 20, 2922-2930 5.5 116
- 467 Exploring extraction/dissolution procedures for analysis of starch chain-length distributions. *Carbohydrate Polymers*, **2014**, 114, 36-42 10.3 114
- 466 RAFT in Emulsion Polymerization: What Makes it Different?. *Australian Journal of Chemistry*, **2002**, 55, 415 1.2 114
- 465 In vivo and in vitro starch digestion: are current in vitro techniques adequate?. *Biomacromolecules*, **2010**, 11, 3600-8 6.9 110
- 464 Reliable measurements of the size distributions of starch molecules in solution: Current dilemmas and recommendations. *Carbohydrate Polymers*, **2010**, 79, 255-261 10.3 110
- 463 Initiator efficiencies in high-conversion bulk polymerizations. *Macromolecules*, **1988**, 21, 2141-2148 5.5 108
- 462 Modelling particle size distributions and secondary particle formation in emulsion polymerisation. *Polymer*, **1998**, 39, 7099-7112 3.9 106
- 461 Variation in amylose fine structure of starches from different botanical sources. *Journal of Agricultural and Food Chemistry*, **2014**, 62, 4443-53 5.7 104
- 460 Molecular Weight and Functional End Group Control by RAFT Polymerization of a Bisubstituted Acrylamide Derivative. *Macromolecules*, **2003**, 36, 621-629 5.5 104
- 459 Critically-evaluated propagation rate coefficients in free radical polymerizations I. Styrene and methyl methacrylate (Technical Report). *Pure and Applied Chemistry*, **1996**, 68, 1491-1494 2.1 103
- 458 Kinetics of emulsion polymerization of methyl methacrylate. *Journal of Polymer Science: Polymer Chemistry Edition*, **1984**, 22, 3225-3253 102
- 457 Measurement of Diffusion Coefficients of Oligomeric Penetrants in Rubbery Polymer Matrixes. *Macromolecules*, **1998**, 31, 7835-7844 5.5 101
- 456 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 99

455	A parameterized model of amylopectin synthesis provides key insights into the synthesis of granular starch. <i>PLoS ONE</i> , 2013 , 8, e65768	3.7	98
454	Mechanistic information from analysis of molecular weight distributions of starch. <i>Biomacromolecules</i> , 2005 , 6, 2248-59	6.9	98
453	Starch molecular structure: The basis for an improved understanding of cooked rice texture. <i>Carbohydrate Polymers</i> , 2018 , 195, 9-17	10.3	97
452	Relations between molecular, crystalline, and lamellar structures of amylopectin. <i>Biomacromolecules</i> , 2012 , 13, 4273-82	6.9	95
451	How amylose molecular fine structure of rice starch affects functional properties. <i>Carbohydrate Polymers</i> , 2019 , 204, 24-31	10.3	94
450	Starch-gluten interactions during gelatinization and its functionality in dough like model systems. <i>Food Hydrocolloids</i> , 2016 , 54, 196-201	10.6	90
449	Mechanisms for supercollisions. <i>Faraday Discussions</i> , 1995 , 102, 423	3.6	90
448	Determination of Arrhenius Parameters for Propagation in Free-Radical Polymerizations: An Assessment of ab Initio Procedures. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 18997-19006		90
447	Physicochemical and structural properties of pregelatinized starch prepared by improved extrusion cooking technology. <i>Carbohydrate Polymers</i> , 2017 , 175, 265-272	10.3	85
446	Theory of Multiple-Detection Size-Exclusion Chromatography of Complex Branched Polymers. <i>Macromolecular Theory and Simulations</i> , 2007 , 16, 13-28	1.5	85
445	Measurement of the molecular weight distribution of debranched starch. <i>Biomacromolecules</i> , 2005 , 6, 2260-70	6.9	85
444	Mathematical modeling of emulsion copolymerization reactors. <i>Journal of Applied Polymer Science</i> , 1989 , 37, 2727-2756	2.9	85
443	Chain-length-dependent termination rate processes in free-radical polymerizations. 2. Modeling methodology and application to methyl methacrylate emulsion polymerizations. <i>Macromolecules</i> , 1993 , 26, 3538-3552	5.5	82
442	Relationships between amylopectin molecular structures and functional properties of different-sized fractions of normal and high-amylose maize starches. <i>Food Hydrocolloids</i> , 2016 , 52, 359-368	10.6	79
441	Molecular weight distributions of starch branches reveal genetic constraints on biosynthesis. <i>Biomacromolecules</i> , 2010 , 11, 3539-47	6.9	79
440	Pulsed laser polymerization study of the propagation kinetics of acrylamide in water. <i>Journal of Polymer Science Part A</i> , 2005 , 43, 1357-1368	2.5	79
439	Improved methods for the structural analysis of the amylose-rich fraction from rice flour. <i>Biomacromolecules</i> , 2006 , 7, 866-76	6.9	78
438	Assessment of the extent of starch dissolution in dimethyl sulfoxide by ¹ H NMR spectroscopy. <i>Macromolecular Bioscience</i> , 2009 , 9, 506-14	5.5	76

437	Separation of complex branched polymers by size-exclusion chromatography probed with multiple detection. <i>Journal of Chromatography A</i> , 2008 , 1190, 215-23	4.5	76
436	Synthesis and properties of composites of starch and chemically modified natural rubber. <i>Polymer</i> , 2004 , 45, 7813-7820	3.9	76
435	Fokker-Planck interpretation of picosecond intramolecular dynamics in solutions. <i>Chemical Physics</i> , 1979 , 44, 389-402	2.3	76
434	A Kinetic Investigation of Seeded Emulsion Polymerization of Styrene Using Reversible Addition-Fragmentation Chain Transfer (RAFT) Agents with a Low Transfer Constant. <i>Macromolecules</i> , 2003 , 36, 4309-4318	5.5	75
433	Shear degradation of molecular, crystalline, and granular structures of starch during extrusion. <i>Starch/Staerke</i> , 2014 , 66, 595-605	2.3	74
432	Angular momentum conservation in unimolecular and recombination reactions. <i>International Journal of Chemical Kinetics</i> , 1988 , 20, 307-329	1.4	74
431	The adsorption of α -amylase on barley proteins affects the in vitro digestion of starch in barley flour. <i>Food Chemistry</i> , 2018 , 241, 493-501	8.5	72
430	Propagation Rate Coefficient of Poly(N-isopropylacrylamide) in Water below Its Lower Critical Solution Temperature. <i>Macromolecules</i> , 2000 , 33, 8589-8596	5.5	71
429	Chain Transfer to Monomer in the Free-Radical Polymerizations of Methyl Methacrylate, Styrene, and β -Methylstyrene. <i>Macromolecules</i> , 1998 , 31, 994-999	5.5	71
428	Operation of semi-batch emulsion polymerisation reactors: Modelling, validation and effect of operating conditions. <i>Chemical Engineering Science</i> , 2002 , 57, 2955-2969	4.4	70
427	Trajectory simulations of collisional energy transfer of highly vibrationally excited azulene. <i>The Journal of Physical Chemistry</i> , 1990 , 94, 77-84		70
426	Distribution of short to medium amylose chains are major controllers of in vitro digestion of retrograded rice starch. <i>Food Hydrocolloids</i> , 2019 , 96, 634-643	10.6	67
425	Instrumental measurement of cooked rice texture by dynamic rheological testing and its relation to the fine structure of rice starch. <i>Carbohydrate Polymers</i> , 2016 , 146, 253-63	10.3	65
424	Propagation rate coefficients from electron spin resonance studies of the emulsion polymerization of methyl methacrylate. <i>Macromolecules</i> , 1986 , 19, 1303-1308	5.5	65
423	The biosynthesis, structure and gelatinization properties of starches from wild and cultivated African rice species (<i>Oryza barthii</i> and <i>Oryza glaberrima</i>). <i>Carbohydrate Polymers</i> , 2015 , 129, 92-100	10.3	64
422	Relationships between protein content, starch molecular structure and grain size in barley. <i>Carbohydrate Polymers</i> , 2017 , 155, 271-279	10.3	64
421	Transition-State Theory Model for the Diffusion Coefficients of Small Penetrants in Glassy Polymers. <i>Macromolecules</i> , 1997 , 30, 7296-7306	5.5	64
420	Electrosteric Stabilization with Poly(Acrylic) Acid in Emulsion Polymerization: Effect on Kinetics and Secondary Particle Formation. <i>Macromolecules</i> , 2000 , 33, 6693-6703	5.5	64

4 ¹⁹	The Direct Determination of Kinetic Parameters in Emulsion Polymerization Systems. <i>Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics</i> , 1983 , 23, 127-186		63
4 ¹⁸	Improved methodology for analyzing relations between starch digestion kinetics and molecular structure. <i>Food Chemistry</i> , 2018 , 264, 284-292	8.5	63
4 ¹⁷	Effects of Poly(acrylic acid) Electrosteric Stabilizer on Entry and Exit in Emulsion Polymerization. <i>Macromolecules</i> , 1996 , 29, 5128-5135	5.5	62
4 ¹⁶	Effect of surfactants used for binder synthesis on the properties of latex paints. <i>Progress in Organic Coatings</i> , 2005 , 53, 112-118	4.8	61
4 ¹⁵	Starch digestion mechanistic information from the time evolution of molecular size distributions. <i>Journal of Agricultural and Food Chemistry</i> , 2010 , 58, 8444-52	5.7	60
4 ¹⁴	Penultimate Unit Effect in Free-Radical Copolymerization. <i>Macromolecules</i> , 1997 , 30, 726-736	5.5	60
4 ¹³	The molecular structural features controlling stickiness in cooked rice, a major palatability determinant. <i>Scientific Reports</i> , 2017 , 7, 43713	4.9	59
4 ¹²	Collisional energy exchange in highly vibrationally excited molecules: The biased random walk model. <i>Journal of Chemical Physics</i> , 1984 , 80, 5501-5509	3.9	59
4 ¹¹	Nature of alpha and beta particles in glycogen using molecular size distributions. <i>Biomacromolecules</i> , 2010 , 11, 1094-100	6.9	58
4 ¹⁰	The effects of processing and organoclay properties on the structure of poly(methyl methacrylate)/clay nanocomposites. <i>Polymer</i> , 2006 , 47, 6337-6361	3.9	58
4 ⁰⁹	Radical Loss in RAFT-Mediated Emulsion Polymerizations. <i>Macromolecules</i> , 2005 , 38, 4901-4912	5.5	58
4 ⁰⁸	Molecular Watchmaking: ab initio Emulsion Polymerization by RAFT-controlled Self-assembly. <i>Macromolecular Symposia</i> , 2005 , 231, 84-93	0.8	58
4 ⁰⁷	Supercollision events in weak collisional energy transfer of highly excited species. <i>Chemical Physics Letters</i> , 1991 , 182, 357-362	2.5	58
4 ⁰⁶	Mechanistic investigation of a starch-branching enzyme using hydrodynamic volume SEC analysis. <i>Biomacromolecules</i> , 2008 , 9, 954-65	6.9	57
4 ⁰⁵	Calculation of collisional-energy-transfer rates in highly excited molecules. <i>The Journal of Physical Chemistry</i> , 1990 , 94, 72-77		57
4 ⁰⁴	Diffusion and viscosity in arabinoxylan solutions: Implications for nutrition. <i>Carbohydrate Polymers</i> , 2010 , 82, 46-53	10.3	56
4 ⁰³	The a priori calculation of collisional energy transfer in highly vibrationally excited molecules: The biased random walk model. <i>Journal of Chemical Physics</i> , 1986 , 84, 6129-6140	3.9	56
4 ⁰²	Polymerization within styrene emulsion droplets. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1982 , 78, 591		56

401	Parameterizing amylose chain-length distributions for biosynthesis-structure-property relations. <i>Analytical and Bioanalytical Chemistry</i> , 2017 , 409, 6813-6819	4.4	55
400	Modification of Natural Rubber by Grafting with Hydrophilic Vinyl Monomers. <i>Macromolecular Chemistry and Physics</i> , 2005 , 206, 2450-2460	2.6	55
399	The relationship between recombination, chemical activation and unimolecular dissociation rate coefficients. <i>Journal of Chemical Physics</i> , 1989 , 90, 4265-4273	3.9	55
398	Entry in Emulsion Polymerization: Effects of Initiator and Particle Surface Charge. <i>Macromolecules</i> , 2003 , 36, 3921-3931	5.5	54
397	Altering starch branching enzymes in wheat generates high-amylose starch with novel molecular structure and functional properties. <i>Food Hydrocolloids</i> , 2019 , 92, 51-59	10.6	53
396	Synthesis of Comblike Poly(butyl methacrylate) Using Reversible Addition-Fragmentation Chain Transfer and an Activated Ester. <i>Macromolecules</i> , 2004 , 37, 2371-2382	5.5	53
395	Using starch molecular fine structure to understand biosynthesis-structure-property relations. <i>Trends in Food Science and Technology</i> , 2019 , 86, 530-536	15.3	52
394	Diffusion of oligomeric species in polymer solutions. <i>Macromolecules</i> , 1993 , 26, 4472-4477	5.5	52
393	Compact structure and proteins of pasta retard in vitro digestive evolution of branched starch molecular structure. <i>Carbohydrate Polymers</i> , 2016 , 152, 441-449	10.3	51
392	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. <i>Macromolecules</i> , 1995 , 28, 3637-3649	5.5	51
391	Modeling collisional energy transfer in highly excited molecules. <i>Journal of Chemical Physics</i> , 1990 , 92, 1819-1830	3.9	51
390	Propagation rate coefficient of acrylic acid: theoretical investigation of the solvent effect. <i>Polymer</i> , 2004 , 45, 6993-6999	3.9	50
389	Modification of natural and artificial polymer colloids by "topology-controlled" emulsion polymerization. <i>Biomacromolecules</i> , 2001 , 2, 518-25	6.9	50
388	Free radical exit in emulsion polymerization. I. Theoretical model. <i>Journal of Polymer Science Part A</i> , 1994 , 32, 605-630	2.5	50
387	Effects of pectin on molecular structural changes in starch during digestion. <i>Food Hydrocolloids</i> , 2017 , 69, 10-18	10.6	49
386	High-amylose rice: Starch molecular structural features controlling cooked rice texture and preference. <i>Carbohydrate Polymers</i> , 2019 , 219, 251-260	10.3	49
385	First-principles calculation of particle formation in emulsion polymerization: pseudo-bulk systems. <i>Polymer</i> , 2004 , 45, 3595-3608	3.9	48
384	Synthesis of latices with polystyrene cores and poly(vinyl acetate) shells. 1. Use of polystyrene seeds. <i>Polymer</i> , 2002 , 43, 6371-6382	3.9	48

383	A Theoretical Study of Propagation Rate Coefficients for Methacrylonitrile and Acrylonitrile. <i>Macromolecules</i> , 1998 , 31, 5175-5187	5.5	48
382	Relaxation studies of the seeded emulsion polymerization of styrene initiated by β radiolysis. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1980 , 76, 1344		48
381	Kinetics of particle growth in emulsion polymerization systems with surface-active initiators. <i>Macromolecules</i> , 1992 , 25, 7043-7050	5.5	47
380	Starch re-crystallization kinetics as a function of various cations. <i>Starch/Staerke</i> , 2011 , 63, 792-800	2.3	46
379	Theory of collisional energy transfer of highly excited molecules. <i>International Reviews in Physical Chemistry</i> , 1991 , 10, 319-347	7	46
378	Catalytic chain transfer for molecular weight control in the emulsion homo- and copolymerizations of methyl methacrylate and butyl methacrylate. <i>Journal of Polymer Science Part A</i> , 1997 , 35, 859-878	2.5	45
377	Modelling secondary particle formation in emulsion polymerisation: application to making core-shell morphologies. <i>Polymer</i> , 2002 , 43, 4557-4570	3.9	45
376	Gas/gas and gas/wall average energy transfer from very low-pressure pyrolysis. <i>Chemical Physics</i> , 1980 , 49, 367-375	2.3	45
375	Roles of GBSSI and SSIIa in determining amylose fine structure. <i>Carbohydrate Polymers</i> , 2015 , 127, 264-740.3	4.0	44
374	What Is Being Learned About Starch Properties from Multiple-Level Characterization. <i>Cereal Chemistry</i> , 2013 , 90, 312-325	2.4	44
373	Effect of a gibberellin-biosynthesis inhibitor treatment on the physicochemical properties of sorghum starch. <i>Journal of Cereal Science</i> , 2011 , 53, 328-334	3.8	44
372	Molecular Weight Distributions in Emulsion Polymerizations: Evidence for Coagulative Nucleation. <i>Australian Journal of Chemistry</i> , 1991 , 44, 1133	1.2	44
371	Size-separation characterization of starch and glycogen for biosynthesis-structure-property relationships. <i>Analytical and Bioanalytical Chemistry</i> , 2011 , 399, 1425-38	4.4	43
370	Pulsed laser study of the propagation kinetics of acrylamide and its derivatives in water. <i>Macromolecules</i> , 1993 , 26, 4572-4576	5.5	43
369	Free radical exit in emulsion polymerization. II. Model discrimination via experiment. <i>Journal of Polymer Science Part A</i> , 1994 , 32, 631-649	2.5	43
368	Consistent values of rate parameters in free radical polymerization systems (Technical Report). <i>Pure and Applied Chemistry</i> , 1992 , 64, 1563-1567	2.1	43
367	Rigorous derivation of reaction path degeneracy in transition state theory. <i>Chemical Physics Letters</i> , 1992 , 193, 181-184	2.5	43
366	Rate Optimization in Controlled Radical Emulsion Polymerization Using RAFT. <i>Macromolecular Theory and Simulations</i> , 2006 , 15, 70-86	1.5	42

365	Collisional energy transfer in highly excited molecules: Calculations of the dependence on temperature and internal, rotational, and translational energy. <i>Journal of Chemical Physics</i> , 1992 , 96, 5983-5998	3.9	42
364	Effect of polymerization kinetics on particle morphology in heterogeneous systems. <i>Macromolecules</i> , 1990 , 23, 4247-4257	5.5	42
363	Characterization Methods for Starch-Based Materials: State of the Art and Perspectives. <i>Australian Journal of Chemistry</i> , 2013 , 66, 1550	1.2	41
362	Molecular Weight Distributions and Chain-Stopping Events in the Free-Radical Polymerization of Methyl Methacrylate. <i>Macromolecules</i> , 2005 , 38, 3214-3224	5.5	41
361	Measurement of propagation rate coefficients using pulsed-laser polymerization and matrix-assisted laser desorption/ionization mass spectrometry. <i>Macromolecules</i> , 1993 , 26, 6684-6685	5.5	41
360	Effect of pulsed electrical fields on the structural properties that affect french fry texture during processing. <i>Trends in Food Science and Technology</i> , 2017 , 67, 1-11	15.3	40
359	Molecular Weight Distributions in Free-Radical Polymerizations. 2. Low-Conversion Bulk Polymerization. <i>Macromolecules</i> , 1997 , 30, 1935-1946	5.5	40
358	Transfer constants from complete molecular weight distributions. <i>Macromolecular Chemistry and Physics</i> , 1996 , 197, 403-412	2.6	40
357	Viscosity and temperature dependence of fluorescence lifetimes of anthracene and 9-methylanthracene. <i>The Journal of Physical Chemistry</i> , 1981 , 85, 2810-2816		40
356	Causal Relations Among Starch Biosynthesis, Structure, and Properties. <i>Springer Science Reviews</i> , 2014 , 2, 15-33		39
355	Randomly hyperbranched polymers. <i>Physical Review Letters</i> , 2007 , 98, 238301	7.4	39
354	Conditions for secondary particle formation in emulsion polymerization systems. <i>Macromolecular Symposia</i> , 1995 , 92, 13-30	0.8	39
353	Changes in glycogen structure over feeding cycle sheds new light on blood-glucose control. <i>Biomacromolecules</i> , 2014 , 15, 660-5	6.9	38
352	A new NMR method for directly monitoring and quantifying the dissolution kinetics of starch in DMSO. <i>Carbohydrate Research</i> , 2007 , 342, 2604-10	2.9	38
351	Diffusion and rheology characteristics of barley mixed linkage β glucan and possible implications for digestion. <i>Carbohydrate Polymers</i> , 2011 , 86, 1732-1738	10.3	37
350	Controlled/living radical polymerization of isoprene and butadiene in emulsion. <i>European Polymer Journal</i> , 2009 , 45, 3149-3163	5.2	37
349	Toward a full characterization of native starch: separation and detection by size-exclusion chromatography. <i>Journal of Chromatography A</i> , 2008 , 1205, 60-70	4.5	37
348	Effect of surfactant systems on the water sensitivity of latex films. <i>Journal of Applied Polymer Science</i> , 2004 , 92, 1813-1823	2.9	37

347	Poly(dimethylaminoethyl methacrylate) grafted natural rubber from seeded emulsion polymerization. <i>Polymer</i> , 2005 , 46, 1105-1111	3.9	37
346	Ab initio calculation of the rate coefficient for short-chain branching in free-radical polymerizations. <i>Polymer</i> , 2001 , 42, 1915-1920	3.9	37
345	Application of Transition-State Theory to Gas-Surface Reactions: Barrierless Adsorption on Clean Surfaces. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 13001-13010		37
344	Unimolecular reactions as radiationless transitions. Calculation of the rate of decomposition of N ₂ O. <i>Australian Journal of Chemistry</i> , 1971 , 24, 1541	1.2	37
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