Christopher N Bowman

List of Publications by Year
in descending order

490 papers	40,557 citations	4103 90 h-index	4131 181 g-index
505 all docs	505 docs citations	505 times ranked	27468 citing authors

#	Article	IF	Citations
1	Thiolâ€“Ene Click Chemistry. Angewandte Chemie - International Edition, 2010, 49, 1540-1573.	7.2	3,333
2	Thiol-click chemistry: a multifaceted toolbox for small molecule and polymer synthesis. Chemical Society Reviews, 2010, 39, 1355.	18.7	1,426
3	The Thiol-Michael Addition Click Reaction: A Powerful and Widely Used Tool in Materials Chemistry. Chemistry of Materials, 2014, 26, 724-744.	3.2	1,193
4	Mechanical properties of hydrogels and their experimental determination. Biomaterials, 1996, 17, 1647-1657.	5.7	980
5	Photoinitiated polymerization of PEG-diacrylate with lithium phenyl-2,4,6-trimethylbenzoylphosphinate: polymerization rate and cytocompatibility. Biomaterials, 2009, 30, 6702-6707.	5.7	951
6	Covalent adaptable networks: smart, reconfigurable and responsive network systems. Chemical Society Reviews, 2013, 42, 7161-7173.	18.7	869
7	Covalent Adaptable Networks (CANs): A Unique Paradigm in Cross-Linked Polymers. Macromolecules, 2010, 43, 2643-2653.	2.2	709
8	Photoinduced Plasticity in Cross-Linked Polymers. Science, 2005, 308, 1615-1617.	6.0	670
9	A Versatile Synthetic Extracellular Matrix Mimic via Thiolâ€Norbornene Photopolymerization. Advanced Materials, 2009, 21, 5005-5010.	11.1	578
10	Recent Advances and Developments in Composite Dental Restorative Materials. Journal of Dental Research, 2011, 90, 402-416.	2.5	542
11	Click Chemistry in Materials Science. Advanced Functional Materials, 2014, 24, 2572-2590.	7.8	514
12	Thiol-yne click chemistry: A powerful and versatile methodology for materials synthesis. Journal of Materials Chemistry, 2010, 20, 4745.	6.7	448
13	Kinetics of thiol-ene and thiol-acrylate photopolymerizations with real-time fourier transform infrared. Journal of Polymer Science Part A, 2001, 39, 3311-3319.	2.5	443
14	In situ forming degradable networks and their application in tissue engineering and drug delivery. Journal of Controlled Release, 2002, 78, 199-209.	4.8	430
15	Mechanical Properties of Cellularly Responsive Hydrogels and Their Experimental Determination. Advanced Materials, 2010, 22, 3484-3494.	11.1	394
16	Covalent Adaptable Networks: Reversible Bond Structures Incorporated in Polymer Networks. Angewandte Chemie - International Edition, 2012, 51, 4272-4274.	7.2	369
17	Structure and swelling of poly(acrylic acid) hydrogels: effect of pH, ionic strength, and dilution on the crosslinked polymer structure. Polymer, 2004, 45, 1503-1510.	1.8	365
18	Thiolâˆ'Yne Photopolymerizations: Novel Mechanism, Kinetics, and Step-Growth Formation of Highly Cross-Linked Networks. Macromolecules, 2009, 42, 211-217.	2.2	357

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19	Two-Color Single-Photon Photoinitiation and Photoinhibition for Subdiffraction Photolithography. Science, 2009, 324, 913-917.	6.0	353
20	Spatial and temporal control of the alkyneâ€“azide cycloaddition by photoinitiated Cu(II) reduction. Nature Chemistry, 2011, 3, 256-259.	6.6	342
21	Tailorable and programmable liquid-crystalline elastomers using a two-stage thiolâ€“acrylate reaction. RSC Advances, 2015, 5, 18997-19001.	1.7	342
22	Fundamental studies of a novel, biodegradable PEG-b-PLA hydrogel. Polymer, 2000, 41, 3993-4004.	1.8	333
23	Kinetic evidence of reaction diffusion during the polymerization of multi(meth)acrylate monomers. Macromolecules, 1994, 27, 650-655.	2.2	319
24	Photopolymerizations of Thiolâ˘'Ene Polymers without Photoinitiators. Macromolecules, 2002, 35, 5361-5365.	2.2	313
25	Photodegradable, Photoadaptable Hydrogels via Radical-Mediated Disulfide Fragmentation Reaction. Macromolecules, 2011, 44, 2444-2450.	2.2	307
26	The effect of cure rate on the mechanical properties of dental resins. Dental Materials, 2001, 17, 504-511.	1.6	298
27	The power of light in polymer science: photochemical processes to manipulate polymer formation, structure, and properties. Polymer Chemistry, 2014, 5, 2187-2201.	1.9	295
28	Thiolâ˘'Ene Photopolymerization Mechanism and Rate Limiting Step Changes for Various Vinyl Functional Group Chemistries. Macromolecules, 2003, 36, 7964-7969.	2.2	289
29	A Novel Sequential Photoinduced Living Graft Polymerization. Macromolecules, 2000, 33, 331-335.	2.2	288
30	Rheological and Chemical Analysis of Reverse Gelation in a Covalently Cross-Linked Dielsâ˘'Alder Polymer Network. Macromolecules, 2008, 41, 9112-9117.	2.2	275
31	Toward Stimuliâ€Responsive Dynamic Thermosets through Continuous Development and Improvements in Covalent Adaptable Networks (CANs). Advanced Materials, 2020, 32, e1906876.	11.1	273
32	A study of the evolution of mechanical properties and structural heterogeneity of polymer networks formed by photopolymerizations of multifunctional (meth)acrylates. Polymer, 1998, 39, 2507-2513.	1.8	268
33	The Effects of Light Intensity, Temperature, and Comonomer Composition on the Polymerization Behavior of Dimethacrylate Dental Resins. Journal of Dental Research, 1999, 78, 1469-1476.	2.5	265
34	Degradable thiol-acrylate photopolymers: polymerization and degradation behavior of an in situ forming biomaterial. Biomaterials, 2005, 26, 4495-4506.	5.7	257
35	Reaction behaviour and kinetic constants for photopolymerizations of multi(meth)acrylate monomers. Polymer, 1994, 35, 3243-3250.	1.8	250
36	Investigations of step-growth thiol-ene polymerizations for novel dental restoratives. Dental Materials, 2005, 21, 1129-1136.	1.6	234

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37	Toward an enhanced understanding and implementation of photopolymerization reactions. AICHE Journal, 2008, 54, 2775-2795.	1.8	220
38	Effects of ultrafiltration membrane surface properties on Pseudomonas aeruginosa biofilm initiation for the purpose of reducing biofouling. Journal of Membrane Science, 2001, 194, 15-32.	4.1	215
39	Reaction Kinetics and Volume Relaxation during Polymerizations of Multiethylene Glycol Dimethacrylates. Macromolecules, 1995, 28, 2491-2499.	2.2	210
40	Oxygen inhibition in thiolâ€"acrylate photopolymerizations. Journal of Polymer Science Part A, 2006, 44, 2007-2014.	2.5	199
41	Mechanism and Modeling of a Thiolâ^'Ene Photopolymerization. Macromolecules, 2003, 36, 4631-4636.	2.2	193
42	Evaluation and control of thiolâ€"ene/thiolâ€"epoxy hybrid networks. Polymer, 2007, 48, 1526-1532.	1.8	187
43	Predicting Controlled-Release Behavior of Degradable PLA-b-PEG-b-PLA Hydrogels. Macromolecules, 2001, 34, 4630-4635.	2.2	185
44	Development of a comprehensive free radical photopolymerization model incorporating heat and mass transfer effects in thick films. Chemical Engineering Science, 2002, 57, 887-900.	1.9	182
45	Effects of Composition and Reactivity on the Reaction Kinetics of Dimethacrylate/Dimethacrylate Copolymerizations. Macromolecules, 1999, 32, 3913-3921.	2.2	177
46	Understanding the kinetics and network formation of dimethacrylate dental resins. Polymers for Advanced Technologies, 2001, 12, 335-345.	1.6	176
47	A Statistical Kinetic Model for the Bulk Degradation of PLA-b-PEG-b-PLA Hydrogel Networks. Journal of Physical Chemistry B, 2000, 104, 7043-7049.	1.2	170
48	New directions in the chemistry of shape memory polymers. Polymer, 2014, 55, 5849-5872.	1.8	167
49	Membrane fouling reduction by backpulsing and surface modification. Journal of Membrane Science, 2000, 173, 191-200.	4.1	164
50	Primary cyclization in the polymerization of bis-GMA and TEGDMA: a modeling approach to understanding the cure of dental resins. Dental Materials, 2001, 17, 221-229.	1.6	160
51	Thiol-ene oligomers as dental restorative materials. Dental Materials, 2005, 21, 1137-1143.	1.6	160
52	Impact of Oxygen on Photopolymerization Kinetics and Polymer Structure. Macromolecules, 2006, 39, 2501-2506.	2.2	160
53	Impact of Curing Protocol on Conversion and Shrinkage Stress. Journal of Dental Research, 2005, 84, 822-826.	2.5	157
54	Reaction Rates and Mechanisms for Radical, Photoinitated Addition of Thiols to Alkynes, and Implications for Thiolâ^'Yne Photopolymerizations and Click Reactions. Macromolecules, 2010, 43, 4113-4119.	2.2	156

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55	Initiation and kinetics of thiol-ene photopolymerizations without photoinitiators. Journal of Polymer Science Part A, 2004, 42, 5817-5826.	2.5	155
56	Photopolymerization Reactions Using the Photoinitiated Copper (I)â€Catalyzed Azideâ€Alkyne Cycloaddition (CuAAC) Reaction. Advanced Materials, 2013, 25, 2024-2028.	11.1	149
57	A readily programmable, fully reversible shape-switching material. Science Advances, 2018, 4, eaat4634.	4.7	146
58	Externally Triggered Healing of a Thermoreversible Covalent Network via Selfâ€Limited Hysteresis Heating. Advanced Materials, 2010, 22, 2784-2787.	11.1	144
59	Photopolymerized dynamic hydrogels with tunable viscoelastic properties through thioester exchange. Biomaterials, 2018, 178, 496-503.	5.7	142
60	Coupling of kinetics and volume relaxation during polymerizations of multiacrylates and multimethacrylates. Macromolecules, 1991, 24, 1914-1920.	2.2	139
61	Actuation in Crosslinked Polymers via Photoinduced Stress Relaxation. Advanced Materials, 2006, 18, 2128-2132.	11.1	139
62	Photomechanics of light-activated polymers. Journal of the Mechanics and Physics of Solids, 2009, 57, 1103-1121.	2.3	138
63	Stress Relaxation via Additionâ^'Fragmentation Chain Transfer in a Thiol-ene Photopolymerization. Macromolecules, 2009, 42, 2551-2556.	2.2	135
64	Enabling Applications of Covalent Adaptable Networks. Annual Review of Chemical and Biomolecular Engineering, 2019, 10, 175-198.	3.3	134
65	Use of ?living? radical polymerizations to study the structural evolution and properties of highly crosslinked polymer networks. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 2297-2307.	2.4	133
66	Twoâ€Stage Reactive Polymer Network Forming Systems. Advanced Functional Materials, 2012, 22, 1502-1510.	7.8	127
67	Photopolymerized thiol-ene systems as shape memory polymers. Polymer, 2010, 51, 4383-4389.	1.8	124
68	Mechanophotopatterning on a Photoresponsive Elastomer. Advanced Materials, 2011, 23, 1977-1981.	11.1	124
69	Modeling Primary Radical Termination and Its Effects on Autoacceleration in Photopolymerization Kinetics. Macromolecules, 1999, 32, 6552-6559.	2.2	123
70	Polymerization kinetics and volume relaxation behavior of photopolymerized multifunctional monomers producing highly crosslinked networks. Journal of Polymer Science Part A, 1994, 32, 139-147.	2.5	122
71	Dielsâ€"Alder Mediated Controlled Release from a Poly(ethylene glycol) Based Hydrogel. Biomacromolecules, 2013, 14, 538-547.	2.6	122
72	Towards the elucidation of shrinkage stress development and relaxation in dental composites. Dental Materials, 2004, 20, 979-986.	1.6	120

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73	Monochromatic Visible Light â€œPhotoinitibitorâ€• Janus-Faced Initiation and Inhibition for Storage of Colored 3D Images. Journal of the American Chemical Society, 2014, 136, 8855-8858.	6.6	118
74	Photoresponsive Fiber Array: Toward Mimicking the Collective Motion of Cilia for Transport Applications. Advanced Functional Materials, 2016, 26, 5322-5327.	7.8	116
75	Effects of Monomer Structure on Their Organization and Polymerization in a Smectic Liquid Crystal. Science, 1997, 275, 57-59.	6.0	114
76	Synthesis, Thiolâ^'Yne â€œClickâ€•Photopolymerization, and Physical Properties of Networks Derived from Novel Multifunctional Alkynes. Macromolecules, 2010, 43, 4937-4942.	2.2	114
77	Spatial and Temporal Control of Thiol-Michael Addition via Photocaged Superbase in Photopatterning and Two-Stage Polymer Networks Formation. Macromolecules, 2014, 47, 6159-6165.	2.2	114
78	Method for Determining the Kinetic Parameters in Diffusion-Controlled Free-Radical Homopolymerizations. Industrial & Engineering Chemistry Research, 1997, 36, 1247-1252.	1.8	113
79	Photoclick Chemistry: A Bright Idea. Chemical Reviews, 2021, 121, 6915-6990.	23.0	113
80	Investigation of thiol-ene and thiol-eneâ€“methacrylate based resins as dental restorative materials. Dental Materials, 2010, 26, 21-28.	1.6	111
81	Bistable and photoswitchable states of matter. Nature Communications, 2018, 9, 2804.	5.8	111
82	The effect of light intensity on double bond conversion and flexural strength of a model, unfilled dental resin. Dental Materials, 2003, 19, 458-465.	1.6	108
83	A Statistical Kinetic Model for the Bulk Degradation of PLA-b-PEG-b-PLA Hydrogel Networks:Â Incorporating Network Non-Idealities. Journal of Physical Chemistry B, 2001, 105, 8069-8076.	1.2	107
84	Kinetics of Primary Cyclization Reactions in Cross-Linked Polymers:Â An Analytical and Numerical Approach to Heterogeneity in Network Formation. Macromolecules, 1999, 32, 8621-8628.	2.2	105
85	Photoinduced Plasticity in Crossâ€Linked Liquid Crystalline Networks. Advanced Materials, 2017, 29, 1606509.	11.1	103
86	Factors affecting membrane fouling reduction by surface modification and backpulsing. Journal of Membrane Science, 2001, 189, 255-270.	4.1	99
87	Using polymeric materials to generate an amplified response to molecular recognition events. Nature Materials, 2008, 7, 52-56.	13.3	99
88	Relative reactivity and selectivity of vinyl sulfones and acrylates towards the thiolâ€“Michael addition reaction and polymerization. Polymer Chemistry, 2013, 4, 1048-1055.	1.9	98
89	Modeling the Effect of Oxygen on Photopolymerization Kinetics. Macromolecular Theory and Simulations, 2006, 15, 176-182.	0.6	96
90	Controlling Network Structure in Degradable Thiolâ^'Acrylate Biomaterials to Tune Mass Loss Behavior. Biomacromolecules, 2006, 7, 2827-2836.	2.6	94

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91	Kinetic Gelation model predictions of crosslinked polymer network microstructure. Chemical Engineering Science, 1994, 49, 2207-2217.	1.9	93
92	Adaptable liquid crystal elastomers with transesterification-based bond exchange reactions. Soft Matter, 2018, 14, 951-960.	1.2	92
93	Reconfigurable LC Elastomers: Using a Thermally Programmable Monodomain To Access Two-Way Free-Standing Multiple Shape Memory Polymers. Macromolecules, 2018, 51, 5812-5819.	2.2	92
94	Probing the origins and control of shrinkage stress in dental resin-composites: I. Shrinkage stress characterization technique*. Journal of Materials Science: Materials in Medicine, 2004, 15, 1097-1103.	1.7	91
95	Formation and Surface Modification of Nanopatterned Thiolâ€ene Substrates using Step and Flash Imprint Lithography. Advanced Materials, 2008, 20, 3308-3313.	11.1	91
96	Thiolâ€“norbornene materials: Approaches to develop high <i>T</i>_g thiolâ€“ene polymers. Journal of Polymer Science Part A, 2007, 45, 5686-5696.	2.5	90
97	Triple Shape Memory Materials Incorporating Two Distinct Polymer Networks Formed by Selective Thiolâ€“Michael Addition Reactions. Macromolecules, 2014, 47, 4949-4954.	2.2	88
98	Development of highly reactive mono-(meth)acrylates as reactive diluents for dimethacrylate-based dental resin systems. Biomaterials, 2005, 26, 1329-1336.	5.7	87
99	Properties of methacrylateâ€“thiolâ€“ene formulations as dental restorative materials. Dental Materials, 2010, 26, 799-806.	1.6	87
100	Effects of neighboring sulfides and pH on ester hydrolysis in thiolâ€“acrylate photopolymers. Acta Biomaterialia, 2007, 3, 449-455.	4.1	86
101	Radical concentrations, environments, and reactivities during crosslinking polymerizations. Macromolecular Chemistry and Physics, 1996, 197, 833-848.	1.1	84
102	Thiolâˆ’Vinyl Mechanisms. 1. Termination and Propagation Kinetics in Thiolâˆ’Ene Photopolymerizations. Macromolecules, 2006, 39, 3673-3680.	2.2	84
103	Thiolâˆ’Allyl Etherâˆ’Methacrylate Ternary Systems. Polymerization Mechanism. Macromolecules, 2007, 40, 1466-1472.	2.2	84
104	Real-Time Infrared Characterization of Reaction Diffusion during Multifunctional Monomer Polymerizations. Macromolecules, 1995, 28, 4040-4043.	2.2	82
105	Transport Properties of Carbon Dioxide through Amine Functionalized Carrier Membranes. Industrial & Engineering Chemistry Research, 1995, 34, 4071-4077.	1.8	82
106	Thiolâˆ’Isocyanateâˆ’Ene Ternary Networks by Sequential and Simultaneous Thiol Click Reactions. Chemistry of Materials, 2010, 22, 2616-2625.	3.2	82
107	Thiolâˆ’Allyl Etherâˆ’Methacrylate Ternary Systems. Evolution Mechanism of Polymerization-Induced Shrinkage Stress and Mechanical Properties. Macromolecules, 2007, 40, 1473-1479.	2.2	81
108	High Performance Graded Rainbow Holograms via Two-Stage Sequential Orthogonal Thiolâ€“Click Chemistry. Macromolecules, 2014, 47, 2306-2315.	2.2	81

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109	Remoldable Thiolâ€“Ene Vitrimers for Photopatterning and Nanoimprint Lithography. Macromolecules, 2016, 49, 8905-8913.	2.2	81
110	Nanoimprint lithography: Emergent materials and methods of actuation. Nano Today, 2020, 31, 100838.	6.2	81
111	Effect of comonomer concentration and functionality on photopolymerization rates, mechanical properties and heterogeneity of the polymer. Macromolecular Chemistry and Physics, 1998, 199, 1043-1049.	1.1	79
112	Effect of Polymerization Temperature and Cross-Linker Concentration on Reaction Diffusion Controlled Termination. Macromolecules, 1999, 32, 6073-6081.	2.2	79
113	Robust polymer microfluidic device fabrication via contact liquid photolithographic polymerization (CLiPP). Lab on A Chip, 2004, 4, 658.	3.1	79
114	A new photoclick reaction strategy: photo-induced catalysis of the thiol-Michael addition via a caged primary amine. Chemical Communications, 2013, 49, 4504-4506.	2.2	79
115	A kinetic gelation method for the simulation of free-radical polymerizations. Chemical Engineering Science, 1992, 47, 1411-1419.	1.9	78
116	Thiolâ'Vinyl Mechanisms. 2. Kinetic Modeling of Ternary Thiolâ^'Vinyl Photopolymerizations. Macromolecules, 2006, 39, 3681-3687.	2.2	78
117	Ultrathin gradient films using thiol-ene polymerizations. Journal of Polymer Science Part A, 2006, 44, 7027-7039.	2.5	78
118	A user's guide to the thiol-thioester exchange in organic media: scope, limitations, and applications in material science. Polymer Chemistry, 2018, 9, 4523-4534.	1.9	78
119	Thiolâ€“eneâ€“methacrylate composites as dental restorative materials. Dental Materials, 2011, 27, 267-272.	1.6	77
120	Using Changes in Initiation and Chain Transfer Rates To Probe the Kinetics of Cross-Linking Photopolymerizations:Â Effects of Chain Length Dependent Termination. Macromolecules, 2001, 34, 5103-5111.	2.2	76
121	Kinetic and Mechanistic Studies of Iniferter Photopolymerizations. Macromolecules, 1996, 29, 7310-7315.	2.2	75
122	Surface Modification Using Thiolâ^'Acrylate Conjugate Addition Reactions. Macromolecules, 2007, 40, 5669-5677.	2.2	75
123	Clickable Nucleic Acids: Sequenceâ€Controlled Periodic Copolymer/Oligomer Synthesis by Orthogonal Thiolâ€X Reactions. Angewandte Chemie - International Edition, 2015, 54, 14462-14467.	7.2	75
124	Mucoadhesion of poly(2-hydroxyethyl methacrylate) is improved when linear poly(ethylene oxide) chains are added to the polymer network. Journal of Controlled Release, 1995, 33, 197-201.	4.8	74
125	A Generalized Bulk-Degradation Model for Hydrogel Networks Formed from Multivinyl Cross-linking Molecules. Journal of Physical Chemistry B, 2001, 105, 5131-5138.	1.2	74
126	The reciprocity law concerning light dose relationships applied to BisGMA/TEGDMA photopolymers: Theoretical analysis and experimental characterization. Dental Materials, 2014, 30, 605-612.	1.6	74

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127	Scaffolded Thermally Remendable Hybrid Polymer Networks. Advanced Functional Materials, 2016, 26, 1477-1485.	7.8	74
128	Effect of Polymer Surface Properties on the Reversibility of Attachment ofPseudomonas aeruginosain the Early Stages of Biofilm Development. Biofouling, 2002, 18, 65-71.	0.8	72
129	A Dielsâ€“Alder modulated approach to control and sustain the release of dexamethasone and induce osteogenic differentiation of human mesenchymal stem cells. Biomaterials, 2013, 34, 4150-4158.	5.7	72
130	Photo-differential scanning calorimetry studies of cationic polymerizations of divinyl ethers. Polymer, 1995, 36, 4651-4656.	1.8	71
131	Stress Relaxation by Additionâ^'Fragmentation Chain Transfer in Highly Cross-Linked Thiolâ^'Yne Networks. Macromolecules, 2010, 43, 10188-10190.	2.2	71
132	Visible-Light Initiated Thiol-Michael Addition Photopolymerization Reactions. ACS Macro Letters, 2014, 3, 315-318.	2.3	71
133	Ester-free thiolâ€“ene dental restorativesâ€"Part A: Resin development. Dental Materials, 2015, 31, 1255-1262.	1.6	71
134	Synthesis and Assembly of Clickâ€Nucleicâ€Acidâ€Containing PEGâ€“PLGA Nanoparticles for DNA Delivery. Advanced Materials, 2017, 29, 1700743.	11.1	71
135	Nitrogen-Centered Nucleophile Catalyzed Thiol-Vinylsulfone Addition, Another Thiol-ene â€œClickâ€• Reaction. ACS Macro Letters, 2012, 1, 811-814.	2.3	70
136	Reaction Diffusion Enhanced Termination in Polymerizations of Multifunctional Monomers. Polymer-Plastics Technology and Engineering, 1993, 1, 499-520.	0.7	68
137	Probing the origins and control of shrinkage stress in dental resin composites. II. Novel method of simultaneous measurement of polymerization shrinkage stress and conversion. Journal of Biomedical Materials Research Part B, 2004, 71B, 206-213.	3.0	68
138	Exploiting the Heterogeneity of Cross-Linked Photopolymers To Create High-TgPolymers from Polymerizations Performed at Ambient Conditions. Macromolecules, 2001, 34, 8021-8025.	2.2	67
139	Kinetic modeling of the effect of solvent concentration on primary cyclization during polymerization of multifunctional monomers. Chemical Engineering Science, 2001, 56, 3173-3184.	1.9	67
140	Efficient Polymerâ€Polymer Conjugation via Thiolâ€ene Click Reaction. Macromolecular Chemistry and Physics, 2017, 218, 1700073.	1.1	67
141	Modeling of network degradation in mixed step-chain growth polymerizations. Polymer, 2005, 46, 4212-4222.	1.8	66
142	Ultrathin Patterned Polymer Films on Surfaces Using Thiolâ^'Ene Polymerizations. Macromolecules, 2006, 39, 5081-5086.	2.2	66
143	A Simple Relationship Relating Linear Viscoelastic Properties and Chemical Structure in a Model Dielsâ€“Alder Polymer Network. Macromolecules, 2012, 45, 7634-7641.	2.2	66
144	Reconfigurable and Spatially Programmable Chameleon Skinâ€Like Material Utilizing Light Responsive Covalent Adaptable Cholesteric Liquid Crystal Elastomers. Advanced Functional Materials, 2020, 30, 2003150.	7.8	66

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145	Living radical photopolymerization induced grafting on thiol-ene based substrates. Journal of Polymer Science Part A, 2005, 43, 2134-2144.	2.5	65
146	Development and characterization of degradable thiol-allyl ether photopolymers. Polymer, 2007, 48, 4589-4600.	1.8	65
147	Transport mechanism of carbon dioxide through perfluorosulfonate ionomer membranes containing an amine carrier. Chemical Engineering Science, 1996, 51, 4781-4789.	1.9	64
148	Structural Evolution of Dimethacrylate Networks Studied by Dielectric Spectroscopy. Macromolecules, 1998, 31, 3311-3316.	2.2	64
149	Polymerizable Vancomycin Derivatives for Bactericidal Biomaterial Surface Modification: Structureâ^'Function Evaluation. Biomacromolecules, 2009, 10, 2221-2234.	2.6	64
150	A novel copper containing photoinitiator, copper(ii) acylphosphinate, and its application in both the photomediated CuAAC reaction and in atom transfer radical polymerization. Chemical Communications, 2013, 49, 7950.	2.2	64
151	Secondary Photocrosslinking of Click Hydrogels To Probe Myoblast Mechanotransduction in Three Dimensions. Journal of the American Chemical Society, 2018, 140, 11585-11588.	6.6	64
152	A Methacrylated Photoiniferter as a Chemical Basis for Microlithography:Â Micropatterning Based on Photografting Polymerization. Macromolecules, 2003, 36, 6739-6745.	2.2	63
153	Wavelength-Selective Sequential Polymer Network Formation Controlled with a Two-Color Responsive Initiation System. Macromolecules, 2017, 50, 5652-5660.	2.2	62
154	The Influence of Comonomer Composition on Dimethacrylate Resin Properties for Dental Composites. Journal of Dental Research, 1996, 75, 1607-1612.	2.5	61
155	Models of multivinyl free radical photopolymerization kinetics. Journal of Photochemistry and Photobiology A: Chemistry, 2003, 159, 135-143.	2.0	61
156	Mechanism of cyclic dye regeneration during eosinâ€sensitized photoinitiation in the presence of polymerization inhibitors. Journal of Polymer Science Part A, 2009, 47, 6083-6094.	2.5	61
157	Thiolâ^'Ene Photopolymer Grafts on Functionalized Glass and Silicon Surfaces. Macromolecules, 2006, 39, 1461-1466.	2.2	60
158	Application of an additionâ€“fragmentation-chain transfer monomer in di(meth)acrylate network formation to reduce polymerization shrinkage stress. Polymer Chemistry, 2017, 8, 4339-4351.	1.9	60
159	Coupling Chain Length Dependent and Reaction Diffusion Controlled Termination in the Free Radical Polymerization of Multivinyl (Meth)acrylates. Macromolecules, 2002, 35, 7968-7975.	2.2	59
160	Surface-Initiated Photopolymerization of Poly(ethylene glycol) Methyl Ether Methacrylate on a Diethyldithiocarbamate-Mediated Polymer Substrate. Macromolecules, 2002, 35, 2487-2493.	2.2	59
161	Synthesis of a novel methacrylic monomer iniferter and its application in surface photografting on crosslinked polymer substrates. Journal of Polymer Science Part A, 2002, 40, 1885-1891.	2.5	59
162	Soft-lithography fabrication of microfluidic features using thiol-ene formulations. Lab on A Chip, 2011, 11, 2772.	3.1	59

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163	Hybrid Organic/Inorganic Thiolâ€"Ene-Based Photopolymerized Networks. Macromolecules, 2011, 44, 7520-7529.	2.2	59
164	Phase behaviour and electro-optic characteristics of a polymer stabilized ferroelectric liquid crystal. Liquid Crystals, 1995, 19, 719-727.	0.9	58
165	Visual Detection of Labeled Oligonucleotides Using Visible-Light-Polymerization-Based Amplification. Biomacromolecules, 2008, 9, 355-362.	2.6	58
166	Visible-Light-Initiated Thiol-Michael Addition Polymerizations with Coumarin-Based Photobase Generators: Another Photoclick Reaction Strategy. ACS Macro Letters, 2016, 5, 229-233.	2.3	58
167	Novel Monovinyl Methacrylic Monomers Containing Secondary Functionality for Ultrarapid Polymerization:Â Steady-State Evaluation. Macromolecules, 2004, 37, 3165-3179.	2.2	57
168	3D Photofixation Lithography in Dielsâ€"Alder Networks. Macromolecular Rapid Communications, 2012, 33, 2092-2096.	2.0	57
169	Facile Image Patterning via Sequential Thiolâ€"Michael/Thiolâ€"Yne Click Reactions. Chemistry of Materials, 2014, 26, 6819-6826.	3.2	57
170	Thiolâ€"Anhydride Dynamic Reversible Networks. Angewandte Chemie - International Edition, 2020, 59, 9345-9349.	7.2	57
171	Polymerization Conditions and Electrooptic Properties of Polymer-Stabilized Ferroelectric Liquid Crystals. Chemistry of Materials, 1998, 10, 2378-2388.	3.2	56
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