

Christopher N Bowman

List of Publications by Citations

Source: <https://exaly.com/author-pdf/1657275/christopher-n-bowman-publications-by-citations.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

476
papers

33,631
citations

84
h-index

166
g-index

505
ext. papers

36,871
ext. citations

7.1
avg, IF

7.68
L-index

#	Paper	IF	Citations
476	Thiol-ene click chemistry. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 1540-73	16.4	2830
475	Thiol-click chemistry: a multifaceted toolbox for small molecule and polymer synthesis. <i>Chemical Society Reviews</i> , 2010 , 39, 1355-87	58.5	1264
474	The Thiol-Michael Addition Click Reaction: A Powerful and Widely Used Tool in Materials Chemistry. <i>Chemistry of Materials</i> , 2014 , 26, 724-744	9.6	928
473	Mechanical properties of hydrogels and their experimental determination. <i>Biomaterials</i> , 1996 , 17, 1647-53	5.6	857
472	Photoinitiated polymerization of PEG-diacrylate with lithium phenyl-2,4,6-trimethylbenzoylphosphinate: polymerization rate and cytocompatibility. <i>Biomaterials</i> , 2009 , 30, 6702-7	15.6	736
471	Photoinduced plasticity in cross-linked polymers. <i>Science</i> , 2005 , 308, 1615-7	33.3	574
470	Covalent adaptable networks: smart, reconfigurable and responsive network systems. <i>Chemical Society Reviews</i> , 2013 , 42, 7161-73	58.5	572
469	Covalent Adaptable Networks (CANs): A Unique Paradigm in Crosslinked Polymers. <i>Macromolecules</i> , 2010 , 43, 2643-2653	5.5	485
468	A Versatile Synthetic Extracellular Matrix Mimic via Thiol-Norbornene Photopolymerization. <i>Advanced Materials</i> , 2009 , 21, 5005-5010	24	478
467	Click Chemistry in Materials Science. <i>Advanced Functional Materials</i> , 2014 , 24, 2572-2590	15.6	423
466	Recent advances and developments in composite dental restorative materials. <i>Journal of Dental Research</i> , 2011 , 90, 402-16	8.1	418
465	Thiol-yne click chemistry: A powerful and versatile methodology for materials synthesis. <i>Journal of Materials Chemistry</i> , 2010 , 20, 4745		397
464	In situ forming degradable networks and their application in tissue engineering and drug delivery. <i>Journal of Controlled Release</i> , 2002 , 78, 199-209	11.7	393
463	Kinetics of thiol-ene and thiol-acrylate photopolymerizations with real-time fourier transform infrared. <i>Journal of Polymer Science Part A</i> , 2001 , 39, 3311-3319	2.5	385
462	Mechanical properties of cellularly responsive hydrogels and their experimental determination. <i>Advanced Materials</i> , 2010 , 22, 3484-94	24	337
461	Thiol-Yne Photopolymerizations: Novel Mechanism, Kinetics, and Step-Growth Formation of Highly Cross-Linked Networks. <i>Macromolecules</i> , 2009 , 42, 211-217	5.5	325
460	Spatial and temporal control of the alkyne-azide cycloaddition by photoinitiated Cu(II) reduction. <i>Nature Chemistry</i> , 2011 , 3, 256-59	17.6	316

459	Structure and swelling of poly(acrylic acid) hydrogels: effect of pH, ionic strength, and dilution on the crosslinked polymer structure. <i>Polymer</i> , 2004 , 45, 1503-1510	3.9	306
458	Fundamental studies of a novel, biodegradable PEG-b-PLA hydrogel. <i>Polymer</i> , 2000 , 41, 3993-4004	3.9	304
457	Kinetic evidence of reaction diffusion during the polymerization of multi(meth)acrylate monomers. <i>Macromolecules</i> , 1994 , 27, 650-655	5.5	287
456	Two-color single-photon photoinitiation and photoinhibition for subdiffraction photolithography. <i>Science</i> , 2009 , 324, 913-7	33.3	286
455	Covalent adaptable networks: reversible bond structures incorporated in polymer networks. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 4272-4	16.4	281
454	Photopolymerizations of ThiolEne Polymers without Photoinitiators. <i>Macromolecules</i> , 2002 , 35, 5361-5365	5.5	272
453	A Novel Sequential Photoinduced Living Graft Polymerization. <i>Macromolecules</i> , 2000 , 33, 331-335	5.5	272
452	The effect of cure rate on the mechanical properties of dental resins. <i>Dental Materials</i> , 2001 , 17, 504-11	5.7	260
451	Photodegradable, Photoadaptable Hydrogels via Radical-Mediated Disulfide Fragmentation Reaction. <i>Macromolecules</i> , 2011 , 44, 2444-2450	5.5	255
450	ThiolEne Photopolymerization Mechanism and Rate Limiting Step Changes for Various Vinyl Functional Group Chemistries. <i>Macromolecules</i> , 2003 , 36, 7964-7969	5.5	243
449	The power of light in polymer science: photochemical processes to manipulate polymer formation, structure, and properties. <i>Polymer Chemistry</i> , 2014 , 5, 2187-2201	4.9	240
448	A study of the evolution of mechanical properties and structural heterogeneity of polymer networks formed by photopolymerizations of multifunctional (meth)acrylates. <i>Polymer</i> , 1998 , 39, 2507-2513	3.9	234
447	Rheological and chemical analysis of reverse gelation in a covalently crosslinked Diels-Alder polymer network. <i>Macromolecules</i> , 2008 , 41, 9112-9117	5.5	230
446	Degradable thiol-acrylate photopolymers: polymerization and degradation behavior of an in situ forming biomaterial. <i>Biomaterials</i> , 2005 , 26, 4495-506	15.6	230
445	Reaction behaviour and kinetic constants for photopolymerizations of multi(meth)acrylate monomers. <i>Polymer</i> , 1994 , 35, 3243-3250	3.9	221
444	The effects of light intensity, temperature, and comonomer composition on the polymerization behavior of dimethacrylate dental resins. <i>Journal of Dental Research</i> , 1999 , 78, 1469-76	8.1	219
443	Tailorable and programmable liquid-crystalline elastomers using a two-stage thiolacrylate reaction. <i>RSC Advances</i> , 2015 , 5, 18997-19001	3.7	212
442	Effects of ultrafiltration membrane surface properties on <i>Pseudomonas aeruginosa</i> biofilm initiation for the purpose of reducing biofouling. <i>Journal of Membrane Science</i> , 2001 , 194, 15-32	9.6	199

441	Investigations of step-growth thiol-ene polymerizations for novel dental restoratives. <i>Dental Materials</i> , 2005 , 21, 1129-36	5.7	198
440	Reaction Kinetics and Volume Relaxation during Polymerizations of Multiethylene Glycol Dimethacrylates. <i>Macromolecules</i> , 1995 , 28, 2491-2499	5.5	193
439	Toward an enhanced understanding and implementation of photopolymerization reactions. <i>AIChE Journal</i> , 2008 , 54, 2775-2795	3.6	191
438	Oxygen inhibition in thiolacrylate photopolymerizations. <i>Journal of Polymer Science Part A</i> , 2006 , 44, 2007-2014	2.5	169
437	Predicting Controlled-Release Behavior of Degradable PLA-b-PEG-b-PLA Hydrogels. <i>Macromolecules</i> , 2001 , 34, 4630-4635	5.5	168
436	Mechanism and Modeling of a ThiolEne Photopolymerization. <i>Macromolecules</i> , 2003 , 36, 4631-4636	5.5	165
435	Evaluation and Control of Thiol-ene/Thiol-epoxy Hybrid Networks. <i>Polymer</i> , 2007 , 48, 1526-1532	3.9	164
434	Effects of Composition and Reactivity on the Reaction Kinetics of Dimethacrylate/Dimethacrylate Copolymerizations. <i>Macromolecules</i> , 1999 , 32, 3913-3921	5.5	158
433	Understanding the kinetics and network formation of dimethacrylate dental resins. <i>Polymers for Advanced Technologies</i> , 2001 , 12, 335-345	3.2	152
432	A Statistical Kinetic Model for the Bulk Degradation of PLA-b-PEG-b-PLA Hydrogel Networks. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 7043-7049	3.4	152
431	Development of a comprehensive free radical photopolymerization model incorporating heat and mass transfer effects in thick films. <i>Chemical Engineering Science</i> , 2002 , 57, 887-900	4.4	151
430	Membrane fouling reduction by backpulsing and surface modification. <i>Journal of Membrane Science</i> , 2000 , 173, 191-200	9.6	150
429	New directions in the chemistry of shape memory polymers. <i>Polymer</i> , 2014 , 55, 5849-5872	3.9	147
428	Thiol-ene oligomers as dental restorative materials. <i>Dental Materials</i> , 2005 , 21, 1137-43	5.7	144
427	Impact of Oxygen on Photopolymerization Kinetics and Polymer Structure. <i>Macromolecules</i> , 2006 , 39, 2501-2506	5.5	142
426	Photopolymerization reactions using the photoinitiated copper (I)-catalyzed azide-alkyne cycloaddition (CuAAC) reaction. <i>Advanced Materials</i> , 2013 , 25, 2024-8	24	141
425	Initiation and kinetics of thiolene photopolymerizations without photoinitiators. <i>Journal of Polymer Science Part A</i> , 2004 , 42, 5817-5826	2.5	140
424	Reaction Rates and Mechanisms for Radical, Photoinitiated Addition of Thiols to Alkynes, and Implications for Thiolene Photopolymerizations and Click Reactions. <i>Macromolecules</i> , 2010 , 43, 4113-4119	5.5	138

423	Primary cyclization in the polymerization of bis-GMA and TEGDMA: a modeling approach to understanding the cure of dental resins. <i>Dental Materials</i> , 2001 , 17, 221-9	5.7	137
422	Impact of curing protocol on conversion and shrinkage stress. <i>Journal of Dental Research</i> , 2005 , 84, 822-6.1	6.1	135
421	Externally triggered healing of a thermoreversible covalent network via self-limited hysteresis heating. <i>Advanced Materials</i> , 2010 , 22, 2784-7	24	127
420	Actuation in Crosslinked Polymers via Photoinduced Stress Relaxation. <i>Advanced Materials</i> , 2006 , 18, 2128-2132	24	126
419	Photomechanics of light-activated polymers. <i>Journal of the Mechanics and Physics of Solids</i> , 2009 , 57, 1103-1121	5	123
418	Coupling of kinetics and volume relaxation during polymerizations of multiacrylates and multimethacrylates. <i>Macromolecules</i> , 1991 , 24, 1914-1920	5.5	121
417	Use of Living Radical polymerizations to study the structural evolution and properties of highly crosslinked polymer networks. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1997 , 35, 2297-2307	2.6	119
416	Stress relaxation via addition-fragmentation chain transfer in a thiol-ene photopolymerization. <i>Macromolecules</i> , 2009 , 42, 2551-2556	5.5	113
415	Towards the elucidation of shrinkage stress development and relaxation in dental composites. <i>Dental Materials</i> , 2004 , 20, 979-86	5.7	113
414	Toward Stimuli-Responsive Dynamic Thermosets through Continuous Development and Improvements in Covalent Adaptable Networks (CANs). <i>Advanced Materials</i> , 2020 , 32, e1906876	24	110
413	Photopolymerized Thiol-Ene Systems as Shape Memory Polymers. <i>Polymer</i> , 2010 , 51, 4383-4389	3.9	109
412	Two-Stage Reactive Polymer Network Forming Systems. <i>Advanced Functional Materials</i> , 2012 , 22, 1502-1510	5.10	108
411	Mechanophotopatterning on a photoresponsive elastomer. <i>Advanced Materials</i> , 2011 , 23, 1977-81	24	107
410	Synthesis, Thiol-Ene Click-Photopolymerization, and Physical Properties of Networks Derived from Novel Multifunctional Alkynes. <i>Macromolecules</i> , 2010 , 43, 4937-4942	5.5	107
409	Effects of Monomer Structure on Their Organization and Polymerization in a Smectic Liquid Crystal. <i>Science</i> , 1997 , 275, 57-9	33.3	106
408	Diels-Alder mediated controlled release from a poly(ethylene glycol) based hydrogel. <i>Biomacromolecules</i> , 2013 , 14, 538-47	6.9	105
407	A readily programmable, fully reversible shape-switching material. <i>Science Advances</i> , 2018 , 4, eaat4634	14.3	103
406	Modeling Primary Radical Termination and Its Effects on Autoacceleration in Photopolymerization Kinetics. <i>Macromolecules</i> , 1999 , 32, 6552-6559	5.5	103

405	Polymerization kinetics and volume relaxation behavior of photopolymerized multifunctional monomers producing highly crosslinked networks. <i>Journal of Polymer Science Part A</i> , 1994 , 32, 139-147	2.5	102
404	Monochromatic visible light "photoinitiator": Janus-faced initiation and inhibition for storage of colored 3D images. <i>Journal of the American Chemical Society</i> , 2014 , 136, 8855-8	16.4	99
403	Method for Determining the Kinetic Parameters in Diffusion-Controlled Free-Radical Homopolymerizations. <i>Industrial & Engineering Chemistry Research</i> , 1997 , 36, 1247-1252	3.9	99
402	Investigation of thiol-ene and thiol-ene-methacrylate based resins as dental restorative materials. <i>Dental Materials</i> , 2010 , 26, 21-8	5.7	98
401	Photoresponsive Fiber Array: Toward Mimicking the Collective Motion of Cilia for Transport Applications. <i>Advanced Functional Materials</i> , 2016 , 26, 5322-5327	15.6	97
400	Using polymeric materials to generate an amplified response to molecular recognition events. <i>Nature Materials</i> , 2008 , 7, 52-6	27	96
399	The effect of light intensity on double bond conversion and flexural strength of a model, unfilled dental resin. <i>Dental Materials</i> , 2003 , 19, 458-65	5.7	95
398	A Statistical Kinetic Model for the Bulk Degradation of PLA-b-PEG-b-PLA Hydrogel Networks: Incorporating Network Non-Idealities. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 8069-8076	3.4	94
397	Kinetics of Primary Cyclization Reactions in Cross-Linked Polymers: An Analytical and Numerical Approach to Heterogeneity in Network Formation. <i>Macromolecules</i> , 1999 , 32, 8621-8628	5.5	93
396	Factors affecting membrane fouling reduction by surface modification and backpulsing. <i>Journal of Membrane Science</i> , 2001 , 189, 255-270	9.6	92
395	Photopolymerized dynamic hydrogels with tunable viscoelastic properties through thioester exchange. <i>Biomaterials</i> , 2018 , 178, 496-503	15.6	90
394	Spatial and Temporal Control of Thiol-Michael Addition via Photocaged Superbase in Photopatterning and Two-Stage Polymer Networks Formation. <i>Macromolecules</i> , 2014 , 47, 6159-6165	5.5	90
393	Formation and Surface Modification of Nanopatterned Thiol-ene Substrates using Step and Flash Imprint Lithography. <i>Advanced Materials</i> , 2008 , 20, 3308-3313	24	87
392	Photoinduced Plasticity in Cross-Linked Liquid Crystalline Networks. <i>Advanced Materials</i> , 2017 , 29, 16065-16069	24	84
391	Controlling network structure in degradable thiol-acrylate biomaterials to tune mass loss behavior. <i>Biomacromolecules</i> , 2006 , 7, 2827-36	6.9	82
390	Thiol-ene materials: Approaches to develop high Tg thiol-ene polymers. <i>Journal of Polymer Science Part A</i> , 2007 , 45, 5686-5696	2.5	81
389	Enabling Applications of Covalent Adaptable Networks. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2019 , 10, 175-198	8.9	80
388	Thiol-Vinyl Mechanisms. 1. Termination and Propagation Kinetics in Thiol-ene Photopolymerizations. <i>Macromolecules</i> , 2006 , 39, 3673-3680	5.5	80

387	Probing the origins and control of shrinkage stress in dental resin-composites: I. Shrinkage stress characterization technique. <i>Journal of Materials Science: Materials in Medicine</i> , 2004 , 15, 1097-103	4.5	79
386	Triple Shape Memory Materials Incorporating Two Distinct Polymer Networks Formed by Selective Thiol-Michael Addition Reactions. <i>Macromolecules</i> , 2014 , 47, 4949-4954	5.5	78
385	Kinetic Gelation model predictions of crosslinked polymer network microstructure. <i>Chemical Engineering Science</i> , 1994 , 49, 2207-2217	4.4	78
384	Bistable and photoswitchable states of matter. <i>Nature Communications</i> , 2018 , 9, 2804	17.4	77
383	Thiol-Allyl Ether-Methacrylate Ternary Systems. Polymerization Mechanism. <i>Macromolecules</i> , 2007 , 40, 1466-1472	5.5	75
382	Robust polymer microfluidic device fabrication via contact liquid photolithographic polymerization (CLiPP). <i>Lab on A Chip</i> , 2004 , 4, 658-62	7.2	75
381	Development of highly reactive mono-(meth)acrylates as reactive diluents for dimethacrylate-based dental resin systems. <i>Biomaterials</i> , 2005 , 26, 1329-36	15.6	75
380	Effect of comonomer concentration and functionality on photopolymerization rates, mechanical properties and heterogeneity of the polymer. <i>Macromolecular Chemistry and Physics</i> , 1998 , 199, 1043-1049	2.6	74
379	Modeling the Effect of Oxygen on Photopolymerization Kinetics. <i>Macromolecular Theory and Simulations</i> , 2006 , 15, 176-182	1.5	74
378	Thiol-Allyl Ether-Methacrylate Ternary Systems. Evolution Mechanism of Polymerization-Induced Shrinkage Stress and Mechanical Properties. <i>Macromolecules</i> , 2007 , 40, 1473-1479	5.5	74
377	Ultrathin gradient films using thiol-ene polymerizations. <i>Journal of Polymer Science Part A</i> , 2006 , 44, 7027-7039	7.4	74
376	Relative reactivity and selectivity of vinyl sulfones and acrylates towards the thiol-Michael addition reaction and polymerization. <i>Polymer Chemistry</i> , 2013 , 4, 1048-1055	4.9	73
375	Properties of methacrylate-thiol-ene formulations as dental restorative materials. <i>Dental Materials</i> , 2010 , 26, 799-806	5.7	73
374	Transport Properties of Carbon Dioxide through Amine Functionalized Carrier Membranes. <i>Industrial & Engineering Chemistry Research</i> , 1995 , 34, 4071-4077	3.9	73
373	A new photoclick reaction strategy: photo-induced catalysis of the thiol-Michael addition via a caged primary amine. <i>Chemical Communications</i> , 2013 , 49, 4504-6	5.8	72
372	Effects of neighboring sulfides and pH on ester hydrolysis in thiol-acrylate photopolymers. <i>Acta Biomaterialia</i> , 2007 , 3, 449-55	10.8	71
371	Thiol-Vinyl Mechanisms. 2. Kinetic Modeling of Ternary Thiol-Vinyl Photopolymerizations. <i>Macromolecules</i> , 2006 , 39, 3681-3687	5.5	71
370	Using Changes in Initiation and Chain Transfer Rates To Probe the Kinetics of Cross-Linking Photopolymerizations: Effects of Chain Length Dependent Termination. <i>Macromolecules</i> , 2001 , 34, 5103-5111	5.5	71

- 369 Effect of Polymerization Temperature and Cross-Linker Concentration on Reaction Diffusion Controlled Termination. *Macromolecules*, **1999**, 32, 6073-6081 5.5 71
- 368 Real-Time Infrared Characterization of Reaction Diffusion during Multifunctional Monomer Polymerizations. *Macromolecules*, **1995**, 28, 4040-4043 5.5 71
- 367 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 11.7 70
- 366 Radical concentrations, environments, and reactivities during crosslinking polymerizations. *Macromolecular Chemistry and Physics*, **1996**, 197, 833-848 2.6 70
- 365 Surface Modification Using Thiol-Acrylate Conjugate Addition Reactions. *Macromolecules*, **2007**, 40, 5669-5677 5.7 69
- 364 Kinetic and Mechanistic Studies of Iniferter Photopolymerizations. *Macromolecules*, **1996**, 29, 7310-7315 5.5 68
- 363 A kinetic gelation method for the simulation of free-radical polymerizations. *Chemical Engineering Science*, **1992**, 47, 1411-1419 4.4 68
- 362 Clickable Nucleic Acids: Sequence-Controlled Periodic Copolymer/Oligomer Synthesis by Orthogonal Thiol-X Reactions. *Angewandte Chemie - International Edition*, **2015**, 54, 14462-7 16.4 67
- 361 Thiol-ene-methacrylate composites as dental restorative materials. *Dental Materials*, **2011**, 27, 267-72 5.7 66
- 360 Stress Relaxation by Addition-Fragmentation Chain Transfer in Highly Crosslinked Thiol-Yne Networks. *Macromolecules*, **2010**, 43, 10188-10190 5.5 66
- 359 Thiol-Cyanate-Yne Ternary Networks by Sequential and Simultaneous Thiol Click Reactions. *Chemistry of Materials*, **2010**, 22, 2616-2625 9.6 65
- 358 High Performance Graded Rainbow Holograms via Two-Stage Sequential Orthogonal Thiol-Click Chemistry. *Macromolecules*, **2014**, 47, 2306-2315 5.5 64
- 357 Scaffolded Thermally Remendable Hybrid Polymer Networks. *Advanced Functional Materials*, **2016**, 26, 1477-1485 15.6 64
- 356 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 5.8 63
- 355 Ultrathin Patterned Polymer Films on Surfaces Using Thiol-ene Polymerizations. *Macromolecules*, **2006**, 39, 5081-5086 5.5 63
- 354 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**, 71, 206-13 63
- 353 Exploiting the Heterogeneity of Cross-Linked Photopolymers To Create High-Tg Polymers from Polymerizations Performed at Ambient Conditions. *Macromolecules*, **2001**, 34, 8021-8025 5.5 63
- 352 Adaptable liquid crystal elastomers with transesterification-based bond exchange reactions. *Soft Matter*, **2018**, 14, 951-960 3.6 62

351	Photo-differential scanning calorimetry studies of cationic polymerizations of divinyl ethers. <i>Polymer</i> , 1995 , 36, 4651-4656	3.9	62
350	Nitrogen-Centered Nucleophile Catalyzed Thiol-Vinylsulfone Addition, Another Thiol-ene Click Reaction. <i>ACS Macro Letters</i> , 2012 , 1, 811-814	6.6	61
349	Living radical photopolymerization induced grafting on thiolene based substrates. <i>Journal of Polymer Science Part A</i> , 2005 , 43, 2134-2144	2.5	61
348	Kinetic modeling of the effect of solvent concentration on primary cyclization during polymerization of multifunctional monomers. <i>Chemical Engineering Science</i> , 2001 , 56, 3173-3184	4.4	61
347	A Generalized Bulk-Degradation Model for Hydrogel Networks Formed from Multivinyl Cross-linking Molecules. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 5131-5138	3.4	61
346	Reaction Diffusion Enhanced Termination in Polymerizations of Multifunctional Monomers. <i>Polymer-Plastics Technology and Engineering</i> , 1993 , 1, 499-520		61
345	Remoldable Thiolene Vitrimers for Photopatterning and Nanoimprint Lithography. <i>Macromolecules</i> , 2016 , 49, 8905-8913	5.5	61
344	A Diels-Alder modulated approach to control and sustain the release of dexamethasone and induce osteogenic differentiation of human mesenchymal stem cells. <i>Biomaterials</i> , 2013 , 34, 4150-4158	15.6	60
343	Development and Characterization of Degradable Thiol-Allyl Ether Photopolymers. <i>Polymer</i> , 2007 , 48, 4589-4600	3.9	60
342	The reciprocity law concerning light dose relationships applied to BisGMA/TEGDMA photopolymers: theoretical analysis and experimental characterization. <i>Dental Materials</i> , 2014 , 30, 605-627	5.7	59
341	Mechanism of Cyclic Dye Regeneration During Eosin-Sensitized Photoinitiation in the Presence of Polymerization Inhibitors. <i>Journal of Polymer Science Part A</i> , 2009 , 47, 6083-6094	2.5	59
340	A Methacrylated Photoiniferter as a Chemical Basis for Microlithography: Micropatterning Based on Photografting Polymerization. <i>Macromolecules</i> , 2003 , 36, 6739-6745	5.5	59
339	Effect of Polymer Surface Properties on the Reversibility of Attachment of <i>Pseudomonas aeruginosa</i> in the Early Stages of Biofilm Development. <i>Biofouling</i> , 2002 , 18, 65-71	3.3	58
338	Ester-free thiol-ene dental restoratives--Part A: Resin development. <i>Dental Materials</i> , 2015 , 31, 1255-62	5.7	57
337	Reconfigurable LC Elastomers: Using a Thermally Programmable Monodomain To Access Two-Way Free-Standing Multiple Shape Memory Polymers. <i>Macromolecules</i> , 2018 , 51, 5812-5819	5.5	57
336	Visible-Light Initiated Thiol-Michael Addition Photopolymerization Reactions.. <i>ACS Macro Letters</i> , 2014 , 3, 315-318	6.6	57
335	Hybrid Organic/Inorganic Thiol-ene-Based Photopolymerized Networks. <i>Macromolecules</i> , 2011 , 44, 7520-7529	5.5	57
334	Polymerizable vancomycin derivatives for bactericidal biomaterial surface modification: structure-function evaluation. <i>Biomacromolecules</i> , 2009 , 10, 2221-34	6.9	57

- 333 Thiol-Ene Photopolymer Grafts on Functionalized Glass and Silicon Surfaces. *Macromolecules*, **2006**, 39, 1461-1466 5.5 57
- 332 Coupling Chain Length Dependent and Reaction Diffusion Controlled Termination in the Free Radical Polymerization of Multivinyl (Meth)acrylates. *Macromolecules*, **2002**, 35, 7968-7975 5.5 57
- 331 Transport mechanism of carbon dioxide through perfluorosulfonate ionomer membranes containing an amine carrier. *Chemical Engineering Science*, **1996**, 51, 4781-4789 4.4 57
- 330 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 4.9 55
- 329 Modeling of network degradation in mixed step-chain growth polymerizations. *Polymer*, **2005**, 46, 4212-4222 5.5 55
- 328 Surface-Initiated Photopolymerization of Poly(ethylene glycol) Methyl Ether Methacrylate on a Diethyldithiocarbamate-Mediated Polymer Substrate. *Macromolecules*, **2002**, 35, 2487-2493 5.5 55
- 327 Soft-lithography fabrication of microfluidic features using thiol-ene formulations. *Lab on A Chip*, **2011**, 11, 2772-8 7.2 54
- 326 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 54
- 325 Novel Monovinyl Methacrylic Monomers Containing Secondary Functionality for Ultrarapid Polymerization: Steady-State Evaluation. *Macromolecules*, **2004**, 37, 3165-3179 5.5 54
- 324 Polymerization Conditions and Electrooptic Properties of Polymer-Stabilized Ferroelectric Liquid Crystals. *Chemistry of Materials*, **1998**, 10, 2378-2388 9.6 54
- 323 Evaluation and development of novel photoinitiator complexes for photoinitiating the copper-catalyzed azide-alkyne cycloaddition reaction. *Polymer Chemistry*, **2014**, 5, 1874-1882 4.9 53
- 322 Visual detection of labeled oligonucleotides using visible-light-polymerization-based amplification. *Biomacromolecules*, **2008**, 9, 355-62 6.9 53
- 321 Structural Evolution of Dimethacrylate Networks Studied by Dielectric Spectroscopy. *Macromolecules*, **1998**, 31, 3311-3316 5.5 53
- 320 Formation of three-dimensional hydrogel multilayers using enzyme-mediated redox chain initiation. *ACS Applied Materials & Interfaces*, **2010**, 2, 1963-72 9.5 52
- 319 Models of multivinyl free radical photopolymerization kinetics. *Journal of Photochemistry and Photobiology A: Chemistry*, **2003**, 159, 135-143 4.7 52
- 318 Phase behaviour and electro-optic characteristics of a polymer stabilized ferroelectric liquid crystal. *Liquid Crystals*, **1995**, 19, 719-727 2.3 52
- 317 Synthesis and Assembly of Click-Nucleic-Acid-Containing PEG-PLGA Nanoparticles for DNA Delivery. *Advanced Materials*, **2017**, 29, 1700743 24 51
- 316 3D Photofixation Lithography in Diels-Alder Networks. *Macromolecular Rapid Communications*, **2012**, 33, 2092-6 4.8 51

315	A Simple Relationship Relating Linear Viscoelastic Properties and Chemical Structure in a Model Diels-Alder Polymer Network. <i>Macromolecules</i> , 2012 , 45, 7634-7641	5.5	51
314	Principal factors affecting sequential photoinduced graft polymerization. <i>Polymer</i> , 2001 , 42, 8333-8338	3.9	51
313	Polymerization Behavior and Kinetics during the Formation of Polymer-Stabilized Ferroelectric Liquid Crystals. <i>Macromolecules</i> , 1997 , 30, 1594-1600	5.5	50
312	Kinetic Analysis of Polymerization Rate Acceleration During the Formation of Polymer/Smectic Liquid Crystal Composites. <i>Macromolecules</i> , 1997 , 30, 5271-5278	5.5	50
311	Network Development in Mixed Step-Chain Growth Thiol-Vinyl Photopolymerizations. <i>Macromolecules</i> , 2006 , 39, 8832-8843	5.5	50
310	Enzyme-mediated redox initiation for hydrogel generation and cellular encapsulation. <i>Biomacromolecules</i> , 2009 , 10, 3114-21	6.9	49
309	The influence of comonomer composition on dimethacrylate resin properties for dental composites. <i>Journal of Dental Research</i> , 1996 , 75, 1607-12	8.1	49
308	Efficient Polymer-Polymer Conjugation via Thiol-ene Click Reaction. <i>Macromolecular Chemistry and Physics</i> , 2017 , 218, 1700073	2.6	48
307	The effect of functionalized nanoparticles on thiol-ene polymerization kinetics. <i>Polymer</i> , 2006 , 47, 6057-6065	6.9	48
306	Wavelength-Selective Sequential Polymer Network Formation Controlled with a Two-Color Responsive Initiation System. <i>Macromolecules</i> , 2017 , 50, 5652-5660	5.5	47
305	Theoretical and experimental flux maximization by optimization of backpulsing. <i>Journal of Membrane Science</i> , 2000 , 165, 225-236	9.6	47
304	Boron Removal by Polymer-Assisted Ultrafiltration. <i>Separation Science and Technology</i> , 1995 , 30, 3849-3859	3.9	47
303	Secondary Photocrosslinking of Click Hydrogels To Probe Myoblast Mechanotransduction in Three Dimensions. <i>Journal of the American Chemical Society</i> , 2018 , 140, 11585-11588	16.4	47
302	Photo-induced bending in a light-activated polymer laminated composite. <i>Soft Matter</i> , 2015 , 11, 2673-82	3.6	46
301	Kinetics of bulk photo-initiated copper(i)-catalyzed azide-alkyne cycloaddition (CuAAC) polymerizations. <i>Polymer Chemistry</i> , 2016 , 7, 603-612	4.9	46
300	Monodisperse functional microspheres from step-growth click polymerizations: preparation, functionalization and implementation. <i>Materials Horizons</i> , 2014 , 1, 535-539	14.4	46
299	Deconvoluting the Impact of Intermolecular and Intramolecular Interactions on the Polymerization Kinetics of Ultrarapid Mono(meth)acrylates. <i>Macromolecules</i> , 2007 , 40, 47-54	5.5	46
298	Visible-Light-Initiated Thiol-Michael Addition Polymerizations with Coumarin-Based Photobase Generators: Another Photoclick Reaction Strategy. <i>ACS Macro Letters</i> , 2016 , 5, 229-233	6.6	45

297	Stress relaxation via addition-fragmentation chain transfer in high T(g), high conversion methacrylate-based systems. <i>Macromolecules</i> , 2012 , 45, 5640-5646	5.5	45
296	Surface grafted antibodies: controlled architecture permits enhanced antigen detection. <i>Langmuir</i> , 2005 , 21, 10907-11	4	45
295	Synthesis and photopolymerization of N,N'-dimethyl,-N,N'-di(methacryloxy ethyl)-1,6-hexanediamine as a polymerizable amine coinitiator for dental restorations. <i>Biomaterials</i> , 2002 , 23, 1221-6	15.6	45
294	Monomer Functionality and Polymer Network Formation. <i>Macromolecules</i> , 2001 , 34, 4642-4649	5.5	45
293	Functionalized PEG hydrogels through reactive dip-coating for the formation of immunoactive barriers. <i>Biomaterials</i> , 2011 , 32, 6204-12	15.6	44
292	High throughput kinetic analysis of photopolymer conversion using composition and exposure time gradients. <i>Polymer</i> , 2005 , 46, 3300-3306	3.9	44
291	Temporal Control of Thiol-Click Chemistry. <i>Chemistry of Materials</i> , 2013 , 25, 3897-3901	9.6	43
290	3D polymeric microfluidic device fabrication via contact liquid photolithographic polymerization (CLiPP). <i>Sensors and Actuators B: Chemical</i> , 2006 , 113, 454-460	8.5	43
289	Modeling Thermal and Optical Effects on Photopolymerization Systems. <i>Macromolecules</i> , 2003 , 36, 7777-7782	5.7	43
288	Ester-free Thiol-X Resins: New Materials with Enhanced Mechanical Behavior and Solvent Resistance. <i>Polymer Chemistry</i> , 2015 , 6, 2234-2240	4.9	42
287	Photo-Mediated Copper(I)-Catalyzed Azide-Alkyne Cycloaddition (CuAAC) "Click" Reactions for Forming Polymer Networks as Shape Memory Materials. <i>Polymer</i> , 2014 , 55, 5880-5884	3.9	42
286	Thiol-isocyanate-acrylate ternary networks by selective thiol-click chemistry. <i>Journal of Polymer Science Part A</i> , 2010 , 48, 3255-3264	2.5	42
285	Polymer-Derived Ceramic Materials from Thiol-ene Photopolymerizations. <i>Chemistry of Materials</i> , 2003 , 15, 4257-4261	9.6	42
284	The significance of chain length dependent termination in cross-linking polymerizations. <i>Polymer</i> , 2001 , 42, 4925-4929	3.9	42
283	Glucose oxidase-mediated polymerization as a platform for dual-mode signal amplification and biodetection. <i>Biotechnology and Bioengineering</i> , 2011 , 108, 1521-8	4.9	41
282	Antigen detection using polymerization-based amplification. <i>Lab on A Chip</i> , 2009 , 9, 653-6	7.2	41
281	Covalent adaptable networks as dental restorative resins: stress relaxation by addition-fragmentation chain transfer in allyl sulfide-containing resins. <i>Dental Materials</i> , 2010 , 26, 1010-8	5.7	41
280	Synthesis, Characterization and Cleavage of Surface-Bound Linear Polymers Formed Using ThiolEne Photopolymerizations. <i>Macromolecules</i> , 2008 , 41, 7440-7447	5.5	41

279	A Dual-Cure, Solid-State Photoresist Combining a Thermoreversible Diels-Alder Network and a Chain Growth Acrylate Network. <i>Macromolecules</i> , 2014 , 47, 3473-3482	5.5	40
278	Inhibition of Staphylococcus epidermidis biofilms using polymerizable vancomycin derivatives. <i>Clinical Orthopaedics and Related Research</i> , 2010 , 468, 2081-91	2.2	40
277	Photopolymerization kinetics, photorheology and photoplasticity of thiol-ene-allylic sulfide networks. <i>Polymer International</i> , 2008 , 57, 469-478	3.3	40
276	Rate mechanisms of a novel thiol-ene photopolymerization reaction. <i>Macromolecular Symposia</i> , 2004 , 206, 361-374	0.8	40
275	Olefin separation using silver impregnated ion-exchange membranes and silver salt/polymer blend membranes. <i>Journal of Membrane Science</i> , 1996 , 117, 151-161	9.6	40
274	Application of an Addition-Fragmentation-Chain Transfer Monomer in Di(meth)acrylate Network Formation to Reduce Polymerization Shrinkage Stress. <i>Polymer Chemistry</i> , 2017 , 8, 4339-4351	4.9	39
273	Mechanism and Implementation of Oxygen Inhibition Suppression in Photopolymerizations by Competitive Photoactivation of a Singlet Oxygen Sensitizer. <i>Macromolecules</i> , 2010 , 43, 7964-7970	5.5	39
272	Kinetic Modeling of Thiol-Ene Reactions with Both Step and Chain Growth Aspects. <i>Macromolecular Theory and Simulations</i> , 2005 , 14, 267-277	1.5	39
271	Verification of scaling laws for degrading PLA-b-PEG-b-PLA hydrogels. <i>AIChE Journal</i> , 2001 , 47, 1432-1437	3.6	39
270	Polymerization reaction dynamics of ethylene glycol methacrylates and dimethacrylates by calorimetry. <i>Polymer</i> , 1992 , 33, 1683-1689	3.9	39
269	A photoviscoplastic model for photoactivated covalent adaptive networks. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 70, 84-103	5	38
268	Formation of Core-Shell Particles by Interfacial Radical Polymerization Initiated by a Glucose Oxidase-Mediated Redox System. <i>Chemistry of Materials</i> , 2013 , 25, 761-767	9.6	38
267	Facile Image Patterning via Sequential Thiol-Michael/Thiol-Ene Click Reactions. <i>Chemistry of Materials</i> , 2014 , 26, 6819-6826	9.6	38
266	Reaction Kinetics and Reduced Shrinkage Stress of Thiol-Yne-Methacrylate and Thiol-Yne-Acrylate Ternary Systems. <i>Macromolecules</i> , 2011 , 44, 9084-9090	5.5	38
265	The effect of primary cyclization on free radical polymerization kinetics: experimental characterization. <i>Polymer</i> , 2003 , 44, 327-332	3.9	38
264	Reducing Shrinkage Stress of Dimethacrylate Networks by Reversible Addition-Fragmentation Chain Transfer. <i>Macromolecular Chemistry and Physics</i> , 2012 , 213, 198-204	2.6	37
263	Modifying network chemistry in thiol-acrylate photopolymers through postpolymerization functionalization to control cell-material interactions. <i>Journal of Biomedical Materials Research - Part A</i> , 2008 , 86, 23-30	5.4	37
262	Photoclick Chemistry: A Bright Idea. <i>Chemical Reviews</i> , 2021 , 121, 6915-6990	68.1	37

261	Monodispersity/Narrow Polydispersity Cross-Linked Microparticles Prepared by Step-Growth ThiolMichael Addition Dispersion Polymerizations. <i>Macromolecules</i> , 2015 , 48, 8461-8470	5.5	36
260	Reduced shrinkage stress via photo-initiated copper(I)-catalyzed cycloaddition polymerizations of azide-alkyne resins. <i>Dental Materials</i> , 2016 , 32, 1332-1342	5.7	36
259	In situ fabrication of macroporous polymer networks within microfluidic devices by living radical photopolymerization and leaching. <i>Lab on A Chip</i> , 2005 , 5, 151-7	7.2	36
258	Dynamic mechanical studies of the glass transition temperature of photopolymerized multifunctional acrylates. <i>Polymer Bulletin</i> , 1993 , 31, 229-233	2.4	36
257	Thiol-Anhydride Dynamic Reversible Networks. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 9345-9349	5.2	35
256	Gel Permeation Chromatography Characterization of the Chain Length Distributions in Thiol-Acrylate Photopolymer Networks. <i>Macromolecules</i> , 2006 , 39, 7882-7888	5.5	35
255	Facile and Efficient Synthesis of Dendrimers and One-Pot Preparation of DendriticLinear Polymer Conjugates via a Single Chemistry: Utilization of Kinetically Selective ThiolMichael Addition Reactions. <i>Macromolecules</i> , 2014 , 47, 4894-4900	5.5	33
254	Understanding the process of healing of thermoreversible covalent adaptable networks. <i>Polymer Chemistry</i> , 2013 , 4, 4974-4979	4.9	33
253	Redox Initiation of Bulk Thiol-Ene Polymerizations. <i>Polymer Chemistry</i> , 2013 , 4, 1167-1175	4.9	33
252	Degradable networks formed from multi-functional poly(vinyl alcohol) macromers: comparison of results from a generalized bulk-degradation model for polymer networks and experimental data. <i>Polymer</i> , 2004 , 45, 3377-3387	3.9	33
251	Hyperbranched Chelating Polymers for the Polymer-Assisted Ultrafiltration of Boric Acid. <i>Separation Science and Technology</i> , 1999 , 34, 1925-1945	2.5	33
250	Polymerization Behavior and Polymer Properties of Eosin-Mediated Surface Modification Reactions. <i>Polymer</i> , 2008 , 49, 4762-4768	3.9	32
249	Kinetic gelation predictions of species aggregation in tetrafunctional monomer polymerizations. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1995 , 33, 1769-1780	2.6	32
248	Thermomechanical Formation-Structure-Property Relationships in Photopolymerized Copper-Catalyzed Azide-Alkyne (CuAAC) Networks. <i>Macromolecules</i> , 2016 , 49, 1191-1200	5.5	31
247	Enhanced Two-Stage Reactive Polymer Network Forming Systems. <i>Polymer</i> , 2012 , 53, 2429-2434	3.9	31
246	Alignment of multi-layered muscle cells within three-dimensional hydrogel macrochannels. <i>Acta Biomaterialia</i> , 2012 , 8, 2193-202	10.8	31
245	Nonclassical Dependence of Polymerization Rate on Initiation Rate Observed in ThiolEne Photopolymerizations. <i>Macromolecules</i> , 2008 , 41, 2987-2989	5.5	31
244	Vancomycin derivative photopolymerized to titanium kills <i>S. epidermidis</i> . <i>Clinical Orthopaedics and Related Research</i> , 2007 , 461, 96-105	2.2	31

243	Recyclable and repolymerizable thiol-ene photopolymers. <i>Materials Horizons</i> , 2018 , 5, 1042-1046	14.4	30
242	Relationship between Glass Transition Temperature and Polymerization Temperature for Cross-Linked Photopolymers. <i>Macromolecules</i> , 2011 , 44, 490-494	5.5	30
241	Development of fluorescent polymerization-based signal amplification for sensitive and non-enzymatic biodetection in antibody microarrays. <i>Acta Biomaterialia</i> , 2010 , 6, 83-9	10.8	30
240	High-throughput kinetic analysis of acrylate and thiol-ene photopolymerization using temperature and exposure time gradients. <i>Journal of Polymer Science Part A</i> , 2008 , 46, 1502-1509	2.5	30
239	Propagation and Termination Kinetics of Cross-Linking Photopolymerizations Studied Using Electron Paramagnetic Resonance Spectroscopy in Conjunction with Near IR Spectroscopy. <i>Macromolecules</i> , 2005 , 38, 6954-6964	5.5	30
238	Development of glassy step-growth thiol-vinyl sulfone polymer networks. <i>Macromolecular Rapid Communications</i> , 2014 , 35, 1497-502	4.8	29
237	Evaluation of highly reactive mono-methacrylates as reactive diluents for BisGMA-based dental composites. <i>Dental Materials</i> , 2009 , 25, 33-8	5.7	29
236	Modeling the Effects of Chain Length on the Termination Kinetics in Multivinyl Photopolymerizations. <i>Macromolecular Theory and Simulations</i> , 2002 , 11, 729-738	1.5	29
235	Polymers for information storage systems III. Crosslinked structure of polydimethacrylates. <i>Polymer</i> , 1990 , 31, 135-139	3.9	29
234	Kinetics of interfacial radical polymerization initiated by a glucose-oxidase mediated redox system. <i>Biomaterials</i> , 2012 , 33, 6909-14	15.6	28
233	Using hyperbranched oligomer functionalized glass fillers to reduce shrinkage stress. <i>Dental Materials</i> , 2012 , 28, 1004-11	5.7	28
232	Synthesis and Characterization of Thiol-Ene Functionalized Siloxanes and Evaluation of their Crosslinked Network Properties. <i>Journal of Polymer Science Part A</i> , 2012 , 50, 4325-4333	2.5	28
231	Copolymerization and Dark Polymerization Studies for Photopolymerization of Novel Acrylic Monomers. <i>Polymer</i> , 2007 , 48, 2014-2021	3.9	28
230	Synthesis and characterization of N-isopropyl, N-methacryloxyethyl methacrylamide as a possible dental resin. <i>Biomaterials</i> , 2001 , 22, 535-40	15.6	28
229	Nanoimprint lithography: Emergent materials and methods of actuation. <i>Nano Today</i> , 2020 , 31, 100838	17.9	28
228	Pristine Polysulfone Networks as a Class of Polysulfide-Derived High-Performance Functional Materials. <i>Chemistry of Materials</i> , 2016 , 28, 5102-5109	9.6	28
227	Synthesis, Characterization and Cleavage of Linear Polymers Attached to Silica Nanoparticles Formed Using Thiol-acrylate Conjugate Addition Reactions. <i>Journal of Polymer Science Part A</i> , 2008 , 46, 6896-6906	2.5	27
226	Thiol-ene photopolymerization of polymer-derived ceramic precursors. <i>Journal of Polymer Science Part A</i> , 2004 , 42, 1752-1757	2.5	27

- 225 Effect of Aryl Substituents on the Reactivity of Phenyl Carbamate Acrylate Monomers. *Macromolecules*, **2004**, 37, 4062-4069 5.5 27
- 224 Influence of molecular dipole on monoacrylate monomer reactivity. *Polymer*, **2005**, 46, 4735-4742 3.9 27
- 223 Properties of the transport of alkali metal salts through polymeric membranes containing benzo-18-crown-6 crown ether functional groups. *Journal of Membrane Science*, **1999**, 156, 293-302 9.6 27
- 222 Productive Exchange of Thiols and Thioesters to Form Dynamic Polythioester-Based Polymers. *ACS Macro Letters*, **2018**, 7, 1312-1316 6.6 27
- 221 Experimental and theoretical photoluminescence studies in nucleic acid assembled gold-upconverting nanoparticle clusters. *Nanoscale*, **2015**, 7, 17254-60 7.7 26
- 220 Mechanistic Modeling of the Thiol-Michael Addition Polymerization Kinetics: Structural Effects of the Thiol and Vinyl Monomers. *Macromolecules*, **2018**, 51, 5979-5988 5.5 26
- 219 Reactivity of Monovinyl (Meth)Acrylates Containing Cyclic Carbonates. *Macromolecules*, **2008**, 41, 9035-9043 5.4 26
- 218 Tailorable low modulus, reversibly deformable elastomeric thiol-ene materials for microfluidic applications. *Sensors and Actuators B: Chemical*, **2007**, 120, 473-480 8.5 26
- 217 Effect of Primary Cyclization on Free Radical Polymerization Kinetics: Modeling Approach. *Macromolecules*, **2002**, 35, 7125-7131 5.5 26
- 216 Dynamic and Responsive DNA-like Polymers. *Journal of the American Chemical Society*, **2018**, 140, 13594-13598 10.1 26
- 215 Dynamic Covalent Chemistry at Interfaces: Development of Tougher, Healable Composites through Stress Relaxation at the Resin-Silica Nanoparticles Interface. *Advanced Materials Interfaces*, **2018**, 5, 1800511 4.6 26
- 214 Thiol-Michael addition miniemulsion polymerizations: functional nanoparticles and reactive latex films. *Polymer Chemistry*, **2015**, 6, 3758-3763 4.9 25
- 213 Organization of liquid crystals on submicron scale topographic patterns with fourfold symmetry prepared by thiolene photopolymerization-based nanoimprint lithography. *Journal of Applied Physics*, **2008**, 103, 093518 2.5 25
- 212 FTIR and ESR Spectroscopic Studies of the Photopolymerization of Vinyl Ester Resins. *Macromolecules*, **2003**, 36, 6066-6074 5.5 25
- 211 Understanding multivinyl monomer photopolymerization kinetics through modeling and GPC investigation of degradable networks. *Polymer*, **2005**, 46, 6226-6234 3.9 25
- 210 Reconfigurable and Spatially Programmable Chameleon Skin-Like Material Utilizing Light Responsive Covalent Adaptable Cholesteric Liquid Crystal Elastomers. *Advanced Functional Materials*, **2020**, 30, 2003150 15.6 25
- 209 UV-Vis/FT-NIR monitoring of visible-light induced polymerization of PEGDA hydrogels initiated by eosin/triethanolamine/O. *Polymer Chemistry*, **2016**, 7, 592-602 4.9 24
- 208 Photo-CuAAC Induced Wrinkle Formation in a Thiol-Acrylate Elastomer via Sequential Click Reactions. *Chemistry of Materials*, **2014**, 26, 5303-5309 9.6 24

207	Controllable Reversible Addition-Fragmentation Termination Monomers for Advances in Photochemically Controlled Covalent Adaptable Networks. <i>Macromolecules</i> , 2014 , 47, 907-915	5.5	24
206	Quantitative evaluation of oligonucleotide surface concentrations using polymerization-based amplification. <i>Analytical and Bioanalytical Chemistry</i> , 2008 , 392, 167-75	4.4	24
205	Evaluation of a Potential Ionic Contribution to the Polymerization of Highly Reactive (Meth)acrylate Monomers. <i>Macromolecules</i> , 2005 , 38, 9474-9481	5.5	24
204	Integrated surface modification of fully polymeric microfluidic devices using living radical photopolymerization chemistry. <i>Journal of Polymer Science Part A</i> , 2006 , 44, 1404-1413	2.5	24
203	Initiatorless Photopolymerization of Liquid Crystal Monomers. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 28040-28046	9.5	24
202	Thiol-ene functionalized siloxanes for use as elastomeric dental impression materials. <i>Dental Materials</i> , 2014 , 30, 449-55	5.7	23
201	Stress relaxation of trithiocarbonate-dimethacrylate-based dental composites. <i>Dental Materials</i> , 2012 , 28, 888-93	5.7	23
200	The emerging role of click reactions in chemical and biological engineering. <i>AIChE Journal</i> , 2012 , 58, 2952-2965	3.6	23
199	Controlled polymerization chemistry to graft architectures that influence cell-material interactions. <i>Acta Biomaterialia</i> , 2007 , 3, 151-61	10.8	23
198	A water-activated pump for portable microfluidic applications. <i>Journal of Colloid and Interface Science</i> , 2007 , 305, 239-49	9.3	23
197	Mechanistic Modelling and Network Properties of Ternary Thiol - Vinyl Photopolymerizations. <i>Australian Journal of Chemistry</i> , 2006 , 59, 586	1.2	23
196	Ester-free thiol-ene dental restoratives--Part B: Composite development. <i>Dental Materials</i> , 2015 , 31, 1263-70	5.7	22
195	High Dynamic Range (H) Two-Stage Photopolymers via Enhanced Solubility of a High Refractive Index Acrylate Writing Monomer. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 1217-1224	9.5	22
194	Mechanistic Kinetic Modeling of Thiol-Michael Addition Photopolymerizations via Photocaged "Superbase" Generators: An Analytical Approach. <i>Macromolecules</i> , 2016 , 49, 8061-8074	5.5	22
193	Molecular Weight Development during Thiol-Ene Photopolymerizations. <i>Macromolecules</i> , 2005 , 38, 4501-4511	4.5	22
192	An Investigation of Chain Length Dependent Termination and Reaction Diffusion Controlled Termination during the Free Radical Photopolymerization of Multivinyl Monomers. <i>Macromolecules</i> , 2005 , 38, 6374-6381	5.5	22
191	Light-Stimulated Permanent Shape Reconfiguration in Cross-Linked Polymer Microparticles. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 14422-14428	9.5	21
190	Amine Induced Retardation of the Radical-Mediated Thiol-Ene Reaction via the Formation of Metastable Disulfide Radical Anions. <i>Journal of Organic Chemistry</i> , 2018 , 83, 2912-2919	4.2	21

- 189 Programmable mechanically assisted geometric deformations of glassy two-stage reactive polymeric materials. *ACS Applied Materials & Interfaces*, **2014**, 6, 6111-9 9.5 21
- 188 Transport of ionic species through functionalized poly(vinylbenzyl chloride) membranes. *Journal of Membrane Science*, **1997**, 128, 183-193 9.6 21
- 187 Thermodynamics of borate ester formation by three readily grafted carbohydrates. *Carbohydrate Research*, **1998**, 308, 173-179 2.9 21
- 186 Mechanisms, polymerization rate scaling, and oxygen inhibition with an ultra-rapid monovinyl urethane acrylate. *Polymer*, **2008**, 49, 4756-4761 3.9 21
- 185 The effect of kinetic chain length on the mechanical relaxation of crosslinked photopolymers. *Polymer*, **2003**, 44, 39-47 3.9 21
- 184 The effect of wavelength on the polymerization of multi(meth)acrylates with disulfide/benzilketone combinations. *Polymer*, **2001**, 42, 421-429 3.9 21
- 183 PREDICTING NETWORK FORMATION OF FREE RADICAL POLYMERIZATION OF MULTIFUNCTIONAL MONOMERS. *Polymer-Plastics Technology and Engineering*, **2002**, 10, 1-19 21
- 182 A Photochromic Technique To Study Polymer Network Volume Distributions and Microstructure during Photopolymerizations. *Macromolecules*, **1994**, 27, 2890-2892 5.5 21
- 181 Evaluation of thiol-ene click chemistry in functionalized polysiloxanes. *Journal of Polymer Science Part A*, **2013**, 51, 1749-1757 2.5 20
- 180 Effect of Cross-Link Density on Photoplasticity of Epoxide Networks Containing Allylic Dithioether Moieties. *Macromolecules*, **2012**, 45, 9734-9741 5.5 20
- 179 (Meth)Acrylate Vinyl Ester Hybrid Polymerizations. *Journal of Polymer Science Part A*, **2009**, 47, 2509-2517 7.5 20
- 178 Visual, base-specific detection of nucleic acid hybridization using polymerization-based amplification. *Analytical Biochemistry*, **2009**, 386, 285-7 3.1 20
- 177 Sensitive immunofluorescent staining of cells via generation of fluorescent nanoscale polymer films in response to biorecognition. *Journal of Histochemistry and Cytochemistry*, **2011**, 59, 76-87 3.4 20
- 176 Role of ion-exchange membrane morphology and sorption properties in facilitated transport di-olefin/mono-olefin separations. *Journal of Membrane Science*, **1998**, 144, 133-143 9.6 20
- 175 Using living radical polymerization to enable facile incorporation of materials in microfluidic cell culture devices. *Biomaterials*, **2008**, 29, 2228-36 15.6 20
- 174 Modeling and verification of fluid-responsive polymer pumps for microfluidic systems. *Chemical Engineering Science*, **2004**, 59, 5967-5974 4.4 20
- 173 Pseudo-crown ethers as fixed site carriers in facilitated transport membranes. *Journal of Membrane Science*, **2000**, 168, 109-119 9.6 20
- 172 Mixed mechanisms of bond exchange in covalent adaptable networks: monitoring the contribution of reversible exchange and reversible addition in thiol/buccinic anhydride dynamic networks. *Polymer Chemistry*, **2020**, 11, 5365-5376 4.9 19

171	Photopolymerized Triazole-Based Glassy Polymer Networks with Superior Tensile Toughness. <i>Advanced Functional Materials</i> , 2018 , 28, 1801095	15.6	19
170	Ruthenium photoredox-triggered phospholipid membrane formation. <i>Organic and Biomolecular Chemistry</i> , 2016 , 14, 5555-8	3.9	19
169	o-Nitrobenzyl-Based Photobase Generators: Efficient Photoinitiators for Visible-Light Induced Thiol-Michael Addition Photopolymerization. <i>ACS Macro Letters</i> , 2018 , 7, 852-857	6.6	19
168	Reconfigurable surface patterns on covalent adaptive network polymers using nanoimprint lithography. <i>Polymer</i> , 2014 , 55, 5933-5937	3.9	19
167	Photopolymer kinetics using light intensity gradients in high-throughput conversion analysis. <i>Polymer</i> , 2007 , 48, 6319-6324	3.9	19
166	A Modeling Investigation of Chain Length Dependent Termination during Multivinyl Free Radical Chain Photopolymerizations: Accounting for the Gel. <i>Macromolecules</i> , 2005 , 38, 4913-4918	5.5	19
165	Detection of antigens in biologically complex fluids with photografted whole antibodies. <i>Analytical Chemistry</i> , 2006 , 78, 3144-51	7.8	19
164	Characterization and Polymerization of Metal Complexes of Poly(ethylene glycol) Diacrylates and the Synthesis of Polymeric Pseudocrown Ethers. <i>Chemistry of Materials</i> , 2000 , 12, 633-642	9.6	19
163	Additive manufacture of lightly crosslinked semicrystalline thiol-enes for enhanced mechanical performance. <i>Polymer Chemistry</i> , 2020 , 11, 39-46	4.9	19
162	Synthesis of novel trithiocarbonate and allyl sulfide containing monomers. <i>Polymer Chemistry</i> , 2014 , 5, 62-68	4.9	18
161	Influence of Secondary Functionalities on the Reaction Behavior of Monovinyl (Meth)Acrylates. <i>Chemistry of Materials</i> , 2007 , 19, 641-643	9.6	18
160	Photoinduced Tetrazole-Based Functionalization of Off-Stoichiometric Clickable Microparticles. <i>Advanced Functional Materials</i> , 2017 , 27, 1605317	15.6	17
159	Coupled UV-Vis/FTIR Spectroscopy for Kinetic Analysis of Multiple Reaction Steps in Polymerizations. <i>Macromolecules</i> , 2015 , 48, 6781-6790	5.5	17
158	Dental Restorative Materials Based on Thiol-Michael Photopolymerization. <i>Journal of Dental Research</i> , 2018 , 97, 530-536	8.1	17
157	Contact Line Pinning Is Not Required for Nanobubble Stability on Copolymer Brushes. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 4239-4244	6.4	17
156	Novel dental restorative materials having low polymerization shrinkage stress via stress relaxation by addition-fragmentation chain transfer. <i>Dental Materials</i> , 2012 , 28, 1113-9	5.7	17
155	Polymerization kinetics of HEMA/DEGDMA: using changes in initiation and chain transfer rates to explore the effects of chain-length-dependent termination. <i>Biomaterials</i> , 2002 , 23, 4057-64	15.6	17
154	Polymerization Kinetics of Pseudocrown Ether Network Formation for Facilitated Transport Membranes. <i>Macromolecules</i> , 1999 , 32, 3201-3208	5.5	17

153	Initiation and termination mechanisms in kinetic gelation simulations. <i>Journal of Polymer Science Part A</i> , 1991 , 29, 1575-1583	2.5	17
152	A photopolymerizable thermoplastic with tunable mechanical performance. <i>Materials Horizons</i> , 2020 , 7, 835-842	14.4	17
151	Photoinduced diffusion through polymer networks. <i>Advanced Materials</i> , 2014 , 26, 6497-502	24	16
150	Antigen-responsive, microfluidic valves for single use diagnostics. <i>Lab on A Chip</i> , 2012 , 12, 708-10	7.2	16
149	Kinetic and thermodynamic measurements for the facile property prediction of dielsAlder-conjugated material behavior. <i>AIChE Journal</i> , 2012 , 58, 3545-3552	3.6	16
148	Induction Curing of Thiol-acrylate and Thiolene Composite Systems. <i>Macromolecules</i> , 2011 , 44, 4988-4996	5.5	16
147	Rapid Solid-State Photopolymerization of Cyclic Acetal-Containing Acrylates. <i>Macromolecules</i> , 2009 , 42, 2433-2437	5.5	16
146	Synthesis and photografting of highly pH-responsive polymer chains. <i>Sensors and Actuators B: Chemical</i> , 2006 , 119, 127-134	8.5	16
145	Combined Dynamic Network and Filler Interface Approach for Improved Adhesion and Toughness in Pressure-Sensitive Adhesives. <i>ACS Applied Polymer Materials</i> , 2020 , 2, 1053-1060	4.3	16
144	Independent Control of Singlet Oxygen and Radical Generation via Irradiation of a Two-Color Photosensitive Molecule. <i>Macromolecules</i> , 2019 , 52, 4968-4978	5.5	15
143	Stress Reduction and T(g) Enhancement in Ternary Thiol-Yne-Methacrylate Systems via Addition-fragmentation Chain Transfer. <i>Macromolecules</i> , 2012 , 45, 5647-5652	5.5	15
142	Fluorescent polymeric nanocomposite films generated by surface-mediated photoinitiation of polymerization. <i>Journal of Nanoparticle Research</i> , 2011 , 13, 331-346	2.3	15
141	Principles of voxel refinement in optical direct write lithography. <i>Journal of Materials Chemistry</i> , 2011 , 21, 14150		15
140	Temperature Dependent Stress Relaxation in a Model DielsAlder Network. <i>Australian Journal of Chemistry</i> , 2011 , 64, 1094	1.2	15
139	Solvent vapor annealed block copolymer films on organosilane self-assembled monolayers. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2005 , 23, 1615		15
138	Complexation structure and transport mechanism of 1,5-hexadiene and 1-hexene through silver facilitated transport membranes. <i>Journal of Membrane Science</i> , 2000 , 172, 49-57	9.6	15
137	Holographic Photopolymer Material with High Dynamic Range (D) via Thiol-Ene Click Chemistry. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 44103-44109	9.5	15
136	Radical mediated thiol-ene/yne dispersion polymerizations. <i>Polymer</i> , 2016 , 105, 180-186	3.9	14

135	Kinetic Modeling of a Comonomer Photopolymerization System Using High-Throughput Conversion Data. <i>Macromolecules</i> , 2008 , 41, 230-237	5.5	14
134	An effervescent reaction micropump for portable microfluidic systems. <i>Lab on A Chip</i> , 2006 , 6, 659-66	7.2	14
133	Electro-optic properties of thiol-ene polymer stabilized ferroelectric liquid crystals. <i>Liquid Crystals</i> , 2003 , 30, 1343-1350	2.3	14
132	Effects of Solvent Quality during Polymerization on Network Structure of Cross-Linked Methacrylate Copolymers. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 2843-2847	3.4	14
131	MEMBRANE SURFACE MODIFICATION AND BACKPULSING FOR WASTEWATER TREATMENT. <i>Separation Science and Technology</i> , 2001 , 36, 1557-1573	2.5	14
130	Microstructural evolution in polymerizations of tetrafunctional monomers. <i>Macromolecular Symposia</i> , 1995 , 93, 269-276	0.8	14
129	Chemical recycling of poly(thiourethane) thermosets enabled by dynamic thiourethane bonds. <i>Polymer Chemistry</i> , 2020 , 11, 6879-6883	4.9	14
128	New Generation of Clickable Nucleic Acids: Synthesis and Active Hybridization with DNA. <i>Biomacromolecules</i> , 2018 , 19, 4139-4146	6.9	14
127	Multifunctional monomers based on vinyl sulfonates and vinyl sulfonamides for crosslinking thiol-Michael polymerizations: monomer reactivity and mechanical behavior. <i>Chemical Communications</i> , 2018 , 54, 3034-3037	5.8	13
126	Rigid Origami via Optical Programming and Deferred Self-Folding of a Two-Stage Photopolymer. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 29658-29667	9.5	13
125	Photoinitiator nucleotide for quantifying nucleic Acid hybridization. <i>Biomacromolecules</i> , 2010 , 11, 1133-1139	8.9	13
124	Photo-Plasticity in Thiol-ene Network Polymers – A Review. <i>Macromolecular Symposia</i> , 2010 , 291-292, 50-65	0.8	13
123	Monolithic integration of optical waveguide and fluidic channel structures in a thiol-ene/methacrylate photopolymer. <i>Optical Materials Express</i> , 2012 , 2, 1548	2.6	13
122	Design, Development and Evaluation of Monovinyl Acrylates Characterized by Secondary Functionalities as Reactive Diluents to Diacrylates. <i>Macromolecules</i> , 2007 , 40, 6112-6118	5.5	13
121	Enhanced reactivity of monovinyl acrylates characterized by secondary functionalities toward photopolymerization and Michael addition: Contribution of intramolecular effects. <i>Journal of Polymer Science Part A</i> , 2008 , 46, 3452-3458	2.5	13
120	Effect of Aliphatic Spacer Substitution on the Reactivity of Phenyl Carbamate Acrylate Monomers. <i>Macromolecules</i> , 2005 , 38, 3093-3098	5.5	13
119	Formation of a host nanostructure for ferroelectric liquid crystals using thiol-ene polymers. <i>Liquid Crystals</i> , 2002 , 29, 1291-1296	2.3	13
118	Polymers for information storage systems. II. Polymerization kinetics for preparation of highly crosslinked polydimethacrylates. <i>Journal of Applied Polymer Science</i> , 1991 , 42, 2013-2018	2.9	13

117	Effects of 1 st , 2 nd , and 3 rd Thiols on Thiol-Yne Reactions: Polymerization Kinetics and Mechanical Behavior. <i>Macromolecules</i> , 2020 , 53, 5805-5815	5.5	13
116	Kinetics and mechanics of photo-polymerized triazole-containing thermosetting composites via the copper(I)-catalyzed azide-alkyne cycloaddition. <i>Dental Materials</i> , 2017 , 33, 621-629	5.7	12
115	Photo-responsive liposomes composed of spiropyran-containing triazole-phosphatidylcholine: investigation of merocyanine-stacking effects on liposome-fiber assembly-transition. <i>Soft Matter</i> , 2019 , 15, 3740-3750	3.6	12
114	Multiple shape memory polymers based on laminates formed from thiol-click chemistry based polymerizations. <i>Soft Matter</i> , 2015 , 11, 6852-8	3.6	12
113	Development of thiourethanes as robust, reprocessable networks. <i>Polymer</i> , 2020 , 202, 122715	3.9	12
112	Reaction Environment Effect on the Kinetics of Radical Thiol-Yne Polymerizations in the Presence of Amines and Thiolate Anions. <i>ACS Macro Letters</i> , 2020 , 9, 174-179	6.6	12
111	Photoinduced Vesicle Formation via the Copper-Catalyzed Azide-Alkyne Cycloaddition Reaction. <i>Langmuir</i> , 2016 , 32, 8195-201	4	12
110	Thermoreversible Folding as a Route to the Unique Shape-Memory Character in Ductile Polymer Networks. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 22739-22745	9.5	12
109	Effects of oxygen on light activation in covalent adaptable network polymers. <i>Soft Matter</i> , 2015 , 11, 6134-44	3.6	12
108	Kovalente adaptive Netzwerke: reversible Bindungen in Polymernetzwerken. <i>Angewandte Chemie</i> , 2012 , 124, 4346-4348	3.6	12
107	Shining a light on dental composite restoratives. <i>Physics Today</i> , 2008 , 61, 82-83	0.9	12
106	Characterization of the Assaying Methods in Polymerization-Based Amplification of Surface Biomarkers. <i>Australian Journal of Chemistry</i> , 2009 , 62, 877	1.2	12
105	Fully recoverable rigid shape memory foam based on copper-catalyzed azide-alkyne cycloaddition (CuAAC) using a salt leaching technique. <i>Polymer Chemistry</i> , 2018 , 9, 121-130	4.9	12
104	Evaluation of biofilm formation on novel copper-catalyzed azide-alkyne cycloaddition (CuAAC)-based resins for dental restoratives. <i>Dental Materials</i> , 2018 , 34, 657-666	5.7	11
103	Fabrication and Characterization of Novel High Modulus, Two-Stage Reactive Thiol-Acrylate Composite Polymer Systems. <i>Macromolecular Symposia</i> , 2013 , 329, 101-107	0.8	11
102	Hydrodynamic separation of particles using pinched-flow fractionation. <i>AIChE Journal</i> , 2013 , 59, 3444-3457	5.5	11
101	Alkyl chain length effects on copolymerization kinetics of a monoacrylate with hexanediol diacrylate. <i>ACS Combinatorial Science</i> , 2007 , 9, 1149-56		11
100	High Refractive Index Photopolymers by Thiol-Yne "Click" Polymerization. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 15647-15658	9.5	11

99	Viscoelastic and Thermoreversible Networks Crosslinked by Non-covalent Interactions Between "Clickable" Nucleic Acids Oligomers and DNA.. <i>Polymer Chemistry</i> , 2020 , 11, 2959-2968	4.9	10
98	Liposomes formed from photo-cleavable phospholipids: formation and photo-induced enhancement in permeability.. <i>RSC Advances</i> , 2018 , 8, 14669-14675	3.7	10
97	Assessment of TEMPO as a Thermally Activatable Base Generator and Its Use in Initiation of Thermally-Triggered Thiol-Michael Addition Polymerizations. <i>Polymer Chemistry</i> , 2018 , 9, 4294-4302	4.9	10
96	Realizing High Refractive Index Thiol-X Materials: A General and Scalable Synthetic Approach 2019 , 1, 582-588		10
95	Influence of the secondary functionality on the radical-vinyl chemistry of highly reactive monoacrylates. <i>Journal of Polymer Science Part A</i> , 2009 , 47, 4859-4870	2.5	10
94	FTIR Microscopy for Kinetic Measurements in High-Throughput Photopolymerization: Experimental Design and Application. <i>Macromolecular Reaction Engineering</i> , 2009 , 3, 522-528	1.5	10
93	Polymers for information storage systems. <i>Polymer Bulletin</i> , 1988 , 20, 329	2.4	10
92	Tunable Mechanical Anisotropy, Crack Guiding, and Toughness Enhancement in Two-Stage Reactive Polymer Networks. <i>Advanced Engineering Materials</i> , 2019 , 21, 1900578	3.5	9
91	A supramolecular hydrogel prepared from a thymine-containing artificial nucleolipid: study of assembly and lyotropic mesophases. <i>Soft Matter</i> , 2018 , 14, 7045-7051	3.6	9
90	Water-soluble clickable nucleic acid (CNA) polymer synthesis by functionalizing the pendant hydroxyl. <i>Chemical Communications</i> , 2017 , 53, 10156-10159	5.8	9
89	Synthesis of Acyclic, Symmetrical 3,3'-Allyl Dithioethers, from the Alkylation of 3-Mercapto-2-mercaptomethylprop-1-ene in the Presence of Sodium Hydride. <i>Australian Journal of Chemistry</i> , 2011 , 64, 1083	1.2	9
88	Kinetic and Mechanistic Studies of Photopolymerizations of Acrylates in the Presence of Iniferters. <i>Macromolecules</i> , 2007 , 40, 6131-6135	5.5	9
87	Additive Manufacture of Dynamic Thiol-ene Networks Incorporating Anhydride-Derived Reversible Thioester Links. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 12789-12796	9.5	9
86	Dynamic covalent chemistry (DCC) in dental restorative materials: Implementation of a DCC-based adaptive interface (AI) at the resin-filler interface for improved performance. <i>Dental Materials</i> , 2020 , 36, 53-59	5.7	9
85	The contribution of intermolecular forces to phototropic actuation of liquid crystalline elastomers. <i>Polymer Chemistry</i> , 2021 , 12, 1581-1587	4.9	9
84	Phosphate-Based Cross-Linked Polymers from Iodo-ene Photopolymerization: Tuning Surface Wettability through Thiol-ene Chemistry. <i>ACS Macro Letters</i> , 2019 , 8, 213-217	6.6	8
83	Evaluation of Aromatic Thiols as Photoinitiators. <i>Macromolecules</i> , 2020 , 53, 5237-5247	5.5	8
82	Factors affecting the sensitivity to acid inhibition in novel acrylates characterized by secondary functionalities. <i>Journal of Polymer Science Part A</i> , 2007 , 45, 1287-1295	2.5	8

81	Polymerization of polymer/ferroelectric liquid crystal composites formed with branched liquid crystalline bismethacrylates. <i>Liquid Crystals</i> , 1998 , 24, 263-270	2.3	8
80	Implementation of two distinct wavelengths to induce multistage polymerization in shape memory materials and nanoimprint lithography. <i>Polymer</i> , 2018 , 156, 162-168	3.9	8
79	Production of dynamic lipid bilayers using the reversible thiol-thioester exchange reaction. <i>Chemical Communications</i> , 2018 , 54, 8108-8111	5.8	8
78	Click Nucleic Acid Mediated Loading of Prodrug Activating Enzymes in PEG-PLGA Nanoparticles for Combination Chemotherapy. <i>Biomacromolecules</i> , 2019 , 20, 1683-1690	6.9	7
77	Cytocompatibility and Cellular Internalization of PEGylated "Clickable" Nucleic Acid Oligomers. <i>Biomacromolecules</i> , 2018 , 19, 2535-2541	6.9	7
76	Clickable Nucleic Acids: Sequence-Controlled Periodic Copolymer/Oligomer Synthesis by Orthogonal Thiol-X Reactions. <i>Angewandte Chemie</i> , 2015 , 127, 14670-14675	3.6	7
75	Development of quantitative structure-activity relationships for explanatory modeling of fast reacting (meth)acrylate monomers bearing novel functionality. <i>Journal of Molecular Graphics and Modelling</i> , 2011 , 29, 763-72	2.8	7
74	Application of a kinetic gelation simulation to the characterization of in situ cross-linking biomaterials. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2002 , 13, 797-815	3.5	7
73	Click Nucleic Acid-DNA Binding Behavior: Dependence on Length, Sequence, and Ionic Strength. <i>Biomacromolecules</i> , 2020 , 21, 4205-4211	6.9	7
72	Towards High-Efficiency Synthesis of Xenonucleic Acids. <i>Trends in Chemistry</i> , 2020 , 2, 43-56	14.8	7
71	Photoinduced Pinocytosis for Artificial Cell and Protocell Systems. <i>Chemistry of Materials</i> , 2018 , 30, 8757-8763	9.8	7
70	Surface Modification of (Non)-Fluorinated Vitrimers through Dynamic Transamination. <i>Macromolecular Rapid Communications</i> , 2021 , 42, e2000644	4.8	7
69	Snakeskin-Inspired Elastomers with Extremely Low Coefficient of Friction under Dry Conditions. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 57450-57460	9.5	6
68	Modeling and Experimental Investigation of Light Intensity and Initiator Effects on Solvent-Free Photopolymerizations. <i>ACS Symposium Series</i> , 1999 , 220-231	0.4	6
67	Degradable and Resorbable Polymers 2020 , 167-190		6
66	Phototriggered Base Amplification for Thiol-Michael Addition Reactions in Cross-linked Photopolymerizations with Efficient Dark Cure. <i>Macromolecules</i> , 2020 , 53, 6331-6340	5.5	6
65	Sequence-Controlled Synthesis of Advanced Clickable Synthetic Oligonucleotides. <i>Macromolecular Rapid Communications</i> , 2020 , 41, e2000327	4.8	6
64	Catalyst-free, aza-Michael polymerization of hydrazides: polymerizability, kinetics, and mechanistic origin of an effect. <i>Polymer Chemistry</i> , 2019 , 10, 5790-5804	4.9	6

63	Light-Activated Stress Relaxation, Toughness Improvement, and Photoinduced Reversal of Physical Aging in Glassy Polymer Networks. <i>Advanced Materials</i> , 2021 , 33, e2007221	24	6
62	Enhancing the toughness of composites via dynamic thioether exchange (TTE) at the resin/filler interface. <i>Polymer Chemistry</i> , 2020 , 11, 4760-4767	4.9	5
61	Thioether-anhydride Dynamic Reversible Networks. <i>Angewandte Chemie</i> , 2020 , 132, 9431-9435	3.6	5
60	Thermal Metamorphosis in (Meth)acrylate Photopolymers: Stress Relaxation, Reshaping, and Second-Stage Reaction. <i>Macromolecules</i> , 2019 , 52, 8114-8123	5.5	5
59	Smart shape changing and shape morphing polymeric materials. <i>Polymer</i> , 2014 , 55, 5847-5848	3.9	5
58	A Comprehensive Kinetic Model of Free-Radical-Mediated Interfacial Polymerization. <i>Macromolecular Theory and Simulations</i> , 2013 , 22, 115-126	1.5	5
57	Micropatterning organosilane self-assembled monolayers with plasma etching and backfilling techniques. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2005 , 23, 354		5
56	Novel Monovinyl Methacrylic Monomers Containing Secondary Functionality for Ultrarapid Polymerization: Steady-State Evaluation		5
55	Influence of Orientational Genesis on the Actuation of Monodomain Liquid Crystalline Elastomers. <i>Macromolecules</i> , 2021 , 54, 4023-4029	5.5	5
54	Permanent and reversibly programmable shapes in liquid crystal elastomer microparticles capable of shape switching. <i>Soft Matter</i> , 2021 , 17, 467-474	3.6	5
53	Thioether Chemistry 2017 , 117-145		4
52	Stress Relaxation via Covalent Dynamic Bonds in Nanogel-Containing Thioether Resins. <i>ACS Macro Letters</i> , 2020 , 9, 713-719	6.6	4
51	Flocculation behavior and mechanisms of block copolymer architectures on silica microparticle and <i>Chlorella vulgaris</i> systems. <i>Journal of Colloid and Interface Science</i> , 2020 , 567, 316-327	9.3	4
50	Influence of small amounts of addition-fragmentation capable monomers on polymerization-induced shrinkage stress. <i>Journal of Polymer Science Part A</i> , 2014 , 52, 1315-1321	2.5	4
49	Settling characteristics of microparticles modified by hydrophilic semi-interpenetrating polymer networks. <i>Journal of Applied Polymer Science</i> , 1995 , 55, 793-805	2.9	4
48	Messenger RNA enrichment using synthetic oligo(T) click nucleic acids. <i>Chemical Communications</i> , 2020 , 56, 13987-13990	5.8	4
47	Hybrid Cerasomes Composed of Phosphatidylcholines and Silica Networks for the Construction of Vesicular Materials with Functionalized Shells. <i>ACS Applied Nano Materials</i> , 2019 , 2, 7549-7558	5.6	4
46	Effects of network structures on the tensile toughness of copper-catalyzed azide-alkyne cycloaddition (CuAAC)-based photopolymers. <i>Macromolecules</i> , 2021 , 54, 747-756	5.5	4

45	Substituted Thiols in Dynamic Thiol-Michael Reactions. <i>Macromolecules</i> , 2021 , 54, 8341-8351	5.5	4
44	Development of a Maleimide Amino Acid for Use as a Tool for Peptide Conjugation and Modification. <i>International Journal of Peptide Research and Therapeutics</i> , 2013 , 19, 265-274	2.1	3
43	Polymerization and Properties of Polymer-Stabilized Ferroelectric Liquid Crystals. <i>MRS Bulletin</i> , 1997 , 22, 15-20	3.2	3
42	Reaction Behavior and Kinetic Modeling Studies of "Living" Radical Photopolymerizations. <i>ACS Symposium Series</i> , 1997 , 51-62	0.4	3
41	Controlled Degradation of Cast and 3-D Printed Photocurable Thioester Networks via Thiol-Michael Exchange. <i>Macromolecules</i> ,	5.5	3
40	Vinyl sulfonamide based thermosetting composites via thiol-Michael polymerization. <i>Dental Materials</i> , 2020 , 36, 249-256	5.7	3
39	Effects of Thiol Substitution on the Kinetics and Efficiency of Thiol-Michael Reactions and Polymerizations. <i>Macromolecules</i> , 2021 , 54, 3093-3100	5.5	3
38	Formation of lipid vesicles in situ utilizing the thiol-Michael reaction. <i>Soft Matter</i> , 2018 , 14, 7645-7652	3.6	3
37	3D printing of sacrificial thioester elastomers using digital light processing for templating 3D organoid structures in soft biomatrices. <i>Biofabrication</i> , 2021 , 13,	10.5	3
36	Efficient cellular uptake of click nucleic acid modified proteins. <i>Chemical Communications</i> , 2020 , 56, 4820-4823	5.4	2
35	Effects of Photodegradable o-Nitrobenzyl Nanogels on the Photopolymerization Process. <i>Macromolecular Materials and Engineering</i> , 2018 , 303, 1800206	3.9	2
34	Click Chemistry: Click Chemistry in Materials Science (Adv. Funct. Mater. 18/2014). <i>Advanced Functional Materials</i> , 2014 , 24, 2566-2566	15.6	2
33	A thiol-ene/methacrylate-based polymer for creating integrated optofluidic devices 2011 ,		2
32	Photopolymerization and Electrooptic Properties of Polymer Network/Ferroelectric Liquid-Crystal Composites. <i>ACS Symposium Series</i> , 1997 , 16-27	0.4	2
31	Exceeding the diffraction limit with single-photon photopolymerization and photo-induced termination 2008 ,		2
30	In situ poling and polymerization of multifunctional monomers for second harmonic generation. <i>Macromolecular Chemistry and Physics</i> , 1994 , 195, 3759-3772	2.6	2
29	Functional Nanogels as a Route to Interpenetrating Polymer Networks with Improved Mechanical Properties. <i>Macromolecules</i> ,	5.5	2
28	Poly(triazole) Glassy Networks via Thiol-Norbornene Photopolymerization: Structure-Property Relationships and Implementation in 3D Printing. <i>Macromolecules</i> , 2021 , 54, 4042-4049	5.5	2

27	Spatially Controlled Permeability and Stiffness in Photopatterned Two-Stage Reactive Polymer Films for Enhanced CO ₂ Barrier and Mechanical Toughness. <i>Macromolecules</i> , 2021 , 54, 44-52	5.5	2
26	Systematic Modulation and Structure-Property Relationships in Photopolymerizable Thermoplastics. <i>ACS Applied Polymer Materials</i> , 2021 , 3, 1171-1181	4.3	2
25	Charged Poly(-isopropylacrylamide) Nanogels for the Stabilization of High Isoelectric Point Proteins. <i>ACS Biomaterials Science and Engineering</i> , 2021 , 7, 4282-4292	5.5	2
24	Post-synthetic functionalization of a polysulfone scaffold with hydrazone-linked functionality. <i>Polymer Chemistry</i> , 2018 , 9, 3791-3797	4.9	2
23	Evaluation of a photo-initiated copper(I)-catalyzed azide-alkyne cycloaddition polymer network with improved water stability and high mechanical performance as an ester-free dental restorative. <i>Dental Materials</i> , 2021 , 37, 1592-1600	5.7	2
22	Effect of comonomer concentration and functionality on photopolymerization rates, mechanical properties and heterogeneity of the polymer 1998 , 199, 1043		2
21	Manipulating the Relative Rates of Reaction and Diffusion in a Holographic Photopolymer Based on Thiol-ene Chemistry. <i>Macromolecules</i> , 2022 , 55, 1822-1833	5.5	2
20	Covalent Adaptable Networks: Toward Stimuli-Responsive Dynamic Thermosets through Continuous Development and Improvements in Covalent Adaptable Networks (CANs) (Adv. Mater. 20/2020). <i>Advanced Materials</i> , 2020 , 32, 2070158	24	1
19	UV-Visible Spectroscopy To Determine Free-Volume Distributions During Multifunctional Monomer Polymerizations. <i>ACS Symposium Series</i> , 1995 , 166-182	0.4	1
18	Photodisulfidation of alkenes with linear disulfides: Reaction scope and kinetics. <i>Tetrahedron</i> , 2022 , 109, 132683	2.4	1
17	Athermal, Chemically Triggered Release of RNA from Thioester Nucleic Acids. <i>Angewandte Chemie - International Edition</i> , 2021 ,	16.4	1
16	Phosphonium Tetrphenylborate: A Photocatalyst for Visible-Light-Induced, Nucleophile-Initiated Thiol-Michael Addition Photopolymerization.. <i>ACS Macro Letters</i> , 2021 , 10, 84-89	6.6	1
15	Enamine Organocatalysts for the Thiol-Michael Addition Reaction and Cross-Linking Polymerizations. <i>Macromolecules</i> , 2021 , 54, 1693-1701	5.5	1
14	Synthesis and Characterization of Click Nucleic Acid Conjugated Polymeric Microparticles for DNA Delivery Applications. <i>Biomacromolecules</i> , 2021 , 22, 1127-1136	6.9	1
13	Use of Living-radical polymerizations to study the structural evolution and properties of highly crosslinked polymer networks 1997 , 35, 2297		1
12	Spatial and Temporal Control of Photomediated Disulfide-ene and Thiol-ene Chemistries for Two-Stage Polymerizations. <i>Macromolecules</i> , 2022 , 55, 1811-1821	5.5	1
11	Kinetic Analysis of Degradation in Thioester Cross-linked Hydrogels as a Function of Thiol Concentration, pKa, and Presentation. <i>Macromolecules</i> , 2022 , 55, 2123-2129	5.5	1
10	Flory-uggins Parameters for Thiol-ene Networks Using Hansen Solubility Parameters. <i>Macromolecules</i> , 2021 , 54, 11439-11448	5.5	1

- 9 Determining Michael Acceptor Reactivity from Kinetic, Mechanistic, and Computational Analysis for the Base-catalyzed Thiol-Michael Reaction. *Polymer Chemistry*, **2021**, 12, 3619-3628 4.9 ○
- 8 Stimuli-Responsive Depolymerization of Poly(Phthalaldehyde) Copolymers and Networks. *Macromolecular Chemistry and Physics*, **2021**, 222, 2100111 2.6 ○
- 7 Photopatterning: Mechanophotopatterning on a Photoresponsive Elastomer (Adv. Mater. 17/2011). *Advanced Materials*, **2011**, 23, 1976-1976 24
- 6 Formation of Polymer Stabilized Ferroelectric Liquid Crystals using a Fluorinated Diacrylate. *Materials Research Society Symposia Proceedings*, **1999**, 559, 123
- 5 Polymerization Effects on the Electro-Optic Properties of a Polymer Stabilized Ferroelectric Liquid Crystal. *Materials Research Society Symposia Proceedings*, **1996**, 425, 197
- 4 Structural Evolution of Highly Crosslinked Polymer Networks. *Materials Research Society Symposia Proceedings*, **1994**, 355, 619
- 3 Structural Evolution of Highly Crosslinked Polymer Networks. *Materials Research Society Symposia Proceedings*, **1994**, 355, 65
- 2 Effects of Aging on Polymerization Kinetics. *Materials Research Society Symposia Proceedings*, **1990**, 215, 43
- 1 An Empirical and Modeling Study of Boron Speciation in Solution with a Reactive Dendrimeric Polymer **1997**, 197-206