Christopher James Kloxin

List of Publications by Year
in descending order

63 papers	6,229 citations	172457 29 h-index	110387 64 g-index
67 all docs	67 docs citations	67 times ranked	6414 citing authors

#	Article	IF	Citations
1	Covalent adaptable networks: smart, reconfigurable and responsive network systems. Chemical Society Reviews, 2013, 42, 7161-7173.	38.1	869
2	Covalent Adaptable Networks (CANs): A Unique Paradigm in Cross-Linked Polymers. Macromolecules, 2010, 43, 2643-2653.	4.8	709
3	Click Chemistry in Materials Science. Advanced Functional Materials, 2014, 24, 2572-2590.	14.9	514
4	Mechanical Properties of Cellularly Responsive Hydrogels and Their Experimental Determination. Advanced Materials, 2010, 22, 3484-3494.	21.0	394
5	Covalent Adaptable Networks: Reversible Bond Structures Incorporated in Polymer Networks. Angewandte Chemie - International Edition, 2012, 51, 4272-4274.	13.8	369
6	Thiolâ˘'Yne Photopolymerizations: Novel Mechanism, Kinetics, and Step-Growth Formation of Highly Cross-Linked Networks. Macromolecules, 2009, 42, 211-217.	4.8	357
7	Spatial and temporal control of the alkyneâ€"azide cycloaddition by photoinitiated Cu(II) reduction. Nature Chemistry, 2011, 3, 256-259.	13.6	342
8	The power of light in polymer science: photochemical processes to manipulate polymer formation, structure, and properties. Polymer Chemistry, 2014, 5, 2187-2201.	3.9	295
9	Rheological and Chemical Analysis of Reverse Gelation in a Covalently Cross-Linked Dielsâ˘'Alder Polymer Network. Macromolecules, 2008, 41, 9112-9117.	4.8	275
10	Toward an enhanced understanding and implementation of photopolymerization reactions. AIChE Journal, 2008, 54, 2775-2795.	3.6	220
11	Externally Triggered Healing of a Thermoreversible Covalent Network via Selfâ€Limited Hysteresis Heating. Advanced Materials, 2010, 22, 2784-2787.	21.0	144
12	Stress Relaxation via Additionâ˘'Fragmentation Chain Transfer in a Thiol-ene Photopolymerization. Macromolecules, 2009, 42, 2551-2556.	4.8	135
13	Mechanophotopatterning on a Photoresponsive Elastomer. Advanced Materials, 2011, 23, 1977-1981.	21.0	124
14	Peptide Design and Self-assembly into Targeted Nanostructure and Functional Materials. Chemical Reviews, 2021, 121, 13915-13935.	47.7	116
15	Spatial and Temporal Control of Thiol-Michael Addition via Photocaged Superbase in Photopatterning and Two-Stage Polymer Networks Formation. Macromolecules, 2014, 47, 6159-6165.	4.8	114
16	A new photoclick reaction strategy: photo-induced catalysis of the thiol-Michael addition via a caged primary amine. Chemical Communications, 2013, 49, 4504-4506.	4.1	79
17	Polymers with controlled assembly and rigidity made with click-functional peptide bundles. Nature, 2019, 574, 658-662.	27.8	79
18	Dynamic Bonds in Covalently Crosslinked Polymer Networks for Photoactivated Strengthening and Healing. Advanced Materials, 2015, 27, 8007-8010.	21.0	76

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19	Clickable Nucleic Acids: Sequenceâ€Controlled Periodic Copolymer/Oligomer Synthesis by Orthogonal Thiolâ€X Reactions. Angewandte Chemie - International Edition, 2015, 54, 14462-14467.	13.8	75
20	Stress Relaxation by Additionâˆ’Fragmentation Chain Transfer in Highly Cross-Linked Thiolâˆ’Yne Networks. Macromolecules, 2010, 43, 10188-10190.	4.8	71
21	Nitrogen-Centered Nucleophile Catalyzed Thiol-Vinylsulfone Addition, Another Thiol-ene â€œClickâ€• Reaction. ACS Macro Letters, 2012, 1, 811-814.	4.8	70
22	Potential Lignin-Derived Alternatives to Bisphenol A in Diamine-Hardened Epoxy Resins. ACS Sustainable Chemistry and Engineering, 2018, 6, 14812-14819.	6.7	67
23	3D Photofixation Lithography in Dielsâ€“Alder Networks. Macromolecular Rapid Communications, 2012, 33, 2092-2096.	3.9	57
24	Stress Relaxation via Additionâ€“Fragmentation Chain Transfer in High <i>T</i>_g, High Conversion Methacrylate-Based Systems. Macromolecules, 2012, 45, 5640-5646.	4.8	53
25	Covalent adaptable networks as dental restorative resins: Stress relaxation by additionâ€“fragmentation chain transfer in allyl sulfide-containing resins. Dental Materials, 2010, 26, 1010-1016.	3.5	52
26	Photolabile Linkers: Exploiting Labile Bond Chemistry to Control Mode and Rate of Hydrogel Degradation and Protein Release. Journal of the American Chemical Society, 2020, 142, 4671-4679.	13.7	46
27	Photodirected Formation and Control of Wrinkles on a Thiolâ€“ene Elastomer. ACS Macro Letters, 2013, 2, 474-477.	4.8	43
28	The rheology and microstructure of an aging thermoreversible colloidal gel. Journal of Rheology, 2017, 61, 23-34.	2.6	39
29	Nonclassical Dependence of Polymerization Rate on Initiation Rate Observed in Thiolâˆ’Ene Photopolymerizations. Macromolecules, 2008, 41, 2987-2989.	4.8	35
30	Stress relaxation of trithiocarbonate-dimethacrylate-based dental composites. Dental Materials, 2012, 28, 888-893.	3.5	30
31	Novel dental restorative materials having low polymerization shrinkage stress via stress relaxation by addition-fragmentation chain transfer. Dental Materials, 2012, 28, 1113-1119.	3.5	24
32	Blue-light activated rapid polymerization for defect-free bulk Cu(<scp>i</scp>)-catalyzed azideâ€“alkyne cycloaddition (CuAAC) crosslinked networks. Chemical Communications, 2016, 52, 10574-10577.	4.1	24
33	Towards understanding the kinetic behaviour and limitations in photo-induced copper(<scp>i</scp>) catalyzed azideâ€“alkyne cycloaddition (CuAAC) reactions. Physical Chemistry Chemical Physics, 2016, 18, 25504-25511.	2.8	23
34	Kinetic and thermodynamic measurements for the facile property prediction of dielsâ€“alderâ€conjugated material behavior. AIChE Journal, 2012, 58, 3545-3552.	3.6	22
35	Principles of voxel refinement in optical direct write lithography. Journal of Materials Chemistry, 2011, 21, 14150.	6.7	19
36	A Single-Step Monomeric Photo-Polymerization and Crosslinking via Thiol-Ene Reaction for Hydroxide Exchange Membrane Fabrication. Journal of the Electrochemical Society, 2015, 162, F1206-F1211.	2.9	19

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37	Covalent Incorporation of Ionic Liquid into Ionâ€Conductive Networks via Thiolâ€“Ene Photopolymerization. Macromolecular Rapid Communications, 2017, 38, 1700113.	3.9	19
38	Force-induced cleavage of a labile bond for enhanced mechanochemical crosslinking. Polymer Chemistry, 2017, 8, 6485-6489.	3.9	18
39	Stress Reduction and <i>T</i>_g Enhancement in Ternary Thiolâ€“Yneâ€“Methacrylate Systems via Additionâ€“Fragmentation Chain Transfer. Macromolecules, 2012, 45, 5647-5652.	4.8	17
40	Polyelectrolyte character of rigid rod peptide bundlemer chains constructed <i>via</i> hierarchical self-assembly. Soft Matter, 2019, 15, 9858-9870.	2.7	15
41	One-pot blue-light triggered tough interpenetrating polymeric network (IPN) using CuAAC and methacrylate reactions. Polymer Chemistry, 2017, 8, 3668-3673.	3.9	14
42	Nanofibers Produced by Electrospinning of Ultrarigid Polymer Rods Made from Designed Peptide Bundlemers. ACS Applied Materials & Interfaces, 2021, 13, 26339-26351.	8.0	14
43	On-Demand and Tunable Dual Wavelength Release of Antibodies Using Light-Responsive Hydrogels. ACS Applied Bio Materials, 2020, 3, 6944-6958.	4.6	13
44	Expanding the Alternating Propagationâ€“Chain Transfer-Based Polymerization Toolkit: The Iodoâ€“Ene Reaction. ACS Macro Letters, 2015, 4, 1404-1409.	4.8	12
45	High Pressure Phase Diagram of an Aqueous PEO-PPO-PEO Triblock Copolymer System via Probe Diffusion Measurements. Macromolecules, 2010, 43, 2084-2087.	4.8	11
46	On-Resin Macrocyclization of Peptides Using Vinyl Sulfonamides as a Thiol-Michael â€œClickâ€• Acceptor. Bioconjugate Chemistry, 2018, 29, 3987-3992.	3.6	10
47	Microviscoelasticity of soft repulsive sphere dispersions: Tracer particle microrheology of triblock copolymer micellar liquids and soft crystals. Journal of Chemical Physics, 2011, 134, 174903.	3.0	9
48	Expanding the thiolâ€“X toolbox: photoinitiation and materials application of the acid-catalyzed thiolâ€“ene (ACT) reaction. Polymer Chemistry, 2021, 12, 1562-1570.	3.9	9
49	Microviscoelasticity of adhesive hard sphere dispersions: Tracer particle microrheology of aqueous Pluronic L64 solutions. Journal of Chemical Physics, 2009, 131, 134904.	3.0	8
50	Copper ligand and anion effects: controlling the kinetics of the photoinitiated copper(<scp>i</scp>) catalyzed azideâ€”alkyne cycloaddition polymerization. Polymer Chemistry, 2018, 9, 4772-4780.	3.9	7
51	One-component rapid Norrish Type II photoinitiation of bulk photo-CuAAC polymer networks. Polymer Chemistry, 2020, 11, 7515-7523.	3.9	7
52	Photoinitiated Copper(I)-Catalyzed Azideâ€“Alkyne Cycloaddition Reaction for Ion Conductive Networks. ACS Macro Letters, 2019, 8, 795-799.	4.8	6
53	Surface Chemical Functionalization of Wrinkled Thiolâ€“Ene Elastomers for Promoting Cellular Alignment. ACS Applied Bio Materials, 2020, 3, 3731-3740.	4.6	5
54	Structural and rheological aging in model attraction-driven glasses by Rheo-SANS. Soft Matter, 2021, 17, 924-935.	2.7	5

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55	Recombinant expression of computationally designed peptide-bundlemers in Escherichia coli. Journal of Biotechnology, 2021, 330, 57-60.	3.8	5
56	Rapid and controlled photo-induced thiolâ€“ene wrinkle formation via flowcoating. Materials Horizons, 2018, 5, 514-520.	12.2	3
57	Sequence-defined vinyl sulfonamide click nucleic acids (VS-CNAs) and their assembly into dynamically responsive materials. Chemical Communications, 2020, 56, 11263-11266.	4.1	3
58	Colloid-like solution behavior of computationally designed coiled coil bundlemers. Journal of Colloid and Interface Science, 2022, 606, 1974-1982.	9.4	3
59	Computational Design of Homotetrameric Peptide Bundle Variants Spanning a Wide Range of Charge States. Biomacromolecules, 2022, 23, 1652-1661.	5.4	3
60	Reversible Covalent Bond Formation as a Strategy for Healable Polymer Networks. RSC Polymer Chemistry Series, 2013, , 62-91.	0.2	2
61	Click Chemistry: Click Chemistry in Materials Science (Adv. Funct. Mater. 18/2014). Advanced Functional Materials, 2014, 24, 2566-2566.	14.9	2
62	Intramolecular structure and dynamics in computationally designed peptide-based polymers displaying tunable chain stiffness. Physical Review Materials, 2021, 5, .	2.4	1
63	Photopatterning: Mechanophotopatterning on a Photoresponsive Elastomer (Adv. Mater. 17/2011). Advanced Materials, 2011, 23, 1976-1976.	21.0	0