Christopher M Bates

List of Publications by Year
in descending order

71	5,699	156536	104191
papers	citations	32 h-index	69 g-index

72	72	72	5611
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Carbon Nanotube Composites with Bottlebrush Elastomers for Compliant Electrodes. ACS Polymers Au, 2022, 2, 27-34.	1.7	6
2	Digital Light Processing of Dynamic Bottlebrush Materials. Advanced Functional Materials, 2022, 32, .	7.8	22
3	Digital Light Processing of Dynamic Bottlebrush Materials (Adv. Funct. Mater. 25/2022). Advanced Functional Materials, 2022, 32, .	7.8	0
4	Asymmetric Miktoarm Star Polymers as Polyester Thermoplastic Elastomers. Macromolecules, 2022, 55, 4929-4936.	2.2	8
5	Miktoarm Star Polymers: Synthesis and Applications. Chemistry of Materials, 2022, 34, 6188-6209.	3.2	19
6	Light-Switchable and Self-Healable Polymer Electrolytes Based on Dynamic Diarylethene and Metal-Ion Coordination. Journal of the American Chemical Society, 2021, 143, 1562-1569.	6.6	31
7	Flow-Induced Concentration Nonuniformity and Shear Banding in Entangled Polymer Solutions. Physical Review Letters, 2021, 126, 207801.	2.9	13
8	Yielding Behavior of Bottlebrush and Linear Block Copolymers. Macromolecules, 2021, 54, 5636-5647.	2.2	7
9	Chemical and Mechanical Tunability of 3D-Printed Dynamic Covalent Networks Based on Boronate Esters. ACS Macro Letters, 2021, 10, 857-863.	2.3	44
10	Light-Mediated Synthesis and Reprocessing of Dynamic Bottlebrush Elastomers under Ambient Conditions. Journal of the American Chemical Society, 2021, 143, 9866-9871.	6.6	70
11	Siliconeâ€based polymer blends: Enhancing properties through compatibilization. Journal of Polymer Science, 2021, 59, 2114-2128.	2.0	13
12	Emergence of Hexagonally Close-Packed Spheres in Linear Block Copolymer Melts. Journal of the American Chemical Society, 2021, 143, 14106-14114.	6.6	36
13	Multiwavelength Photodetectors Based on an Azobenzene Polymeric Ionic Liquid. ACS Applied Polymer Materials, 2021, 3, 5125-5133.	2.0	2
14	Three-Dimensional Photochemical Printing of Thermally Activated Polymer Foams. ACS Applied Polymer Materials, 2021, 3, 4984-4991.	2.0	9
15	Origins of Lithium/Sodium Reverse Permeability Selectivity in 12-Crown-4-Functionalized Polymer Membranes. ACS Macro Letters, 2021, 10, 1167-1173.	2.3	13
16	Engineering Li/Na selectivity in 12-Crown-4â€“functionalized polymer membranes. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	65
17	Super-soft solvent-free bottlebrush elastomers for touch sensing. Materials Horizons, 2020, 7, 181-187.	6.4	63
18	Surfaceâ€initiated PETâ€RAFT polymerization under metalâ€free and ambient conditions using enzyme degassing. Journal of Polymer Science, 2020, 58, 70-76.	2.0	38

#	Article	IF	Citations
19	Efficient Synthesis of Asymmetric Miktoarm Star Polymers. Macromolecules, 2020, 53, 702-710.	2.2	33
20	Single-Step, Spin-on Process for High Fidelity and Selective Deposition. ACS Applied Polymer Materials, 2020, 2, 481-486.	2.0	5
21	Architecture Effects in Complex Spherical Assemblies of (AB)_n-Type Block Copolymers. ACS Macro Letters, 2020, 9, 1745-1752.	2.3	34
22	Room temperature 3D printing of super-soft and solvent-free elastomers. Science Advances, 2020, 6, .	4.7	81
23	Rapid Generation of Block Copolymer Libraries Using Automated Chromatographic Separation. Journal of the American Chemical Society, 2020, 142, 9843-9849.	6.6	25
24	Dynamic Bottlebrush Polymer Networks: Self-Healing in Super-Soft Materials. Journal of the American Chemical Society, 2020, 142, 7567-7573.	6.6	108
25	Synthesis and Self-Assembly of AB_n Miktoarm Star Polymers. ACS Macro Letters, 2020, 9, 396-403.	2.3	91
26	Universal Approach to Photo-Crosslink Bottlebrush Polymers. Macromolecules, 2020, 53, 1090-1097.	2.2	34
27	Spatial Control of the Self-assembled Block Copolymer Domain Orientation and Alignment on Photopatterned Surfaces. ACS Applied Materials & Interfaces, 2020, 12, 23399-23409.	4.0	7
28	Surfaceâ€initiated PETâ€RAFT polymerization under metalâ€free and ambient conditions using enzyme degassing. Journal of Polymer Science, 2020, 58, 70-76.	2.0	0
29	Metal-Free Room-Temperature Vulcanization of Silicones via Borane Hydrosilylation. Macromolecules, 2019, 52, 7244-7250.	2.2	14
30	Stability of the A15 phase in diblock copolymer melts. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13194-13199.	3.3	130
31	Rapid and Selective Deposition of Patterned Thin Films on Heterogeneous Substrates via Spin Coating. ACS Applied Materials & Interfaces, 2019, 11, 21177-21183.	4.0	26
32	Metal-Free Synthesis of Poly(silyl ether)s under Ambient Conditions. Macromolecules, 2019, 52, 1993-1999.	2.2	25
33	Miktoarm Stars via Grafting-Through Copolymerization: Self-Assembly and the Star-to-Bottlebrush Transition. Macromolecules, 2019, 52, 1794-1802.	2.2	71
34	Tuning Merocyanine Photoacid Structure to Enhance Solubility and Temporal Control: Application in Ring Opening Polymerization. ChemPhotoChem, 2019, 3, 467-472.	1.5	31
35	Fluoride-ion solvation in non-aqueous electrolyte solutions. Materials Chemistry Frontiers, 2019, 3, 2721-2727.	3.2	12
36	Controlled Formation and Binding Selectivity of Discrete Oligo(methyl methacrylate) Stereocomplexes. Journal of the American Chemical Society, 2018, 140, 1945-1951.	6.6	51

#	Article	IF	Citations
37	Room-temperature cycling of metal fluoride electrodes: Liquid electrolytes for high-energy fluoride ion cells. Science, 2018, 362, 1144-1148.	6.0	157
38	Macrocyclic Side-Chain Monomers for Photoinduced ATRP: Synthesis and Properties versus Long-Chain Linear Isomers. Macromolecules, 2018, 51, 6901-6910.	2.2	16
39	BrÃ¸nsted-Acid-Catalyzed Exchange in Polyester Dynamic Covalent Networks. ACS Macro Letters, 2018, 7, 817-821.	2.3	131
40	Control of Grafting Density and Distribution in Graft Polymers by Living Ring-Opening Metathesis Copolymerization. Journal of the American Chemical Society, 2017, 139, 3896-3903.	6.6	136
41	Light-Mediated Atom Transfer Radical Polymerization of Semi-Fluorinated (Meth)acrylates: Facile Access to Functional Materials. Journal of the American Chemical Society, 2017, 139, 5939-5945.	6.6	121
42	Manipulating the ABCs of self-assembly via low-Ï‡ block polymer design. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6462-6467.	3.3	53
43	Effects of Tailored Dispersity on the Self-Assembly of Dimethylsiloxaneâ€“Methyl Methacrylate Block Co-Oligomers. ACS Macro Letters, 2017, 6, 668-673.	2.3	78
44	50th Anniversary Perspective: Block Polymersâ€”Pure Potential. Macromolecules, 2017, 50, 3-22.	2.2	593
45	Oneâ€Pot Synthesis of ABCDE Multiblock Copolymers with Hydrophobic, Hydrophilic, and Semiâ€Fluorinated Segments. Angewandte Chemie - International Edition, 2017, 56, 14483-14487.	7.2	105
46	Oneâ€Pot Synthesis of ABCDE Multiblock Copolymers with Hydrophobic, Hydrophilic, and Semiâ€Fluorinated Segments. Angewandte Chemie, 2017, 129, 14675-14679.	1.6	20
47	A Hybrid Chemo-/Grapho-Epitaxial Alignment Strategy for Defect Reduction in Sub-10 nm Directed Self-Assembly of Silicon-Containing Block Copolymers. Chemistry of Materials, 2016, 28, 8951-8961.	3.2	28
48	Pattern Transfer of Sub-10 nm Features via Tin-Containing Block Copolymers. ACS Macro Letters, 2016, 5, 391-395.	2.3	22
49	Electrocatalysis of CO₂ Reduction in Brush Polymer Ion Gels. Journal of the American Chemical Society, 2016, 138, 11160-11163.	6.6	27
50	Structure, Stability, and Reorganization of 0.5 L₀ Topography in Block Copolymer Thin Films. ACS Nano, 2016, 10, 10152-10160.	7.3	38
51	Brush polymer ion gels. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 292-300.	2.4	24
52	Interfacial Layers with Photoswitching Surface Energy for Block Copolymer Alignment and Directed Self-Assembly. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2015, 28, 611-615.	0.1	4
53	Directed Self-Assembly of Silicon-Containing Block Copolymer Thin Films. ACS Applied Materials & Interfaces, 2015, 7, 3323-3328.	4.0	68
54	ABA Triblock Brush Polymers: Synthesis, Self-Assembly, Conductivity, and Rheological Properties. Macromolecules, 2015, 48, 4967-4973.	2.2	157

#	Article	IF	Citations
55	Design of highâ€‡ block copolymers for lithography. Journal of Polymer Science Part A, 2015, 53, 344-352.	2.5	136
56	Block Copolymer Lithography. Macromolecules, 2014, 47, 2-12.	2.2	537
57	Improving Brush Polymer Infrared One-Dimensional Photonic Crystals via Linear Polymer Additives. Journal of the American Chemical Society, 2014, 136, 17374-17377.	6.6	118
58	Interfacial Design for Block Copolymer Thin Films. Chemistry of Materials, 2014, 26, 1471-1479.	3.2	108
59	Photopatternable Interfaces for Block Copolymer Lithography. ACS Macro Letters, 2014, 3, 824-828.	2.3	28
60	A Study of Tin-containing Block Copolymers. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2014, 27, 445-448.	0.1	5
61	Block Copolymers for DSA in the 100 ^|^Aring; Regime. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2014, 27, 415-418.	0.1	1
62	Consequences of Surface Neutralization in Diblock Copolymer Thin Films. ACS Nano, 2013, 7, 9905-9919.	7.3	59
63	Synthesis and thinâ€‰film orientation of poly(styreneâ€‹blockâ€‰trimethylsilylisoprene). Journal of Polymer Science Part A, 2013, 51, 290-297.	2.5	16
64	Polarity-switching Top Coats for Silicon-containing Block Copolymer Orientation Control. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2013, 26, 223-224.	0.1	4
65	Block Copolymer Orientation Control Using a Top-Coat Surface Treatment. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2012, 25, 125-130.	0.1	15
66	Thin Film Self-Assembly of Poly(trimethylsilylstyrene-b-<scp>d</scp>,<scp>l</scp>-lactide) with Sub-10 nm Domains. Macromolecules, 2012, 45, 8722-8728.	2.2	120
67	Multiblock Polymers: Panacea or Pandoraâ€™s Box?. Science, 2012, 336, 434-440.	6.0	930
68	Polarity-Switching Top Coats Enable Orientation of Subâ€“10-nm Block Copolymer Domains. Science, 2012, 338, 775-779.	6.0	354
69	Oligosaccharide/Silicon-Containing Block Copolymers with 5 nm Features for Lithographic Applications. ACS Nano, 2012, 6, 3424-3433.	7.3	194
70	Polymeric Cross-Linked Surface Treatments for Controlling Block Copolymer Orientation in Thin Films. Langmuir, 2011, 27, 2000-2006.	1.6	53
71	A New Materials-based Pitch Division Technique. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2009, 22, 773-781.	0.1	6