Heather D Maynard

List of Publications by Year
in descending order

121	9,410	30070 54	38395 95
papers	citations	h-index	g-index

122	122	122	9421
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Diazido macrocyclic sulfates as a platform for the synthesis of sequence-defined polymers for antibody drug conjugates. Chemical Science, 2022, 13, 3888-3893.	7.4	3
2	Self-Immolative Hydroxybenzylamine Linkers for Traceless Protein Modification. Journal of the American Chemical Society, 2022, 144, 6050-6058.	13.7	16
3	Safety and Biodistribution Profile of Poly(styrenyl acetal trehalose) and Its Granulocyte Colony Stimulating Factor Conjugate. Biomacromolecules, 2022, 23, 3383-3395.	5.4	4
4	Synthesis and Application of Trehalose Materials. Jacs Au, 2022, 2, 1561-1587.	7.9	22
5	Effects of trehalose and polyacrylate-based hydrogels on tomato growth under drought. AoB PLANTS, 2022, 14, .	2.3	1
6	Enhanced Bioactivity of a Human GHR Antagonist Generated by Solid-Phase Site-Specific PEGylation. Biomacromolecules, 2021, 22, 299-308.	5.4	6
7	Mesotrione Conjugation Strategies to Create Proherbicides with Reduced Soil Mobility. ACS Sustainable Chemistry and Engineering, 2021, 9, 5776-5782.	6.7	5
8	Effect of Poly(trehalose methacrylate) Molecular Weight and Concentration on the Stability and Viscosity of Insulin. Macromolecular Materials and Engineering, 2021, 306, 2100197.	3.6	7
9	Synthesis of disulfide-bridging trehalose polymers for antibody and Fab conjugation using a bis-sulfone ATRP initiator. Polymer Chemistry, 2021, 12, 1217-1223.	3.9	5
10	Preparation of biomolecule-polymer conjugates by grafting-from using ATRP, RAFT, or ROMP. Progress in Polymer Science, 2020, 100, 101186.	24.7	126
11	Genetic Code Expansion Enables Site-Specific PEGylation of a Human Growth Hormone Receptor Antagonist through Click Chemistry. Bioconjugate Chemistry, 2020, 31, 2179-2190.	3.6	13
12	Synthesis of Zwitterionic and Trehalose Polymers with Variable Degradation Rates and Stabilization of Insulin. Biomacromolecules, 2020, 21, 2147-2154.	5.4	17
13	Long-Acting Human Growth Hormone Receptor Antagonists Produced in E. coli and Conjugated with Polyethylene Glycol. Bioconjugate Chemistry, 2020, 31, 1651-1660.	3.6	5
14	Modification of proteins using olefin metathesis. Materials Chemistry Frontiers, 2020, 4, 1040-1051.	5.9	26
15	SAT-283 Generation of a Long-Acting Human Growth Hormone Receptor Antagonist by Site-Specific Pegylation. Journal of the Endocrine Society, 2020, 4, .	0.2	0
16	Human Vault Nanoparticle Targeted Delivery of Antiretroviral Drugs to Inhibit Human Immunodeficiency Virus Type 1 Infection. Bioconjugate Chemistry, 2019, 30, 2216-2227.	3.6	13
17	Electrically Mediated Membrane Pore Gating via Grafted Polymer Brushes. , 2019, 1, 647-654.		13
18	Multivalent Cluster Nanomolecules for Inhibiting Proteinâ€“Protein Interactions. Bioconjugate Chemistry, 2019, 30, 2594-2603.	3.6	10

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19	Scalable Trehaloseâ€Functionalized Hydrogel Synthesis for Highâ€Temperature Protection of Enzymes. Macromolecular Materials and Engineering, 2019, 304, 1800782.	3.6	7
20	Carborane RAFT agents as tunable and functional molecular probes for polymer materials. Polymer Chemistry, 2019, 10, 1660-1667.	3.9	14
21	Amphiphilic fluorous random copolymer selfâ€assembly for encapsulation of a fluorinated agrochemical. Journal of Polymer Science Part A, 2019, 57, 352-359.	2.3	14
22	Site-Specific Insulin-Trehalose Glycopolymer Conjugate by Grafting from Strategy Improves Bioactivity. ACS Macro Letters, 2018, 7, 324-329.	4.8	52
23	Glucoseâ€Responsive Trehalose Hydrogel for Insulin Stabilization and Delivery. Macromolecular Bioscience, 2018, 18, e1700372.	4.1	41
24	Stabilization of Glucagon by Trehalose Glycopolymer Nanogels. Advanced Functional Materials, 2018, 28, 1705475.	14.9	27
25	Synthesis and Biological Evaluation of a Degradable Trehalose Glycopolymer Prepared by RAFT Polymerization. Macromolecular Rapid Communications, 2018, 39, 1700652.	3.9	19
26	Tuning Molecular Interactions for Highly Reproducible and Efficient Formamidinium Perovskite Solar Cells via Adduct Approach. Journal of the American Chemical Society, 2018, 140, 6317-6324.	13.7	338
27	A guide to maximizing the therapeutic potential of proteinâ€“polymer conjugates by rational design. Chemical Society Reviews, 2018, 47, 8998-9014.	38.1	95
28	PEG Analogs Synthesized by Ring-Opening Metathesis Polymerization for Reversible Bioconjugation. Bioconjugate Chemistry, 2018, 29, 3739-3745.	3.6	16
29	Organometallic Gold(III) Reagents for Cysteine Arylation. Journal of the American Chemical Society, 2018, 140, 7065-7069.	13.7	148
30	Polymers at the Interface with Biology. Biomacromolecules, 2018, 19, 3151-3162.	5.4	10
31	Substituted Polyesters by Thiolâ€“Ene Modification: Rapid Diversification for Therapeutic Protein Stabilization. Journal of the American Chemical Society, 2017, 139, 1145-1154.	13.7	82
32	Writing Without Ink: A Mechanically and Photochemically Responsive PDMS Polymer for Science Outreach. Journal of Chemical Education, 2017, 94, 1752-1755.	2.3	17
33	Trehalose Glycopolymer Enhances Both Solution Stability and Pharmacokinetics of a Therapeutic Protein. Bioconjugate Chemistry, 2017, 28, 836-845.	3.6	76
34	Expanding the ROMP Toolbox: Synthesis of Air-Stable Benzonorbornadiene Polymers by Aryne Chemistry. Macromolecules, 2017, 50, 580-586.	4.8	23
35	Atomically precise organomimetic cluster nanomolecules assembled via perfluoroaryl-thiol SNAr chemistry. Nature Chemistry, 2017, 9, 333-340.	13.6	201
36	Design of modular dual enzymeâ€responsive peptides. Biopolymers, 2017, 108, e23035.	2.4	2

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37	Fluorous Comonomer Modulates the Reactivity of Cyclic Ketene Acetal and Degradation of Vinyl Polymers. Macromolecules, 2017, 50, 9222-9232.	4.8	36
38	Effect of trehalose polymer regioisomers on protein stabilization. Polymer Chemistry, 2017, 8, 4781-4788.	3.9	32
39	Structure activity relationship of heparin mimicking polymer p(SS-co-PEGMA): effect of sulfonation and polymer size on FGF2-receptor binding. Polymer Chemistry, 2017, 8, 4548-4556.	3.9	20
40	Visible-Light-Induced Olefin Activation Using 3D Aromatic Boron-Rich Cluster Photooxidants. Journal of the American Chemical Society, 2016, 138, 6952-6955.	13.7	95
41	Encapsulated Hydrogels by E-beam Lithography and Their Use in Enzyme Cascade Reactions. Langmuir, 2016, 32, 4043-4051.	3.5	16
42	Controlled Radical Polymerization as an Enabling Approach for the Next Generation of Proteinâ€“Polymer Conjugates. Accounts of Chemical Research, 2016, 49, 1777-1785.	15.6	71
43	A Heparin-Mimicking Block Copolymer Both Stabilizes and Increases the Activity of Fibroblast Growth Factor 2 (FGF2). Biomacromolecules, 2016, 17, 3386-3395.	5.4	36
44	Calculating the mean time to capture for tethered ligands and its effect on the chemical equilibrium of bound ligand pairs. Data in Brief, 2016, 8, 506-515.	1.0	0
45	Protein storage with perfluorinated PEG compartments in a hydrofluorocarbon solvent. Polymer Chemistry, 2016, 7, 6694-6698.	3.9	36
46	Core/shell protein-reactive nanogels via a combination of RAFT polymerization and vinyl sulfone postmodification. Nanomedicine, 2016, 11, 2631-2645.	3.3	19
47	Heparin-Mimicking Polymers: Synthesis and Biological Applications. Biomacromolecules, 2016, 17, 3417-3440.	5.4	136
48	Fibroblast growth factor 2 dimer with superagonist inÂvitro activity improves granulation tissue formation during wound healing. Biomaterials, 2016, 81, 157-168.	11.4	59
49	Enhancing the conjugation yield of brush polymerâ€“protein conjugates by increasing the linker length at the polymer end-group. Polymer Chemistry, 2016, 7, 2352-2357.	3.9	16
50	Direct Write Protein Patterns for Multiplexed Cytokine Detection from Live Cells Using Electron Beam Lithography. ACS Nano, 2016, 10, 723-729.	14.6	60
51	Homodimeric Proteinâ€“Polymer Conjugates via the Tetrazineâ€“trans-Cyclooctene Ligation. Macromolecules, 2016, 49, 30-37.	4.8	40
52	Dual pH- and temperature-responsive protein nanoparticles. European Polymer Journal, 2015, 69, 532-539.	5.4	31
53	Poly(vinyl sulfonate) Facilitates bFGF-Induced Cell Proliferation. Biomacromolecules, 2015, 16, 2684-2692.	5.4	38
54	Imine Hydrogels with Tunable Degradability for Tissue Engineering. Biomacromolecules, 2015, 16, 2101-2108.	5.4	112

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55	Degradable PEGylated protein conjugates utilizing RAFT polymerization. European Polymer Journal, 2015, 65, 305-312.	5.4	34
56	Trehalose hydrogels for stabilization of enzymes to heat. Polymer Chemistry, 2015, 6, 3443-3448.	3.9	44
57	Trehalose glycopolymer resists allow direct writing of protein patterns by electron-beam lithography. Nature Communications, 2015, 6, 6654.	12.8	75
58	Protein modification in a trice. Nature, 2015, 526, 646-647.	27.8	7
59	Grafting from Small Interfering Ribonucleic Acid (siRNA) as an Alternative Synthesis Route to siRNAâ€“Polymer Conjugates. Macromolecules, 2015, 48, 5640-5647.	4.8	27
60	Amphiphilic/fluorous random copolymers as a new class of non-cytotoxic polymeric materials for protein conjugation. Polymer Chemistry, 2015, 6, 240-247.	3.9	75
61	Synthesis of ferrocene-functionalized monomers for biodegradable polymer formation. Inorganic Chemistry Frontiers, 2014, 1, 271.	6.0	19
62	Therapeutic Proteinâ€“Polymer Conjugates: Advancing Beyond PEGylation. Journal of the American Chemical Society, 2014, 136, 14323-14332.	13.7	524
63	Proteinâ€“Polymer Conjugation via Ligand Affinity and Photoactivation of Glutathione S-Transferase. Bioconjugate Chemistry, 2014, 25, 1902-1909.	3.6	22
64	Morphing Hydrogel Patterns by Thermoâ€Reversible Fluorescence Switching. Macromolecular Rapid Communications, 2014, 35, 1260-1265.	3.9	23
65	Synthesis of Biotinylated Aldehyde Polymers for Biomolecule Conjugation. Macromolecular Rapid Communications, 2013, 34, 983-989.	3.9	21
66	Trehalose Glycopolymers as Excipients for Protein Stabilization. Biomacromolecules, 2013, 14, 2561-2569.	5.4	117
67	Synthesis of nanogelâ€“protein conjugates. Polymer Chemistry, 2013, 4, 2464.	3.9	50
68	Keto-Functionalized Polymer Scaffolds as Versatile Precursors to Polymer Side-Chain Conjugates. Macromolecules, 2013, 46, 8-14.	4.8	45
69	A heparin-mimicking polymer conjugate stabilizes basic fibroblast growth factor. Nature Chemistry, 2013, 5, 221-227.	13.6	184
70	Smart Vaults: Thermally-Responsive Protein Nanocapsules. ACS Nano, 2013, 7, 867-874.	14.6	59
71	Chemoselective Immobilization of Proteins by Microcontact Printing and Bioâ€orthogonal Click Reactions. ChemBioChem, 2013, 14, 2464-2471.	2.6	28
72	Synthesis of Glycopolymers by Controlled Radical Polymerization Techniques and Their Applications. ChemBioChem, 2012, 13, 2478-2487.	2.6	87

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73	Electron-Beam Lithography for Patterning Biomolecules at the Micron and Nanometer Scale. Chemistry of Materials, 2012, 24, 774-780.	6.7	118
74	Shape-Shifting Micro- and Nanopatterns Controlled by Temperature. Journal of the American Chemical Society, 2012, 134, 12386-12389.	13.7	16
75	Trehalose Glycopolymers for Stabilization of Protein Conjugates to Environmental Stressors. Journal of the American Chemical Society, 2012, 134, 8474-8479.	13.7	199
76	Aminooxy and Pyridyl Disulfide Telechelic Poly(poly(ethylene glycol) acrylate) by RAFT Polymerization. Macromolecules, 2012, 45, 4958-4965.	4.8	30
77	Emerging synthetic approaches for proteinâ€“polymer conjugations. Chemical Communications, 2011, 47, 2212.	4.1	181
78	GlutathioneS-transferase as a general and reversible tag for surface immobilization of proteins. Journal of Materials Chemistry, 2011, 21, 1457-1461.	6.7	24
79	Protein Nanopatterns by Oxime Bond Formation. Langmuir, 2011, 27, 1415-1418.	3.5	31
80	Dual Click reactions to micropattern proteins. Soft Matter, 2011, 7, 9972.	2.7	29
81	FDA-approved poly(ethylene glycol)â€“protein conjugate drugs. Polymer Chemistry, 2011, 2, 1442.	3.9	553
82	Thermoprecipitation of Glutathione Sâ€Transferase by Glutathioneâ€“Poly(Nâ€isopropylacrylamide) Prepared by RAFT Polymerization. Macromolecular Rapid Communications, 2010, 31, 1691-1695.	3.9	37
83	Proteinâ€“polymer conjugates: synthetic approaches by controlled radical polymerizations and interesting applications. Current Opinion in Chemical Biology, 2010, 14, 818-827.	6.1	145
84	Heterotelechelic polymers for capture and release of proteinâ€“polymer conjugates. Polymer Chemistry, 2010, 1, 168.	3.9	59
85	Two-Step Synthesis of Multivalent Cancer-Targeting Constructs. Biomacromolecules, 2010, 11, 160-167.	5.4	41
86	Synthesis of Aminooxy End-Functionalized pNIPAAm by RAFT Polymerization for Protein and Polysaccharide Conjugation. Macromolecules, 2009, 42, 7650-7656.	4.8	74
87	Synthesis of Heterotelechelic Polymers for Conjugation of Two Different Proteins. Macromolecules, 2009, 42, 2360-2367.	4.8	118
88	Differences in cytotoxicity of poly(PEGA)s synthesized by reversible additionâ€“fragmentation chain transfer polymerization. Chemical Communications, 2009, , 3580.	4.1	113
89	Synthesis of Semitelechelic Maleimide Poly(PEGA) for Protein Conjugation By RAFT Polymerization. Biomacromolecules, 2009, 10, 1777-1781.	5.4	102
90	Positioning Multiple Proteins at the Nanoscale with Electron Beam Cross-Linked Functional Polymers. Journal of the American Chemical Society, 2009, 131, 521-527.	13.7	137

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91	Synthesis of a Pyridyl Disulfide End-Functionalized Glycopolymer for Conjugation to Biomolecules and Patterning on Gold Surfaces. Biomacromolecules, 2009, 10, 2207-2212.	5.4	77
92	Trapping of Thiol-Terminated Acrylate Polymers with Divinyl Sulfone To Generate Well-Defined Semitelechelic Michael Acceptor Polymers. Macromolecules, 2009, 42, 7657-7663.	4.8	95
93	Synthesis of Maleimide-End-Functionalized Star Polymers and Multimeric Proteinâ˜Polymer Conjugates. Macromolecules, 2009, 42, 8028-8033.	4.8	90
94	Synthesis of Michael Acceptor Ionomers of Poly(4-Sulfonated Styrene-co-Poly(ethylene Glycol)) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	0.9	16
95	Synthetic approach to homodimeric proteinâ€“polymer conjugates. Chemical Communications, 2009, , 2148.	4.1	78
96	Synthesis of a photo-caged aminooxy alkane thiol. Organic and Biomolecular Chemistry, 2009, 7, 4954.	2.8	14
97	Reversible siRNAâ€“polymer conjugates by RAFT polymerization. Chemical Communications, 2008, , 3245.	4.1	159
98	Straightforward Synthesis of Cysteine-Reactive Telechelic Polystyrene. Macromolecules, 2008, 41, 599-606.	4.8	74
99	Designed Amino Acid ATRP Initiators for the Synthesis of Biohybrid Materials. Journal of the American Chemical Society, 2008, 130, 1041-1047.	13.7	105
100	Electrochemically Controllable Conjugation of Proteins on Surfaces. Bioconjugate Chemistry, 2007, 18, 1919-1923.	3.6	41
101	Synthesis of proteinâ€“polymer conjugates. Organic and Biomolecular Chemistry, 2007, 5, 45-53.	2.8	306
102	Manufacture of nanoscale structures through integrated top-down and bottom-up approaches. , 2007, , .		0
103	Thermoresponsive biohybrid materials synthesized by ATRP. Journal of Materials Chemistry, 2007, 17, 4015.	6.7	51
104	Surface initiated actin polymerization from top-down manufactured nanopatterns. Soft Matter, 2007, 3, 541.	2.7	24
105	Aminooxy End-Functionalized Polymers Synthesized by ATRP for Chemoselective Conjugation to Proteins. Macromolecules, 2007, 40, 4772-4779.	4.8	158
106	Reactive block copolymer scaffolds. Chemical Communications, 2007, , 3631.	4.1	49
107	Site-specific protein immobilization through N-terminal oxime linkages. Journal of Materials Chemistry, 2007, 17, 2021.	6.7	81
108	Well-defined polymers with activated ester and protected aldehyde side chains for bio-functionalization. Journal of Controlled Release, 2007, 122, 279-286.	9.9	90

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109	Biotinylated Glycopolymers Synthesized by Atom Transfer Radical Polymerization. Biomacromolecules, 2006, 7, 2297-2302.	5.4	113
110	Submicron Streptavidin Patterns for Protein Assembly. Langmuir, 2006, 22, 7444-7450.	3.5	77
111	Nanopatterning proteins and peptides. Soft Matter, 2006, 2, 928.	2.7	202
112	Well-defined polymers with acetal side chains as reactive scaffolds synthesized by atom transfer radical polymerization. Journal of Polymer Science Part A, 2006, 44, 5004-5013.	2.3	71
113	Sub-micron Patterning on Polymer Films for Protein Arrays. Materials Research Society Symposia Proceedings, 2005, 900, 1.	0.1	0
114	Protein Micropatterns Using a pH-Responsive Polymer and Light. Langmuir, 2005, 21, 8389-8393.	3.5	65
115	In Situ Preparation of Proteinâ^'â€œSmartâ€•Polymer Conjugates with Retention of Bioactivity. Journal of the American Chemical Society, 2005, 127, 16955-16960.	13.7	419
116	Streptavidin as a Macroinitiator for Polymerization:Â In Situ Proteinâ^'Polymer Conjugate Formation. Journal of the American Chemical Society, 2005, 127, 6508-6509.	13.7	298
117	Inhibition of Cell Adhesion to Fibronectin by Oligopeptide-Substituted Polynorbornenes. Journal of the American Chemical Society, 2001, 123, 1275-1279.	13.7	179
118	Synthesis of Norbornenyl Polymers with Bioactive Oligopeptides by Ring-Opening Metathesis Polymerization. Macromolecules, 2000, 33, 6239-6248.	4.8	200
119	Purification technique for the removal of ruthenium from olefin metathesis reaction products. Tetrahedron Letters, 1999, 40, 4137-4140.	1.4	261
120	Synthesis of Functionalized Polyethers by Ring-Opening Metathesis Polymerization of Unsaturated Crown Ethers. Macromolecules, 1999, 32, 6917-6924.	4.8	71
121	Template-Directed Ring-Closing Metathesis: Synthesis and Polymerization of Unsaturated Crown Ether Analogs. Angewandte Chemie International Edition in English, 1997, 36, 1101-1103.	4.4	160