Heather D Maynard

List of Publications by Year
in descending order

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

30070

38395

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

#	Article	IF	Citations
1	FDA-approved poly(ethylene glycol)â€“protein conjugate drugs. Polymer Chemistry, 2011, 2, 1442.	3.9	553
2	Therapeutic Proteinâ€“Polymer Conjugates: Advancing Beyond PEGylation. Journal of the American Chemical Society, 2014, 136, 14323-14332.	13.7	524
3	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
4	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
5	Synthesis of proteinâ€“polymer conjugates. Organic and Biomolecular Chemistry, 2007, 5, 45-53.	2.8	306
6	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
7	Purification technique for the removal of ruthenium from olefin metathesis reaction products. Tetrahedron Letters, 1999, 40, 4137-4140.	1.4	261
8	Nanopatterning proteins and peptides. Soft Matter, 2006, 2, 928.	2.7	202
9	Atomically precise organomimetic cluster nanomolecules assembled via perfluoroaryl-thiol SNAr chemistry. Nature Chemistry, 2017, 9, 333-340.	13.6	201
10	Synthesis of Norbornenyl Polymers with Bioactive Oligopeptides by Ring-Opening Metathesis Polymerization. Macromolecules, 2000, 33, 6239-6248.	4.8	200
11	Trehalose Glycopolymers for Stabilization of Protein Conjugates to Environmental Stressors. Journal of the American Chemical Society, 2012, 134, 8474-8479.	13.7	199
12	A heparin-mimicking polymer conjugate stabilizes basic fibroblast growth factor. Nature Chemistry, 2013, 5, 221-227.	13.6	184
13	Emerging synthetic approaches for proteinâ€“polymer conjugations. Chemical Communications, 2011, 47, 2212.	4.1	181
14	Inhibition of Cell Adhesion to Fibronectin by Oligopeptide-Substituted Polynorbornenes. Journal of the American Chemical Society, 2001, 123, 1275-1279.	13.7	179
15	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
16	Reversible siRNAâ€“polymer conjugates by RAFT polymerization. Chemical Communications, 2008, , 3245.	4.1	159
17	Aminooxy End-Functionalized Polymers Synthesized by ATRP for Chemoselective Conjugation to Proteins. Macromolecules, 2007, 40, 4772-4779.	4.8	158
18	Organometallic Gold(III) Reagents for Cysteine Arylation. Journal of the American Chemical Society, 2018, 140, 7065-7069.	13.7	148

#	Article	IF	Citations
19	Proteinâ€"polymer conjugates: synthetic approaches by controlled radical polymerizations and interesting applications. Current Opinion in Chemical Biology, 2010, 14, 818-827.	6.1	145
20	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
21	Heparin-Mimicking Polymers: Synthesis and Biological Applications. Biomacromolecules, 2016, 17, 3417-3440.	5.4	136
22	Preparation of biomolecule-polymer conjugates by grafting-from using ATRP, RAFT, or ROMP. Progress in Polymer Science, 2020, 100, 101186.	24.7	126
23	Synthesis of Heterotelechelic Polymers for Conjugation of Two Different Proteins. Macromolecules, 2009, 42, 2360-2367.	4.8	118
24	Electron-Beam Lithography for Patterning Biomolecules at the Micron and Nanometer Scale. Chemistry of Materials, 2012, 24, 774-780.	6.7	118
25	Trehalose Glycopolymers as Excipients for Protein Stabilization. Biomacromolecules, 2013, 14, 2561-2569.	5.4	117
26	Biotinylated Glycopolymers Synthesized by Atom Transfer Radical Polymerization. Biomacromolecules, 2006, 7, 2297-2302.	5.4	113
27	Differences in cytotoxicity of poly(PEGA)s synthesized by reversible additionâ€"fragmentation chain transfer polymerization. Chemical Communications, 2009, , 3580.	4.1	113
28	Imine Hydrogels with Tunable Degradability for Tissue Engineering. Biomacromolecules, 2015, 16, 2101-2108.	5.4	112
29	Designed Amino Acid ATRP Initiators for the Synthesis of Biohybrid Materials. Journal of the American Chemical Society, 2008, 130, 1041-1047.	13.7	105
30	Synthesis of Semitelechelic Maleimide Poly(PEGA) for Protein Conjugation By RAFT Polymerization. Biomacromolecules, 2009, 10, 1777-1781.	5.4	102
31	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
32	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
33	A guide to maximizing the therapeutic potential of proteinâ€"polymer conjugates by rational design. Chemical Society Reviews, 2018, 47, 8998-9014.	38.1	95
34	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
35	Synthesis of Maleimide-End-Functionalized Star Polymers and Multimeric Proteinâ˘'Polymer Conjugates. Macromolecules, 2009, 42, 8028-8033.	4.8	90
36	Synthesis of Glycopolymers by Controlled Radical Polymerization Techniques and Their Applications. ChemBioChem, 2012, 13, 2478-2487.	2.6	87

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37	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
38	Site-specific protein immobilization through N-terminal oxime linkages. Journal of Materials Chemistry, 2007, 17, 2021.	6.7	81
39	Synthetic approach to homodimeric proteinâ€"polymer conjugates. Chemical Communications, 2009, , 2148.	4.1	78
40	Submicron Streptavidin Patterns for Protein Assembly. Langmuir, 2006, 22, 7444-7450.	3.5	77
41	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
42	Trehalose Glycopolymer Enhances Both Solution Stability and Pharmacokinetics of a Therapeutic Protein. Bioconjugate Chemistry, 2017, 28, 836-845.	3.6	76
43	Trehalose glycopolymer resists allow direct writing of protein patterns by electron-beam lithography. Nature Communications, 2015, 6, 6654.	12.8	75
44	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
45	Straightforward Synthesis of Cysteine-Reactive Telechelic Polystyrene. Macromolecules, 2008, 41, 599-606.	4.8	74
46	Synthesis of Aminooxy End-Functionalized pNIPAAm by RAFT Polymerization for Protein and Polysaccharide Conjugation. Macromolecules, 2009, 42, 7650-7656.	4.8	74
47	Synthesis of Functionalized Polyethers by Ring-Opening Metathesis Polymerization of Unsaturated Crown Ethers. Macromolecules, 1999, 32, 6917-6924.	4.8	71
48	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
49	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
50	Protein Micropatterns Using a pH-Responsive Polymer and Light. Langmuir, 2005, 21, 8389-8393.	3.5	65
51	Direct Write Protein Patterns for Multiplexed Cytokine Detection from Live Cells Using Electron Beam Lithography. ACS Nano, 2016, 10, 723-729.	14.6	60
52	Heterotelechelic polymers for capture and release of proteinâ€"polymer conjugates. Polymer Chemistry, 2010, 1, 168.	3.9	59
53	Smart Vaults: Thermally-Responsive Protein Nanocapsules. ACS Nano, 2013, 7, 867-874.	14.6	59
54	Fibroblast growth factor 2 dimer with superagonist inÂvitro activity improves granulation tissue formation during wound healing. Biomaterials, 2016, 81, 157-168.	11.4	59

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55	Site-Specific Insulin-Trehalose Glycopolymer Conjugate by Grafting from Strategy Improves Bioactivity. ACS Macro Letters, 2018, 7, 324-329.	4.8	52
56	Thermoresponsive biohybrid materials synthesized by ATRP. Journal of Materials Chemistry, 2007, 17, 4015.	6.7	51
57	Synthesis of nanogelâ€“protein conjugates. Polymer Chemistry, 2013, 4, 2464.	3.9	50
58	Reactive block copolymer scaffolds. Chemical Communications, 2007, , 3631.	4.1	49
59	Keto-Functionalized Polymer Scaffolds as Versatile Precursors to Polymer Side-Chain Conjugates. Macromolecules, 2013, 46, 8-14.	4.8	45
60	Trehalose hydrogels for stabilization of enzymes to heat. Polymer Chemistry, 2015, 6, 3443-3448.	3.9	44
61	Electrochemically Controllable Conjugation of Proteins on Surfaces. Bioconjugate Chemistry, 2007, 18, 1919-1923.	3.6	41
62	Two-Step Synthesis of Multivalent Cancer-Targeting Constructs. Biomacromolecules, 2010, 11, 160-167.	5.4	41
63	Glucoseâ€Responsive Trehalose Hydrogel for Insulin Stabilization and Delivery. Macromolecular Bioscience, 2018, 18, e1700372.	4.1	41
64	Homodimeric Proteinâ€“Polymer Conjugates via the Tetrazineâ€“<i>trans</i>-Cyclooctene Ligation. Macromolecules, 2016, 49, 30-37.	4.8	40
65	Poly(vinyl sulfonate) Facilitates bFGF-Induced Cell Proliferation. Biomacromolecules, 2015, 16, 2684-2692.	5.4	38
66	Thermoprecipitation of Glutathione <i>S</i>â€Transferase by Glutathioneâ€“Poly(<i>N</i>â€isopropylacrylamide) Prepared by RAFT Polymerization. Macromolecular Rapid Communications, 2010, 31, 1691-1695.	3.9	37
67	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
68	Protein storage with perfluorinated PEG compartments in a hydrofluorocarbon solvent. Polymer Chemistry, 2016, 7, 6694-6698.	3.9	36
69	Fluorous Comonomer Modulates the Reactivity of Cyclic Ketene Acetal and Degradation of Vinyl Polymers. Macromolecules, 2017, 50, 9222-9232.	4.8	36
70	Degradable PEGylated protein conjugates utilizing RAFT polymerization. European Polymer Journal, 2015, 65, 305-312.	5.4	34
71	Effect of trehalose polymer regioisomers on protein stabilization. Polymer Chemistry, 2017, 8, 4781-4788.	3.9	32
72	Protein Nanopatterns by Oxime Bond Formation. Langmuir, 2011, 27, 1415-1418.	3.5	31

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73	Dual pH- and temperature-responsive protein nanoparticles. European Polymer Journal, 2015, 69, 532-539.	5.4	31
74	Aminooxy and Pyridyl Disulfide Telechelic Poly(poly(ethylene glycol) acrylate) by RAFT Polymerization. Macromolecules, 2012, 45, 4958-4965.	4.8	30
75	Dual Click reactions to micropattern proteins. Soft Matter, 2011, 7, 9972.	2.7	29
76	Chemoselective Immobilization of Proteins by Microcontact Printing and Bioâ€orthogonal Click Reactions. ChemBioChem, 2013, 14, 2464-2471.	2.6	28
77	<i>Grafting from </i>Small Interfering Ribonucleic Acid (siRNA) as an Alternative Synthesis Route to siRNAâ€“Polymer Conjugates. Macromolecules, 2015, 48, 5640-5647.	4.8	27
78	Stabilization of Glucagon by Trehalose Glycopolymer Nanogels. Advanced Functional Materials, 2018, 28, 1705475.	14.9	27
79	Modification of proteins using olefin metathesis. Materials Chemistry Frontiers, 2020, 4, 1040-1051.	5.9	26
80	Surface initiated actin polymerization from top-down manufactured nanopatterns. Soft Matter, 2007, 3, 541.	2.7	24
81	GlutathioneS-transferase as a general and reversible tag for surface immobilization of proteins. Journal of Materials Chemistry, 2011, 21, 1457-1461.	6.7	24
82	Morphing Hydrogel Patterns by Thermoâ€Reversible Fluorescence Switching. Macromolecular Rapid Communications, 2014, 35, 1260-1265.	3.9	23
83	Expanding the ROMP Toolbox: Synthesis of Air-Stable Benzonorbornadiene Polymers by Aryne Chemistry. Macromolecules, 2017, 50, 580-586.	4.8	23
84	Proteinâ€“Polymer Conjugation via Ligand Affinity and Photoactivation of Glutathione <i>S</i>-Transferase. Bioconjugate Chemistry, 2014, 25, 1902-1909.	3.6	22
85	Synthesis and Application of Trehalose Materials. Jacs Au, 2022, 2, 1561-1587.	7.9	22
86	Synthesis of Biotinylated Aldehyde Polymers for Biomolecule Conjugation. Macromolecular Rapid Communications, 2013, 34, 983-989.	3.9	21
87	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
88	Synthesis of ferrocene-functionalized monomers for biodegradable polymer formation. Inorganic Chemistry Frontiers, 2014, 1, 271.	6.0	19
89	Core/shell protein-reactive nanogels via a combination of RAFT polymerization and vinyl sulfone postmodification. Nanomedicine, 2016, 11, 2631-2645.	3.3	19
90	Synthesis and Biological Evaluation of a Degradable Trehalose Glycopolymer Prepared by RAFT Polymerization. Macromolecular Rapid Communications, 2018, 39, 1700652.	3.9	19

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91	Writing Without Ink: A Mechanically and Photochemically Responsive PDMS Polymer for Science Outreach. Journal of Chemical Education, 2017, 94, 1752-1755.	2.3	17
92	Synthesis of Zwitterionic and Trehalose Polymers with Variable Degradation Rates and Stabilization of Insulin. Biomacromolecules, 2020, 21, 2147-2154.	5.4	17
93	Synthesis of Michael Acceptor Ionomers of Poly(4-Sulfonated Styrene-co-Poly(ethylene Glycol)) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.9	16
94	Shape-Shifting Micro- and Nanopatterns Controlled by Temperature. Journal of the American Chemical Society, 2012, 134, 12386-12389.	13.7	16
95	Encapsulated Hydrogels by E-beam Lithography and Their Use in Enzyme Cascade Reactions. Langmuir, 2016, 32, 4043-4051.	3.5	16
96	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
97	PEG Analogs Synthesized by Ring-Opening Metathesis Polymerization for Reversible Bioconjugation. Bioconjugate Chemistry, 2018, 29, 3739-3745.	3.6	16
98	Self-Immolative Hydroxybenzylamine Linkers for Traceless Protein Modification. Journal of the American Chemical Society, 2022, 144, 6050-6058.	13.7	16
99	Synthesis of a photo-caged aminooxy alkane thiol. Organic and Biomolecular Chemistry, 2009, 7, 4954.	2.8	14
100	Carborane RAFT agents as tunable and functional molecular probes for polymer materials. Polymer Chemistry, 2019, 10, 1660-1667.	3.9	14
101	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
102	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
103	Electrically Mediated Membrane Pore Gating via Grafted Polymer Brushes. , 2019, 1, 647-654.		13
104	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
105	Polymers at the Interface with Biology. Biomacromolecules, 2018, 19, 3151-3162.	5.4	10
106	Multivalent Cluster Nanomolecules for Inhibiting Proteinâ€"Protein Interactions. Bioconjugate Chemistry, 2019, 30, 2594-2603.	3.6	10
107	Protein modification in a trice. Nature, 2015, 526, 646-647.	27.8	7
108	Scalable Trehaloseâ€Functionalized Hydrogel Synthesis for Highâ€Temperature Protection of Enzymes. Macromolecular Materials and Engineering, 2019, 304, 1800782.	3.6	7

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109	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
110	Enhanced Bioactivity of a Human GHR Antagonist Generated by Solid-Phase Site-Specific PEGylation. Biomacromolecules, 2021, 22, 299-308.	5.4	6
111	Long-Acting Human Growth Hormone Receptor Antagonists Produced in <i>E. coli</i> and Conjugated with Polyethylene Glycol. Bioconjugate Chemistry, 2020, 31, 1651-1660.	3.6	5
112	Mesotrione Conjugation Strategies to Create Proherbicides with Reduced Soil Mobility. ACS Sustainable Chemistry and Engineering, 2021, 9, 5776-5782.	6.7	5
113	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
114	Safety and Biodistribution Profile of Poly(styrenyl acetal trehalose) and Its Granulocyte Colony Stimulating Factor Conjugate. Biomacromolecules, 2022, 23, 3383-3395.	5.4	4
115	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
116	Design of modular dual enzymeâ€•responsive peptides. Biopolymers, 2017, 108, e23035.	2.4	2
117	Effects of trehalose and polyacrylate-based hydrogels on tomato growth under drought. AoB PLANTS, 2022, 14, .	2.3	1
118	Sub-micron Patterning on Polymer Films for Protein Arrays. Materials Research Society Symposia Proceedings, 2005, 900, 1.	0.1	0
119	Manufacture of nanoscale structures through integrated top-down and bottom-up approaches. , 2007, , .		0
120	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
121	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