

# Laura Hartmann

## List of Publications by Year in descending order

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93  
papers

3,022  
citations

136950

32  
h-index

175258

52  
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98  
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98  
docs citations

98  
times ranked

3395  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermally Controlled Acceleration of Epoxy Resin Curing through Polymer-Bound Imidazole Derivatives with High Latency. ACS Applied Polymer Materials, 2022, 4, 1150-1158.	4.4	6
2	Controlling the Surface Functionalization of Ultrasmall Gold Nanoparticles by Sequence-Defined Macromolecules. Chemistry - A European Journal, 2021, 27, 1451-1464.	3.3	17
3	Progress, challenges and future directions of heterocycles as building blocks in iterative methodologies towards sequence-defined oligomers and polymers. Polymer Chemistry, 2021, 12, 4439-4450.	3.9	9
4	Synthesis and self-assembly of amphiphilic precision glycomacromolecules. Polymer Chemistry, 2021, 12, 4795-4802.	3.9	2
5	PEGylated sequence-controlled macromolecules using supramolecular binding to target the Taspase1/Importin $\beta$ interaction. Chemical Communications, 2021, 57, 3091-3094.	4.1	4
6	Lewis Base-Brønsted Acid-Enzyme Catalysis in Enantioselective Multistep One-Pot Syntheses. Angewandte Chemie - International Edition, 2021, 60, 16700-16706.	13.8	7
7	Take your Positions and Shine: Effects of Positioning Aggregation-Induced Emission Luminophores within Sequence-Defined Macromolecules. Chemistry - A European Journal, 2021, 27, 10186-10192.	3.3	2
8	Exploring Cyclic Sulfamidate Building Blocks for the Synthesis of Sequence-Defined Macromolecules. Macromolecular Rapid Communications, 2021, 42, e2100193.	3.9	5
9	Synthesis of Brush-Like Glycopolymers with Monodisperse, Sequence-Defined Side Chains and Their Interactions with Plant and Animal Lectins. Macromolecular Rapid Communications, 2020, 41, e1900459.	3.9	16
10	Recovery, Purification, and Reusability of Building Blocks for Solid Phase Synthesis. Macromolecular Rapid Communications, 2020, 41, 1900473.	3.9	6
11	Fast curing of polyhydroxyurethanes via ring opening polyaddition of low viscosity cyclic carbonates and amines. Polymer Chemistry, 2020, 11, 6964-6970.	3.9	11
12	Effect of PEGylation on Receptor Anchoring and Steric Shielding at Interfaces: An Adhesion and Surface Plasmon Resonance Study with Precision Polymers. Biomacromolecules, 2020, 21, 4850-4856.	5.4	7
13	Sequence-Defined Heteromultivalent Precision Glycomacromolecules Bearing Sulfonated/Sulfated Nonglycosidic Moieties Preferentially Bind Galectin-3 and Delay Wound Healing of a Galectin-3 Positive Tumor Cell Line in an In Vitro Wound Scratch Assay. Macromolecular Bioscience, 2020, 20, e2000163.	4.1	22
14	The Next 100 Years of Polymer Science. Macromolecular Chemistry and Physics, 2020, 221, 2000216.	2.2	69
15	Sequence-defined positioning of amine and amide residues to control catechol driven wet adhesion. Chemical Science, 2020, 11, 9919-9924.	7.4	16
16	Next Generation of Zinc Bisguanidine Polymerization Catalysts towards Highly Crystalline, Biodegradable Polyesters. Angewandte Chemie - International Edition, 2020, 59, 21778-21784.	13.8	63
17	Catechol-functionalized sequence-defined glycomacromolecules as covalent inhibitors of bacterial adhesion. Polymer Chemistry, 2020, 11, 6091-6096.	3.9	8
18	Prophylactic Antiviral Activity of Sulfated Glycomimetic Oligomers and Polymers. Journal of the American Chemical Society, 2020, 142, 5252-5265.	13.7	56

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19	Polymers for the Future. <i>Macromolecular Chemistry and Physics</i> , 2020, 221, 2000077.	2.2	1
20	Effects of linker and liposome anchoring on lactose-functionalized glycomacromolecules as multivalent ligands for binding galectin-3. <i>RSC Advances</i> , 2019, 9, 23484-23497.	3.6	17
21	Asymmetrically Branched Precision Glycooligomers Targeting Langerin. <i>Biomacromolecules</i> , 2019, 20, 4088-4095.	5.4	19
22	Synthesis of Porphyrin and Bacteriochlorin Glycoconjugates through CuAAC Reaction Tuning. <i>European Journal of Organic Chemistry</i> , 2019, 2019, 6496-6503.	2.4	19
23	Modeling of Multivalent Ligand-Receptor Binding Measured by kinITC. <i>Computation</i> , 2019, 7, 46.	2.0	4
24	Divalent Sialylated Precision Glycooligomers Binding to Polyomaviruses and the Effect of Different Linkers. <i>Macromolecular Bioscience</i> , 2019, 19, 1800426.	4.1	10
25	Multivalent Interactions of Polyamide Based Sequence-Controlled Glycomacromolecules with Concanavalin A. <i>Macromolecular Bioscience</i> , 2019, 19, e1900033.	4.1	17
26	Multidimensional micro- and nano-printing technologies: general discussion. <i>Faraday Discussions</i> , 2019, 219, 73-76.	3.2	0
27	Glycan interactions on glycocalyx mimetic surfaces: general discussion. <i>Faraday Discussions</i> , 2019, 219, 183-188.	3.2	0
28	New directions in surface functionalization and characterization: general discussion. <i>Faraday Discussions</i> , 2019, 219, 252-261.	3.2	0
29	Preparation of multivalent glycan micro- and nano-arrays: general discussion. <i>Faraday Discussions</i> , 2019, 219, 128-137.	3.2	1
30	Heteromultivalent Glycooligomers as Mimetics of Blood Group Antigens. <i>Chemistry - A European Journal</i> , 2019, 25, 3301-3309.	3.3	14
31	Enabling Directional Sequence-Control via Step-Growth Polymerization of Heterofunctionalized Precision Macromonomers. <i>Macromolecular Rapid Communications</i> , 2019, 40, 1800735.	3.9	3
32	Sequence-Defined Introduction of Hydrophobic Motifs and Effects in Lectin Binding of Precision Glycomacromolecules. <i>Macromolecular Bioscience</i> , 2019, 19, 1800425.	4.1	21
33	Split-and-Combine Approach Towards Branched Precision Glycomacromolecules and Their Lectin Binding Behavior. <i>Chemistry - A European Journal</i> , 2018, 24, 1619-1630.	3.3	23
34	Monodisperse Sequence-Controlled $\alpha$ -Fucosylated Glycooligomers and Their Multivalent Inhibitory Effects on LecB. <i>Macromolecular Bioscience</i> , 2018, 18, 1800337.	4.1	15
35	Recent Developments in Solid-Phase Strategies towards Synthetic, Sequence-Defined Macromolecules. <i>Chemistry - an Asian Journal</i> , 2018, 13, 3611-3622.	3.3	37
36	Fucose-Functionalized Precision Glycomacromolecules Targeting Human Norovirus Capsid Protein. <i>Biomacromolecules</i> , 2018, 19, 3714-3724.	5.4	25

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37	Multivalent Binding of Precision Glycooligomers on Soft Glycocalyx Mimicking Hydrogels. <i>Biomacromolecules</i> , 2018, 19, 3479-3488.	5.4	21
38	Sequence-Controlled High Molecular Weight Glyco(oligoamide)-PEG Multiblock Copolymers as Ligands and Inhibitors in Lectin Binding. <i>Macromolecules</i> , 2018, 51, 5608-5619.	4.8	18
39	Synthesis of highly controlled carbohydrate-polymer based hybrid structures by combining heparin fragments and sialic acid derivatives, and solid phase polymer synthesis. <i>Chemical Communications</i> , 2018, 54, 10487-10490.	4.1	6
40	Highly Fluorescent Merocyanine and Cyanine PMMA Copolymers. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1800277.	3.9	13
41	Sequence-Controlled Glycopolymers via Step-Growth Polymerization of Precision Glycomacromolecules for Lectin Receptor Clustering. <i>Biomacromolecules</i> , 2017, 18, 787-796.	5.4	54
42	Cu Elimination from Cu-Coordinating Macromolecules. <i>ACS Macro Letters</i> , 2017, 6, 399-403.	4.8	11
43	Toward Orthogonal Preparation of Sequence-Defined Monodisperse Heteromultivalent Glycomacromolecules on Solid Support Using Staudinger Ligation and Copper-Catalyzed Click Reactions. <i>Journal of Organic Chemistry</i> , 2017, 82, 9400-9409.	3.2	25
44	Elastic Modulus Dependence on the Specific Adhesion of Hydrogels. <i>Advanced Functional Materials</i> , 2017, 27, 1702040.	14.9	26
45	Linear Precision Glycomacromolecules with Varying Interligand Spacing and Linker Functionalities Binding to Concanavalin A and the Bacterial Lectin FimH. <i>Macromolecular Bioscience</i> , 2017, 17, 1700198.	4.1	30
46	Presenting Precision Glycomacromolecules on Gold Nanoparticles for Increased Lectin Binding. <i>Polymers</i> , 2017, 9, 716.	4.5	29
47	Photosensitive Peptidomimetic for Light-Controlled, Reversible DNA Compaction. <i>Biomacromolecules</i> , 2016, 17, 1959-1968.	5.4	14
48	Precise redox-sensitive cleavage sites for improved bioactivity of siRNA lipopolyplexes. <i>Nanoscale</i> , 2016, 8, 18098-18104.	5.6	40
49	Development and optimization of a competitive binding assay for the galactophilic low affinity lectin LecA from <i>Pseudomonas aeruginosa</i> . <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 7933-7948.	2.8	45
50	Young Talents in Polymer Science. <i>Macromolecular Chemistry and Physics</i> , 2016, 217, 124-125.	2.2	1
51	Multivalent display of minimal <i>Clostridium difficile</i> glycan epitopes mimics antigenic properties of larger glycans. <i>Nature Communications</i> , 2016, 7, 11224.	12.8	60
52	Biodegradable poly(amidoamine)s with uniform degradation fragments via sequence-controlled macromonomers. <i>Polymer Chemistry</i> , 2016, 7, 7086-7093.	3.9	34
53	Rising Stars in Polymer Science. <i>Macromolecular Chemistry and Physics</i> , 2016, 217, 317-318.	2.2	0
54	Self-assembly of cholesterol tethered within hydrogel networks. <i>Polymer</i> , 2016, 84, 371-382.	3.8	5

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55	Chapter 2. Glycopolymers. RSC Polymer Chemistry Series, 2016, , 31-65.	0.2	0
56	Exploiting Oligo(amido amine) Backbones for the Multivalent Presentation of Coiled-Coil Peptides. Biomacromolecules, 2015, 16, 2394-2402.	5.4	13
57	Biocompatibility of poly(ethylene glycol) and poly(acrylic acid) interpenetrating network hydrogel by intrastromal implantation in rabbit cornea. Journal of Biomedical Materials Research - Part A, 2015, 103, 3157-3165.	4.0	33
58	Probing multivalency in ligand-receptor-mediated adhesion of soft, biomimetic interfaces. Beilstein Journal of Organic Chemistry, 2015, 11, 720-729.	2.2	30
59	Combinatorial Screening for Specific Drug Solubilizers with Switchable Release Profiles. Macromolecular Bioscience, 2015, 15, 82-89.	4.1	11
60	Human biomonitoring of aluminium after a single, controlled manual metal arc inert gas welding process of an aluminium-containing worksheet in nonwelders. International Archives of Occupational and Environmental Health, 2015, 88, 913-923.	2.3	5
61	Quantification of protein-materials interaction by soft colloidal probe spectroscopy. Physical Chemistry Chemical Physics, 2015, 17, 3014-3018.	2.8	14
62	Photoswitchable precision glycooligomers and their lectin binding. Beilstein Journal of Organic Chemistry, 2014, 10, 1603-1612.	2.2	25
63	Recent Advances in Solid Phase Polymer Synthesis: Polyamides from Tailor-Made Building Blocks. ACS Symposium Series, 2014, , 85-101.	0.5	5
64	Ammonium Carbamate Functionalization of Microgels for pH-Sensitive Loading and Release of Anionic and Cationic Molecules. Macromolecular Chemistry and Physics, 2014, 215, 90-95.	2.2	0
65	Electrochemical displacement sensor based on ferrocene boronic acid tracer and immobilized glycan for saccharide binding proteins and E. coli. Biosensors and Bioelectronics, 2014, 58, 1-8.	10.1	58
66	Carbohydrate-Lectin Recognition of Sequence-Defined Heteromultivalent Glycooligomers. Journal of the American Chemical Society, 2014, 136, 2008-2016.	13.7	114
67	Amphiphilic Cationic $\beta$ 3R3-Peptides: Membrane Active Peptidomimetics and Their Potential as Antimicrobial Agents. Biomacromolecules, 2014, 15, 1687-1695.	5.4	20
68	Metal-Mediated Molecular Self-Healing in Histidine-Rich Mussel Peptides. Biomacromolecules, 2014, 15, 1644-1652.	5.4	75
69	A novel contact model for AFM indentation experiments on soft spherical cell-like particles. Soft Matter, 2014, 10, 6732.	2.7	71
70	Specific Adhesion of Carbohydrate Hydrogel Particles in Competition with Multivalent Inhibitors Evaluated by AFM. Langmuir, 2014, 30, 6142-6150.	3.5	23
71	$\beta$ 3R3-Peptides: design and synthesis of novel peptidomimetics and their self-assembling properties at the air-water interface. Organic and Biomolecular Chemistry, 2013, 11, 5399.	2.8	11
72	Synthesis of Carbohydrate-Functionalised Sequence-Defined Oligo(amidoamine)s by Photochemical Thiol-Ene Coupling in a Continuous Flow Reactor. Chemistry - A European Journal, 2013, 19, 3090-3098.	3.3	70

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73	Magnetic Porous Sugar-Functionalized PEG Microgels for Efficient Isolation and Removal of Bacteria from Solution. <i>Biomacromolecules</i> , 2013, 14, 1927-1935.	5.4	44
74	Quantitative mapping of glycoprotein microheterogeneity and macroheterogeneity: an evaluation of mass spectrometry signal strengths using synthetic peptides and glycopeptides. <i>Journal of Mass Spectrometry</i> , 2013, 48, 627-639.	1.6	130
75	Mesoporous Protein Particles Through Colloidal CaCO <sub>3</sub> Templates. <i>Advanced Functional Materials</i> , 2013, 23, 116-123.	14.9	59
76	Mechanical Carbohydrate Sensors Based on Soft Hydrogel Particles. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 6084-6087.	13.8	41
77	Synthesis of homo- and heteromultivalent carbohydrate-functionalized oligo(amidoamines) using novel glyco-building blocks. <i>Beilstein Journal of Organic Chemistry</i> , 2013, 9, 2395-2403.	2.2	21
78	Solid-Phase Synthesis of Asymmetrically Branched Sequence-Defined Poly/Oligo(amidoamines). <i>Journal of Organic Chemistry</i> , 2012, 77, 4226-4234.	3.2	46
79	Sequence-Defined Glycopolymer Segments Presenting Mannose: Synthesis and Lectin Binding Affinity. <i>Biomacromolecules</i> , 2012, 13, 1845-1852.	5.4	132
80	Synthesis and functionalization of poly(ethylene glycol) microparticles as soft colloidal probes for adhesion energy measurements. <i>Soft Matter</i> , 2012, 8, 1664-1672.	2.7	35
81	Synthesis of Porous PEG Microgels Using CaCO <sub>3</sub> Microspheres as Hard Templates. <i>Macromolecular Rapid Communications</i> , 2012, 33, 1049-1054.	3.9	46
82	Polymers for Control Freaks: Sequence-Defined Poly(amidoamine)s and Their Biomedical Applications. <i>Macromolecular Chemistry and Physics</i> , 2011, 212, 8-13.	2.2	69
83	Precise Positioning of Chiral Building Blocks in Monodisperse, Sequence-Defined Polyamides. <i>Macromolecular Rapid Communications</i> , 2011, 32, 197-202.	3.9	31
84	Toward the development of an artificial cornea: Improved stability of interpenetrating polymer networks. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2011, 98B, 8-17.	3.4	39
85	Morphology of Photopolymerized End-Linked Poly(ethylene glycol) Hydrogels by Small-Angle X-ray Scattering. <i>Macromolecules</i> , 2010, 43, 6861-6870.	4.8	87
86	Precision Polymers: Monodisperse, Monomer-Sequence-Defined Segments to Target Future Demands of Polymers in Medicine. <i>Advanced Materials</i> , 2009, 21, 3425-3431.	21.0	148
87	Tailor-Made Poly(amidoamine)s for Controlled Complexation and Condensation of DNA. <i>Chemistry - A European Journal</i> , 2008, 14, 2025-2033.	3.3	97
88	CO <sub>2</sub> -switchable oligoamine patches based on amino acids and their use to build polyelectrolyte containers with intelligent gating. <i>Soft Matter</i> , 2008, 4, 534.	2.7	41
89	Sequence Positioning of Disulfide Linkages to Program the Degradation of Monodisperse Poly(amidoamines). <i>Macromolecules</i> , 2007, 40, 7771-7776.	4.8	39
90	Solid-Phase Supported Polymer Synthesis of Sequence-Defined, Multifunctional Poly(amidoamines). <i>Biomacromolecules</i> , 2006, 7, 1239-1244.	5.4	134

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91	Amphiphilic conetworks as regenerative controlled releasing antimicrobial coatings. Journal of Controlled Release, 2005, 103, 355-367.	9.9	102
92	Reloadable antimicrobial coatings based on amphiphilic silicone networks. Surface Coatings International Part B: Coatings Transactions, 2005, 88, 49-53.	0.3	12
93	Nanophase Separated Amphiphilic Conetwork Coatings and Membranes. Macromolecules, 2005, 38, 2431-2438.	4.8	104