Matthew Gibson

List of Publications by Year
in descending order

168 papers	10,033 citations	29994 54 h-index	42291 92 g-index
177 all docs	177 docs citations	177 times ranked	10205 citing authors

#	Article	IF	Citations
1	Synthesis of Functional Polymers by Postâ€Polymerization Modification. Angewandte Chemie - International Edition, 2009, 48, 48-58.	7.2	775
2	Lost, but Found with Nile Red: A Novel Method for Detecting and Quantifying Small Microplastics (1) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	4.6	519
3	Distribution of plastic polymer types in the marine environment; A meta-analysis. Journal of Hazardous Materials, 2019, 369, 691-698.	6.5	508
4	Synthetic polymers enable non-vitreous cellular cryopreservation by reducing ice crystal growth during thawing. Nature Communications, 2014, 5, 3244.	5.8	242
5	Understanding microbial community dynamics to improve optimal microbiome selection. Microbiome, 2019, 7, 85.	4.9	233
6	Recent advances in the synthesis of well-defined glycopolymers. Journal of Polymer Science Part A, 2007, 45, 2059-2072.	2.5	226
7	The SARS-COV-2 Spike Protein Binds Sialic Acids and Enables Rapid Detection in a Lateral Flow Point of Care Diagnostic Device. ACS Central Science, 2020, 6, 2046-2052.	5.3	222
8	Permeable Protein-Loaded Polymersome Cascade Nanoreactors by Polymerization-Induced Self-Assembly. ACS Macro Letters, 2017, 6, 1263-1267.	2.3	193
9	Antifreeze (Glyco)protein Mimetic Behavior of Poly(vinyl alcohol): Detailed Structure Ice Recrystallization Inhibition Activity Study. Biomacromolecules, 2013, 14, 1578-1586.	2.6	187
10	Confinement of Therapeutic Enzymes in Selectively Permeable Polymer Vesicles by Polymerization-Induced Self-Assembly (PISA) Reduces Antibody Binding and Proteolytic Susceptibility. ACS Central Science, 2018, 4, 718-723.	5.3	181
11	High-Affinity Glycopolymer Binding to Human DC-SIGN and Disruption of DC-SIGN Interactions with HIV Envelope Glycoprotein. Journal of the American Chemical Society, 2010, 132, 15130-15132.	6.6	180
12	Polymer mimics of biomacromolecular antifreezes. Nature Communications, 2017, 8, 1546.	5.8	178
13	To aggregate, or not to aggregate? considerations in the design and application of polymeric thermally-responsive nanoparticles. Chemical Society Reviews, 2013, 42, 7204-7213.	18.7	172
14	Postpolymerization modification of poly(pentafluorophenyl methacrylate): Synthesis of a diverse waterâ€soluble polymer library. Journal of Polymer Science Part A, 2009, 47, 4332-4345.	2.5	148
15	Polymeric Dibromomaleimides As Extremely Efficient Disulfide Bridging Bioconjugation and Pegylation Agents. Journal of the American Chemical Society, 2012, 134, 1847-1852.	6.6	143
16	Comparison of photo- and thermally initiated polymerization-induced self-assembly: a lack of end group fidelity drives the formation of higher order morphologies. Polymer Chemistry, 2017, 8, 2860-2871.	1.9	140
17	Dispersity effects in polymer self-assemblies: a matter of hierarchical control. Chemical Society Reviews, 2017, 46, 4119-4134.	18.7	136
18	Uptake and cytotoxicity of citrate-coated gold nanospheres: Comparative studies on human endothelial and epithelial cells. Particle and Fibre Toxicology, 2012, 9, 23.	2.8	130

#	Article	IF	Citations
19	Slowing the growth of ice with synthetic macromolecules: beyond antifreeze(glyco) proteins. Polymer Chemistry, 2010, 1, 1141.	1.9	124
20	Probing Bacterialâ€Toxin Inhibition with Synthetic Glycopolymers Prepared by Tandem Postâ€Polymerization Modification: Role of Linker Length and Carbohydrate Density. Angewandte Chemie - International Edition, 2012, 51, 7812-7816.	7.2	119
21	Size- and Coating-Dependent Uptake of Polymer-Coated Gold Nanoparticles in Primary Human Dermal Microvascular Endothelial Cells. Biomacromolecules, 2012, 13, 1533-1543.	2.6	114
22	Combining Biomimetic Block Copolymer Worms with an Iceâ€Inhibiting Polymer for the Solventâ€Free Cryopreservation of Red Blood Cells. Angewandte Chemie - International Edition, 2016, 55, 2801-2804.	7.2	111
23	Inhibition of Ice Crystal Growth by Synthetic Glycopolymers: Implications for the Rational Design of Antifreeze Glycoprotein Mimics. Biomacromolecules, 2009, 10, 328-333.	2.6	102
24	Plasticizer Degradation by Marine Bacterial Isolates: A Proteogenomic and Metabolomic Characterization. Environmental Science & Technology, 2020, 54, 2244-2256.	4.6	97
25	Early Colonization of Weathered Polyethylene by Distinct Bacteria in Marine Coastal Seawater. Microbial Ecology, 2020, 79, 517-526.	1.4	96
26	Side-Chain Peptide-Synthetic Polymer Conjugates via Tandem â€œEster-Amide/Thiolâ€"Eneâ€• Post-Polymerization Modification of Poly(pentafluorophenyl methacrylate) Obtained Using ATRP. Biomacromolecules, 2011, 12, 2908-2913.	2.6	95
27	Mimicking the Ice Recrystallization Activity of Biological Antifreezes. When is a New Polymer â€œActiveâ€?. Macromolecular Bioscience, 2019, 19, e1900082.	2.1	95
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37	Glycerol-Free Cryopreservation of Red Blood Cells Enabled by Ice-Recrystallization-Inhibiting Polymers. ACS Biomaterials Science and Engineering, 2015, 1, 789-794.	2.6	74
38	Antifreeze Protein Mimetic Metallohelices with Potent Ice Recrystallization Inhibition Activity. Journal of the American Chemical Society, 2017, 139, 9835-9838.	6.6	73
39	Evaluation of the Antimicrobial Activity of Cationic Polymers against Mycobacteria: Toward Antitubercular Macromolecules. Biomacromolecules, 2017, 18, 1592-1599.	2.6	70
40	Glycopolymers with secondary binding motifs mimic glycan branching and display bacterial lectin selectivity in addition to affinity. Chemical Science, 2014, 5, 1611-1616.	3.7	69
41	Redox-Sensitive Materials for Drug Delivery: Targeting the Correct Intracellular Environment, Tuning Release Rates, and Appropriate Predictive Systems. Antioxidants and Redox Signaling, 2014, 21, 786-803.	2.5	69
42	Rational, yet simple, design and synthesis of an antifreeze-protein inspired polymer for cellular cryopreservation. Chemical Communications, 2015, 51, 12977-12980.	2.2	69
43	Polyampholytes as Emerging Macromolecular Cryoprotectants. Biomacromolecules, 2020, 21, 7-17.	2.6	68
44	Fast three-dimensional imaging of gold nanoparticles in living cells with photothermal optical lock-in Optical Coherence Microscopy. Optics Express, 2012, 20, 21385.	1.7	65
45	Photoinitiated Polymerization-Induced Self-Assembly in the Presence of Surfactants Enables Membrane Protein Incorporation into Vesicles. Macromolecules, 2018, 51, 6190-6201.	2.2	63
46	The atomistic details of the ice recrystallisation inhibition activity of PVA. Nature Communications, 2021, 12, 1323.	5.8	62
47	Optimised â€˜clickâ€™ synthesis of glycopolymers with mono/di- and trisaccharides. Polymer Chemistry, 2011, 2, 107-113.	1.9	61
48	Ice Recrystallization Inhibiting Polymers Enable Glycerol-Free Cryopreservation of Microorganisms. Biomacromolecules, 2018, 19, 3371-3376.	2.6	61
49	Multivalent Antimicrobial Polymer Nanoparticles Target Mycobacteria and Gram-Negative Bacteria by Distinct Mechanisms. Biomacromolecules, 2018, 19, 256-264.	2.6	60
50	Nonfouling Polypeptide Brushes via Surfaceâ€initiated Polymerization of <i>N</i><i>^{Îµ}</i>â€oligo(ethylene glycol)succinateâ€<scp>L</scp>â€lysine <i>N</i>â€carboxyanhydride. Macromolecular Rapid Communications, 2009, 30, 845-850.	2.0	58
51	Highly efficient disulfide bridging polymers for bioconjugates from radical-compatible dithiophenol maleimides. Chemical Communications, 2012, 48, 4064.	2.2	58
52	Biodegradable Poly(disulfide)s Derived from RAFT Polymerization: Monomer Scope, Glutathione Degradation, and Tunable Thermal Responses. Biomacromolecules, 2012, 13, 3200-3208.	2.6	57
53	Regioregular Alternating Polyampholytes Have Enhanced Biomimetic Ice Recrystallization Activity Compared to Random Copolymers and the Role of Side Chain versus Main Chain Hydrophobicity. Biomacromolecules, 2017, 18, 295-302.	2.6	57
54	Polymer Self-Assembly Induced Enhancement of Ice Recrystallization Inhibition. Journal of the American Chemical Society, 2021, 143, 7449-7461.	6.6	57

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55	Ice recrystallisation inhibition by polyols: comparison of molecular and macromolecular inhibitors and role of hydrophobic units. Biomaterials Science, 2013, 1, 478.	2.6	56
56	Optimization of the Polymer Coating for Glycosylated Gold Nanoparticle Biosensors to Ensure Stability and Rapid Optical Readouts. ACS Macro Letters, 2014, 3, 1004-1008.	2.3	54
57	Ice-recrystallization inhibiting polymers protect proteins against freeze-stress and enable glycerol-free cryostorage. Materials Horizons, 2019, 6, 364-368.	6.4	54
58	Beyond oil degradation: enzymatic potential of <i>Alcanivorax</i> to degrade natural and synthetic polyesters. Environmental Microbiology, 2020, 22, 1356-1369.	1.8	53
59	Discrimination between bacterial phenotypes using glyco-nanoparticles and the impact of polymer coating on detection readouts. Journal of Materials Chemistry B, 2014, 2, 1490-1498.	2.9	51
60	Extracellular Antifreeze Protein Significantly Enhances the Cryopreservation of Cell Monolayers. Biomacromolecules, 2019, 20, 3864-3872.	2.6	51
61	Post-Thaw Culture and Measurement of Total Cell Recovery Is Crucial in the Evaluation of New Macromolecular Cryoprotectants. Biomacromolecules, 2020, 21, 2864-2873.	2.6	51
62	A multi-OMIC characterisation of biodegradation and microbial community succession within the PET plastisphere. Microbiome, 2021, 9, 141.	4.9	49
63	Quantitative study on the antifreeze protein mimetic ice growth inhibition properties of poly(ampholytes) derived from vinyl-based polymers. Biomaterials Science, 2014, 2, 1787-1795.	2.6	47
64	Thermoresponsive, well-defined, poly(vinyl alcohol) co-polymers. Polymer Chemistry, 2015, 6, 4749-4757.	1.9	47
65	Synthesis of Degradable Poly(vinyl alcohol) by Radical Ring-Opening Copolymerization and Ice Recrystallization Inhibition Activity. ACS Macro Letters, 2017, 6, 1404-1408.	2.3	45
66	Organogelation of Sheetâ€"Helix Diblock Copolypeptides. Angewandte Chemie - International Edition, 2008, 47, 5160-5162.	7.2	44
67	Molecular Sieving on the Surface of a Protein Provides Protection Without Loss of Activity. Advanced Functional Materials, 2013, 23, 2007-2015.	7.8	43
68	Glycopolymer-coated gold nanorods synthesised by a one pot copper(0) catalyzed tandem RAFT/click reaction. Polymer Chemistry, 2014, 5, 2326.	1.9	43
69	Glycosylated gold nanoparticle libraries for label-free multiplexed lectin biosensing. Journal of Materials Chemistry B, 2016, 4, 3046-3053.	2.9	43
70	Towards being genuinely smart: â€˜isothermally-responsiveâ€™ polymers as versatile, programmable scaffolds for biologically-adaptable materials. Polymer Chemistry, 2015, 6, 1033-1043.	1.9	42
71	Sequentially Modified, Polymer-Stabilized Gold Nanoparticle Libraries: Convergent Synthesis and Aggregation Behavior. ACS Combinatorial Science, 2011, 13, 286-297.	3.8	41
72	Enhanced non-vitreous cryopreservation of immortalized and primary cells by ice-growth inhibiting polymers. Biomaterials Science, 2016, 4, 1079-1084.	2.6	41

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73	Photochemical â€œInâ€Airâ€• Combinatorial Discovery of Antimicrobial Coâ€polymers. Chemistry - A European Journal, 2018, 24, 13758-13761.	1.7	41
74	Synthetically Scalable Poly(ampholyte) Which Dramatically Enhances Cellular Cryopreservation. Biomacromolecules, 2019, 20, 3104-3114.	2.6	40
75	The critical importance of size on thermoresponsive nanoparticle transition temperatures: gold and micelle-based polymer nanoparticles. Chemical Communications, 2011, 47, 11627.	2.2	38
76	Poly(azlactone)s: versatile scaffolds for tandem post-polymerisation modification and glycopolymer synthesis. Polymer Chemistry, 2013, 4, 717-723.	1.9	38
77	Glycan heterogeneity on gold nanoparticles increases lectin discrimination capacity in label-free multiplexed bioassays. Analyst, The, 2016, 141, 4305-4312.	1.7	36
78	Improved synthesis of O-linked, and first synthesis of S- linked, carbohydrate functionalised N-carboxyanhydrides (glycoNCAs). Organic and Biomolecular Chemistry, 2007, 5, 2756.	1.5	35
79	Probing the Biomimetic Ice Nucleation Inhibition Activity of Poly(vinyl alcohol) and Comparison to Synthetic and Biological Polymers. Biomacromolecules, 2015, 16, 2820-2826.	2.6	35
80	Experimentally facile controlled polymerization of <i>N</i>â€carboxyanhydrides (NCAs), including <i>O</i>â€benzylâ€<scp>L</scp>â€threonine NCA. Journal of Polymer Science Part A, 2009, 47, 2882-2891.	2.5	34
81	One-step grafting of polymers to graphene oxide. Polymer Chemistry, 2015, 6, 8270-8274.	1.9	34
82	A mechanistic understanding of polyethylene biodegradation by the marine bacterium Alcanivorax. Journal of Hazardous Materials, 2022, 436, 129278.	6.5	34
83	Externally controllable glycan presentation on nanoparticle surfaces to modulate lectin recognition. Nanoscale Horizons, 2017, 2, 106-109.	4.1	31
84	High-Throughput Tertiary Amine Deoxygenated Photopolymerizations for Synthesizing Polymer Libraries. Macromolecules, 2019, 52, 7603-7612.	2.2	31
85	Combinatorial Biomaterials Discovery Strategy to Identify New Macromolecular Cryoprotectants. ACS Macro Letters, 2020, 9, 290-294.	2.3	31
86	Uptake of poly(2-hydroxypropylmethacrylamide)-coated gold nanoparticles in microvascular endothelial cells and transport across the bloodâ€"brain barrier. Biomaterials Science, 2013, 1, 824.	2.6	30
87	â€œIsothermalâ€• LCST transitions triggered by bioreduction of single polymer end-groups. Chemical Communications, 2013, 49, 4223-4225.	2.2	30
88	Multivalent Presentation of Ice Recrystallization Inhibiting Polymers on Nanoparticles Retains Activity. Langmuir, 2019, 35, 7347-7353.	1.6	30
89	Latent Ice Recrystallization Inhibition Activity in Nonantifreeze Proteins: Ca²⁺-Activated Plant Lectins and Cation-Activated Antimicrobial Peptides. Biomacromolecules, 2015, 16, 3411-3416.	2.6	29
90	â€œGrafting toâ€• of RAFTed Responsive Polymers to Glass Substrates by Thiolâ€"Ene and Critical Comparison to Thiolâ€"Gold Coupling. Biomacromolecules, 2016, 17, 2626-2633.	2.6	29

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91	Optimization and Stability of Cellâ€“Polymer Hybrids Obtained by â€œClickingâ€•Synthetic Polymers to Metabolically Labeled Cell Surface Glycans. Biomacromolecules, 2019, 20, 2726-2736.	2.6	28
92	Glutathione-triggered disassembly of isothermally responsive polymer nanoparticles obtained by nanoprecipitation of hydrophilic polymers. Polymer Chemistry, 2014, 5, 126-131.	1.9	27
93	Using molecular rotors to probe gelation. Soft Matter, 2015, 11, 3706-3713.	1.2	27
94	Double-Modified Glycopolymers from Thiolactones to Modulate Lectin Selectivity and Affinity. ACS Macro Letters, 2018, 7, 1498-1502.	2.3	27
95	Effect of Micellization on the Thermoresponsive Behavior of Polymeric Assemblies. ACS Macro Letters, 2015, 4, 1210-1214.	2.3	26
96	Influence of Block Copolymerization on the Antifreeze Protein Mimetic Ice Recrystallization Inhibition Activity of Poly(vinyl alcohol). Biomacromolecules, 2016, 17, 3033-3039.	2.6	26
97	Activation of ice recrystallization inhibition activity of poly(vinyl alcohol) using a supramolecular trigger. Polymer Chemistry, 2016, 7, 1701-1704.	1.9	26
98	Structural characterization of an all-aminosugar-containing capsular polysaccharide from Colwellia psychrerythraea 34H. Antonie Van Leeuwenhoek, 2017, 110, 1377-1387.	0.7	26
99	A minimalistic cyclic ice-binding peptide from phage display. Nature Communications, 2021, 12, 2675.	5.8	26
100	Investigation of glycopolymerâ€“lectin interactions using QCM-d: comparison of surface binding with inhibitory activity. Polymer Chemistry, 2012, 3, 1634.	1.9	25
101	Isothermally-Responsive Polymers Triggered by Selective Binding of Fe³⁺ to Siderophoric Catechol End-Groups. ACS Macro Letters, 2014, 3, 1225-1229.	2.3	25
102	Polymer-Stabilized Sialylated Nanoparticles: Synthesis, Optimization, and Differential Binding to Influenza Hemagglutinins. Biomacromolecules, 2020, 21, 1604-1612.	2.6	25
103	Physicochemical Approach to Understanding the Structure, Conformation, and Activity of Mannan Polysaccharides. Biomacromolecules, 2021, 22, 1445-1457.	2.6	25
104	Synthesis and characterisation of glucose-functional glycopolymers and gold nanoparticles: study of their potential interactions with ovine red blood cells. Carbohydrate Research, 2015, 405, 47-54.	1.1	24
105	â€œTuning aggregative<i>versus</i>non-aggregative lectin binding with glycosylated nanoparticles by the nature of the polymer ligandâ€• Journal of Materials Chemistry B, 2020, 8, 136-145.	2.9	24
106	Combining Biomimetic Block Copolymer Worms with an Iceâ€Inhibiting Polymer for the Solventâ€Free Cryopreservation of Red Blood Cells. Angewandte Chemie, 2016, 128, 2851-2854.	1.6	23
107	Ultralow Dispersity Poly(vinyl alcohol) Reveals Significant Dispersity Effects on Ice Recrystallization Inhibition Activity. ACS Macro Letters, 2017, 6, 1001-1004.	2.3	23
108	Triggerable Multivalent Glyconanoparticles for Probing Carbohydrateâ€“Carbohydrate Interactions. ACS Macro Letters, 2018, 7, 178-183.	2.3	23

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109	Engineering Cell Surfaces by Covalent Grafting of Synthetic Polymers to Metabolically-Labeled Glycans. ACS Macro Letters, 2018, 7, 1289-1294.	2.3	23
110	Probing the causes of thermal hysteresis using tunable N_{agg} micelles with linear and brush-like thermoresponsive coronas. Polymer Chemistry, 2017, 8, 233-244.	1.9	22
111	Siderophore-inspired nanoparticle-based biosensor for the selective detection of Fe³⁺. Journal of Materials Chemistry B, 2015, 3, 270-275.	2.9	21
112	Impact of polymer-modified gold nanoparticles on brain endothelial cells: exclusion of endoplasmic reticulum stress as a potential risk factor. Nanotoxicology, 2016, 10, 1341-1350.	1.6	21
113	Site-specific conjugation of antifreeze proteins onto polymer-stabilized nanoparticles. Polymer Chemistry, 2019, 10, 2986-2990.	1.9	21
114	Introducing affinity and selectivity into galectin-targeting nanoparticles with fluorinated glycan ligands. Chemical Science, 2021, 12, 905-910.	3.7	21
115	Red Blood Cell Cryopreservation with Minimal Post-Thaw Lysis Enabled by a Synergistic Combination of a Cryoprotecting Polyampholyte with DMSO/Trehalose. Biomacromolecules, 2022, 23, 467-477.	2.6	21
116	Gold nanoparticle-linked analysis of carbohydrateâ€"protein interactions, and polymeric inhibitors, using unlabelled proteins; easy measurements using a â€˜simpleâ€™ digital camera. Journal of Materials Chemistry B, 2013, 1, 2665.	2.9	20
117	Oxidized polyethylene films for orienting polar molecules for linear dichroism spectroscopy. Analyst, The, 2014, 139, 1372-1382.	1.7	20
118	Gold Nanoparticle Aggregation as a Probe of Antifreeze (Glyco) Protein-Inspired Ice Recrystallization Inhibition and Identification of New IRI Active Macromolecules. Scientific Reports, 2015, 5, 15716.	1.6	20
119	Impact of sequential surface-modification of graphene oxide on ice nucleation. Physical Chemistry Chemical Physics, 2017, 19, 21929-21932.	1.3	20
120	Low DMSO Cryopreservation of Stem Cells Enabled by Macromolecular Cryoprotectants. ACS Applied Bio Materials, 2020, 3, 5627-5632.	2.3	20
121	Ice recrystallisation inhibiting polymer nano-objects <i>via</i> saline-tolerant polymerisation-induced self-assembly. Materials Horizons, 2020, 7, 1883-1887.	6.4	20
122	Plasmonic Detection of SARS-CoV-2 Spike Protein with Polymer-Stabilized Glycosylated Gold Nanorods. ACS Macro Letters, 2022, 11, 317-322.	2.3	20
123	Gold nanoparticle interactions with endothelial cells cultured under physiological conditions. Biomaterials Science, 2017, 5, 707-717.	2.6	19
124	Enhancement of Macromolecular Ice Recrystallization Inhibition Activity by Exploiting Depletion Forces. ACS Macro Letters, 2019, 8, 1063-1067.	2.3	19
125	Co-operative transitions of responsive-polymer coated gold nanoparticles; precision tuning and direct evidence for co-operative aggregation. Journal of Materials Chemistry B, 2016, 4, 5673-5682.	2.9	17
126	Glycan-Based Flow-Through Device for the Detection of SARS-COV-2. ACS Sensors, 2021, 6, 3696-3705.	4.0	17

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127	Ice Recrystallization Inhibition by Amino Acids: The Curious Case of Alpha- and Beta-Alanine. Journal of Physical Chemistry Letters, 2022, 13, 2237-2244.	2.1	17
128	Discrimination between lectins with similar specificities by ratiometric profiling of binding to glycosylated surfaces; a chemical â€˜tongueâ€™ approach. RSC Advances, 2015, 5, 53911-53914.	1.7	16
129	Thiolâ€“ene immobilisation of carbohydrates onto glass slides as a simple alternative to goldâ€“thiol monolayers, amines or lipid binding. Biomaterials Science, 2015, 3, 175-181.	2.6	16
130	Targeting extracellular glycans: tuning multimeric boronic acids for pathogen-selective killing of <i>Mycobacterium tuberculosis</i>. Chemical Science, 2019, 10, 5935-5942.	3.7	16
131	Synthesis of star-branched poly(vinyl alcohol) and ice recrystallization inhibition activity. European Polymer Journal, 2017, 88, 320-327.	2.6	15
132	Polyproline as a Minimal Antifreeze Protein Mimic That Enhances the Cryopreservation of Cell Monolayers. Angewandte Chemie, 2017, 129, 16157-16160.	1.6	15
133	Toward Glycomaterials with Selectivity as Well as Affinity. Jacs Au, 2021, 1, 2089-2099.	3.6	15
134	Decoration of Chondroitin Polysaccharide with Threonine: Synthesis, Conformational Study, and Ice-Recrystallization Inhibition Activity. Biomacromolecules, 2017, 18, 2267-2276.	2.6	14
135	Ice recrystallisation inhibiting polymers prevent irreversible protein aggregation during solvent-free cryopreservation as additives and as covalent polymer-protein conjugates. European Polymer Journal, 2020, 140, 110036.	2.6	14
136	100th Anniversary of Macromolecular Science Viewpoint: Re-Engineering Cellular Interfaces with Synthetic Macromolecules Using Metabolic Glycan Labeling. ACS Macro Letters, 2020, 9, 991-1003.	2.3	14
137	The polymeric glyco-linker controls the signal outputs for plasmonic gold nanorod biosensors due to biocorona formation. Nanoscale, 2021, 13, 10837-10848.	2.8	14
138	Exploiting Thermoresponsive Polymers to Modulate Lipophilicity: Interactions With Model Membranes. Macromolecular Rapid Communications, 2012, 33, 779-784.	2.0	13
139	Enzymatically Triggered, Isothermally Responsive Polymers: Reprogramming Poly(oligoethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.6	13
140	X-ray diffraction to probe the kinetics of ice recrystallization inhibition. Analyst, The, 2020, 145, 3666-3677.	1.7	13
141	Comparison of systematically functionalized heterogeneous and homogenous glycopolymers as toxin inhibitors. Journal of Polymer Science Part A, 2019, 57, 40-47.	2.5	12
142	Degradable Polyampholytes from Radical Ring-Opening Copolymerization Enhance Cellular Cryopreservation. ACS Macro Letters, 2022, 11, 889-894.	2.3	12
143	Photo-polymerisation and study of the ice recrystallisation inhibition of hydrophobically modified poly(vinyl pyrrolidone) co-polymers. European Polymer Journal, 2019, 110, 330-336.	2.6	11
144	Deuterated carbohydrate probes as â€˜label-freeâ€™ substrates for probing nutrient uptake in mycobacteria by nuclear reaction analysis. Chemical Communications, 2015, 51, 4838-4841.	2.2	10

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145	Sub-zero temperature mechanically stable low molecular weight hydrogels. Journal of Materials Chemistry B, 2018, 6, 7274-7279.	2.9	10
146	Lateral Flow Glycoâ€Assays for the Rapid and Lowâ€Cost Detection of Lectinsâ€"Polymeric Linkers and Particle Engineering Are Essential for Selectivity and Performance. Advanced Healthcare Materials, 2022, 11, e2101784.	3.9	10
147	Identification of the antiâ€mycobacterial functional properties of piperidinol derivatives. British Journal of Pharmacology, 2017, 174, 2183-2193.	2.7	9
148	Dimeric benzoboroxoles for targeted activity against <i>Mycobacterium tuberculosis</i>. Organic and Biomolecular Chemistry, 2019, 17, 9524-9528.	1.5	9
149	Proline pre-conditioning of cell monolayers increases post-thaw recovery and viability by distinct mechanisms to other osmolytes. RSC Medicinal Chemistry, 2021, 12, 982-993.	1.7	9
150	Minimalistic ice recrystallisation inhibitors based on phenylalanine. Chemical Communications, 2022, 58, 7658-7661.	2.2	9
151	Discrimination between bacterial species by ratiometric analysis of their carbohydrate binding profile. Molecular BioSystems, 2016, 12, 341-344.	2.9	8
152	Polymer-Mediated Cryopreservation of Bacteriophages. Biomacromolecules, 2021, 22, 5281-5289.	2.6	8
153	Synthesis of Anthracene Conjugates of Truncated Antifreeze Protein Sequences: Effect of the End Group and Photocontrolled Dimerization on Ice Recrystallization Inhibition Activity. Biomacromolecules, 2019, 20, 4611-4621.	2.6	7
154	Covalent cell surface recruitment of chemotherapeutic polymers enhances selectivity and activity. Chemical Science, 2021, 12, 4557-4569.	3.7	6
155	Multivalent Glycopolymer-Coated Gold Nanoparticles. Methods in Molecular Biology, 2016, 1367, 169-179.	0.4	6
156	Comparison of RAFTâ€derived poly(vinylpyrrolidone) verses poly(oligoethyleneglycol methacrylate) for the stabilization of glycosylated gold nanoparticles. Journal of Polymer Science Part A, 2017, 55, 1200-1208.	2.5	5
157	Developing immune-regulatory materials using immobilized monosaccharides with immune-instructive properties. Materials Today Bio, 2020, 8, 100080.	2.6	5
158	End-Functionalized Poly(vinylpyrrolidone) for Ligand Display in Lateral Flow Device Test Lines. ACS Polymers Au, 2022, 2, 69-79.	1.7	5
159	Diversely functionalised carbohydrate-centered oligomers and polymers. Thermoresponsivity, lectin binding and degradability. European Polymer Journal, 2015, 62, 352-362.	2.6	4
160	Protecting Group Free Synthesis of Glyconanoparticles Using Aminoâ€"Oxy-Terminated Polymer Ligands. Bioconjugate Chemistry, 2020, 31, 2392-2403.	1.8	3
161	Understanding selectivity of metabolic labelling and click-targeting in multicellular environments as a route to tissue selective drug delivery. Journal of Materials Chemistry B, 2021, 9, 5365-5373.	2.9	3
162	Characterization of Gold Nanorods Conjugated with Synthetic Glycopolymers Using an Analytical Approach Based on spICP-SFMS and EAF4-MALS. Nanomaterials, 2021, 11, 2720.	1.9	2

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163	Selective detection of epimeric pentose saccharides at physiological pH using a fluorescent receptor. Carbohydrate Research, 2014, 391, 61-65.	1.1	1
164	From ice to bugs: polymers and sugars to address healthcare challenges. Future Science OA, 2016, 2, FSO131.	0.9	1
165	Solvent-Free Cryostorage of Microorganisms using Ice Growth Inhibiting Polymers. Biophysical Journal, 2019, 116, 295a.	0.2	1
166	Natural and Synthetic Macromolecules That Interact with Ice. Biomacromolecules, 2022, 23, 465-466.	2.6	1
167	Coating the Flu with Sticky Polymers to Look for New Drugs. ACS Central Science, 2016, 2, 682-684.	5.3	0
168	Joint Forces of HR-Spicp-MS and EAF4-MALS for Characterization of Gold Nanorods Conjugated with Synthetic Glycopolymers. Materials Proceedings, 2020, 4, .	0.2	0