

# Barbara Imperiali

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5148000/publications.pdf>

Version: 2024-02-01

208  
papers

12,422  
citations

16451

64  
h-index

31849

101  
g-index

277  
all docs

277  
docs citations

277  
times ranked

10346  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of N-linked glycosylation on glycopeptide and glycoprotein structure. <i>Current Opinion in Chemical Biology</i> , 1999, 3, 643-649.	6.1	367
2	Exploiting Polypeptide Motifs for the Design of Selective Cu(II) Ion Chemosensors. <i>Journal of the American Chemical Society</i> , 1998, 120, 609-610.	13.7	315
3	Protein oligomerization: How and why. <i>Bioorganic and Medicinal Chemistry</i> , 2005, 13, 5013-5020.	3.0	308
4	Asparagine-linked protein glycosylation: from eukaryotic to prokaryotic systems. <i>Glycobiology</i> , 2006, 16, 91R-101R.	2.5	300
5	Monitoring protein interactions and dynamics with solvatochromic fluorophores. <i>Trends in Biotechnology</i> , 2010, 28, 73-83.	9.3	260
6	Inhibition of serine proteases by peptidyl fluoromethyl ketones. <i>Biochemistry</i> , 1986, 25, 3760-3767.	2.5	252
7	Fluorescent Chemosensors for Divalent Zinc Based on Zinc Finger Domains. Enhanced Oxidative Stability, Metal Binding Affinity, and Structural and Functional Characterization. <i>Journal of the American Chemical Society</i> , 1997, 119, 3443-3450.	13.7	218
8	Stereoselective aldol condensation. Use of chiral boron enolates. <i>Journal of the American Chemical Society</i> , 1981, 103, 1566-1568.	13.7	213
9	A Versatile Amino Acid Analogue of the Solvatochromic Fluorophore 4-(N,N-Dimethylamino)-1,8-naphthalimide: A Powerful Tool for the Study of Dynamic Protein Interactions. <i>Journal of the American Chemical Society</i> , 2008, 130, 13630-13638.	13.7	212
10	Derivatives of 8-Hydroxy-2-methylquinoline Are Powerful Prototypes for Zinc Sensors in Biological Systems. <i>Journal of the American Chemical Society</i> , 2001, 123, 5160-5161.	13.7	203
11	A multiplexed homogeneous fluorescence-based assay for protein kinase activity in cell lysates. <i>Nature Methods</i> , 2005, 2, 277-284.	19.0	202
12	Modular and Tunable Chemosensor Scaffold for Divalent Zinc. <i>Journal of the American Chemical Society</i> , 2003, 125, 10591-10597.	13.7	198
13	Design and Evaluation of a Peptidyl Fluorescent Chemosensor for Divalent Zinc. <i>Journal of the American Chemical Society</i> , 1996, 118, 3053-3054.	13.7	194
14	Versatile Fluorescence Probes of Protein Kinase Activity. <i>Journal of the American Chemical Society</i> , 2003, 125, 14248-14249.	13.7	193
15	Protein Alignment by a Coexpressed Lanthanide-Binding Tag for the Measurement of Residual Dipolar Couplings. <i>Journal of the American Chemical Society</i> , 2003, 125, 13338-13339.	13.7	193
16	The Expanding Horizons of Asparagine-Linked Glycosylation. <i>Biochemistry</i> , 2011, 50, 4411-4426.	2.5	191
17	Modulation of protein structure and function by asparagine-linked glycosylation. <i>Chemistry and Biology</i> , 1996, 3, 803-812.	6.0	182
18	Lanthanide-Binding Tags as Versatile Protein Coexpression Probes. <i>ChemBioChem</i> , 2003, 4, 265-271.	2.6	158

#	ARTICLE	IF	CITATIONS
19	Structural Origin of the High Affinity of a Chemically Evolved Lanthanide-Binding Peptide. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 3682-3685.	13.8	158
20	A Powerful Combinatorial Screen to Identify High-Affinity Terbium(III)-Binding Peptides. <i>ChemBioChem</i> , 2003, 4, 272-276.	2.6	144
21	Double-Lanthanide-Binding Tags: Design, Photophysical Properties, and NMR Applications. <i>Journal of the American Chemical Society</i> , 2007, 129, 7106-7113.	13.7	142
22	Engineering Encodable Lanthanide-Binding Tags into Loop Regions of Proteins. <i>Journal of the American Chemical Society</i> , 2011, 133, 808-819.	13.7	132
23	Chemical approaches for investigating phosphorylation in signal transduction networks. <i>Trends in Cell Biology</i> , 2005, 15, 502-510.	7.9	128
24	Effects of Glycosylation on Peptide Conformation: A Synergistic Experimental and Computational Study. <i>Journal of the American Chemical Society</i> , 2004, 126, 8421-8425.	13.7	124
25	Lanthanide-Binding Tags as Luminescent Probes for Studying Protein Interactions. <i>Journal of the American Chemical Society</i> , 2006, 128, 7346-7352.	13.7	124
26	In vitro assembly of the undecaprenylpyrophosphate-linked heptasaccharide for prokaryotic N-linked glycosylation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 14255-14259.	7.1	123
27	From Peptide to Protein: Comparative Analysis of the Substrate Specificity of N-Linked Glycosylation in <i>C. jejuni</i> . <i>Biochemistry</i> , 2007, 46, 5579-5585.	2.5	113
28	At the membrane frontier: A prospectus on the remarkable evolutionary conservation of polyprenols and polyprenyl-phosphates. <i>Archives of Biochemistry and Biophysics</i> , 2012, 517, 83-97.	3.0	113
29	Substrate assistance in the mechanism of family 18 chitinases: theoretical studies of potential intermediates and inhibitors 1 Edited by B. Honig. <i>Journal of Molecular Biology</i> , 1998, 280, 913-923.	4.2	110
30	Lanthanide-tagged proteins: an illuminating partnership. <i>Current Opinion in Chemical Biology</i> , 2010, 14, 247-254.	6.1	110
31	Direct Biochemical Evidence for the Utilization of UDP-bacillosamine by PglC, an Essential Glycosyl-1-phosphate Transferase in the <i>Campylobacter jejuni</i> N-Linked Glycosylation Pathway. <i>Biochemistry</i> , 2006, 45, 5343-5350.	2.5	104
32	A molecular basis for glycosylation-induced conformational switching. <i>Chemistry and Biology</i> , 1998, 5, 427-437.	6.0	103
33	Biomimetic divalent ligands for the acute disruption of synaptic AMPAR stabilization. <i>Nature Chemical Biology</i> , 2011, 7, 81-91.	8.0	103
34	Oligosaccharyl transferase: gatekeeper to the secretory pathway. <i>Current Opinion in Chemical Biology</i> , 2002, 6, 844-850.	6.1	102
35	Asparagine-linked glycosylation: Specificity and function of oligosaccharyl transferase. <i>Bioorganic and Medicinal Chemistry</i> , 1995, 3, 1565-1578.	3.0	101
36	In Vitro Biosynthesis of UDP-N, N'-Diacetyl bacillosamine by Enzymes of the <i>Campylobacter jejuni</i> General Protein Glycosylation System. <i>Biochemistry</i> , 2006, 45, 13659-13669.	2.5	100

#	ARTICLE	IF	CITATIONS
37	Structure determination of a Galectin-3 carbohydrate complex using paramagnetism-based NMR constraints. <i>Protein Science</i> , 2008, 17, 1220-1231.	7.6	96
38	Recognition-Domain Focused Chemosensors: Versatile and Efficient Reporters of Protein Kinase Activity. <i>Journal of the American Chemical Society</i> , 2008, 130, 12821-12827.	13.7	96
39	New Synthetic Amino Acids for the Design and Synthesis of Peptide-Based Metal Ion Sensors. <i>Journal of Organic Chemistry</i> , 1996, 61, 8940-8948.	3.2	95
40	Metallopeptide Design: Tuning the Metal Cation Affinities with Unnatural Amino Acids and Peptide Secondary Structure. <i>Journal of the American Chemical Society</i> , 1996, 118, 11349-11356.	13.7	92
41	Chemoenzymic synthesis of 2-amino-3-(2,2'-bipyridinyl)propanoic acids. <i>Journal of Organic Chemistry</i> , 1993, 58, 1613-1616.	3.2	90
42	Chemoenzymatic Synthesis of Glycopeptides with PglB, a Bacterial Oligosaccharyl Transferase from <i>Campylobacter jejuni</i> . <i>Chemistry and Biology</i> , 2005, 12, 1311-1316.	6.0	89
43	Caged phosphopeptides reveal a temporal role for 14-3-3 in G1 arrest and S-phase checkpoint function. <i>Nature Biotechnology</i> , 2004, 22, 993-1000.	17.5	88
44	A new environment-sensitive fluorescent amino acid for Fmoc-based solid phase peptide synthesis. <i>Organic and Biomolecular Chemistry</i> , 2004, 2, 1965-1966.	2.8	88
45	Covalent Modification of Synthetic Hydrogels with Bioactive Proteins via Sortase-Mediated Ligation. <i>Biomacromolecules</i> , 2015, 16, 2316-2326.	5.4	88
46	Protein Glycosylation: The Clash of the Titans. <i>Accounts of Chemical Research</i> , 1997, 30, 452-459.	15.6	86
47	Fluorescent Caged Phosphoserine Peptides as Probes to Investigate Phosphorylation-Dependent Protein Associations. <i>Journal of the American Chemical Society</i> , 2003, 125, 10150-10151.	13.7	86
48	Dynamic and specific interaction between synaptic NR2-NMDA receptor and PDZ proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 19561-19566.	7.1	86
49	Fluorogenic probes for monitoring peptide binding to class II MHC proteins in living cells. <i>Nature Chemical Biology</i> , 2007, 3, 222-228.	8.0	85
50	Fluorescent Amino Acids: Modular Building Blocks for the Assembly of New Tools for Chemical Biology. <i>ChemBioChem</i> , 2013, 14, 788-799.	2.6	85
51	Economy in Protein Design: Evolution of a Metal-Independent $\beta$ -Sheet Motif Based on the Zinc Finger Domains. <i>Journal of the American Chemical Society</i> , 1996, 118, 3073-3081.	13.7	79
52	Biochemical Characterization of the O-Linked Glycosylation Pathway in <i>Neisseria gonorrhoeae</i> Responsible for Biosynthesis of Protein Glycans Containing N-acetyl-Diacetylglucosamine. <i>Biochemistry</i> , 2011, 50, 4936-4948.	2.5	79
53	Sequential Activation and Deactivation of Protein Function Using Spectrally Differentiated Caged Phosphoamino Acids. <i>Journal of the American Chemical Society</i> , 2011, 133, 11038-11041.	13.7	79
54	Double-Lanthanide-Binding Tags for Macromolecular Crystallographic Structure Determination. <i>Journal of the American Chemical Society</i> , 2007, 129, 7114-7120.	13.7	78

#	ARTICLE	IF	CITATIONS
55	Differences between Asn-Xaa-Thr-containing peptides: a comparison of solution conformation and substrate behavior with oligosaccharyltransferase. <i>Biochemistry</i> , 1991, 30, 4374-4380.	2.5	77
56	Optimal Sox-based fluorescent chemosensor design for serine/threonine protein kinases. <i>Analytical Biochemistry</i> , 2006, 352, 198-207.	2.4	77
57	A versatile synthesis of peptidyl fluoromethyl ketones. <i>Tetrahedron Letters</i> , 1986, 27, 135-138.	1.4	76
58	The interplay of glycosylation and disulfide formation influences fibrillization in a prion protein fragment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 7593-7598.	7.1	76
59	Conformational Switching by Asparagine-Linked Glycosylation. <i>Journal of the American Chemical Society</i> , 1997, 119, 2295-2296.	13.7	74
60	Design and NMR analyses of compact, independently folded BBA motifs. <i>Folding &amp; Design</i> , 1998, 3, 95-103.	4.5	72
61	Perturbing the folding energy landscape of the bacterial immunity protein Im7 by site-specific N-linked glycosylation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 22528-22533.	7.1	72
62	The Renaissance of Bacillosamine and Its Derivatives: Pathway Characterization and Implications in Pathogenicity. <i>Biochemistry</i> , 2014, 53, 624-638.	2.5	72
63	Photolytic Control of Peptide Self-Assembly. <i>Journal of the American Chemical Society</i> , 2003, 125, 7530-7531.	13.7	69
64	Semisynthesis of a Glycosylated Im7 Analogue for Protein Folding Studies. <i>Journal of the American Chemical Society</i> , 2005, 127, 12882-12889.	13.7	67
65	Stereoselective synthesis and peptide incorporation of (S)- $\alpha$ -amino-(2,2'-bipyridine)-6-propanoic acid. <i>Journal of Organic Chemistry</i> , 1992, 57, 757-759.	3.2	65
66	Caged Phosphoproteins. <i>Journal of the American Chemical Society</i> , 2005, 127, 846-847.	13.7	64
67	In Vitro Evidence for the Dual Function of Alg2 and Alg11: Essential Mannosyltransferases in N-Linked Glycoprotein Biosynthesis. <i>Biochemistry</i> , 2006, 45, 9593-9603.	2.5	64
68	Stereoselective Synthesis of Fluorescent $\beta$ -Amino Acids Containing Oxine (8-Hydroxyquinoline) and Their Peptide Incorporation in Chemosensors for Divalent Zinc. <i>Journal of Organic Chemistry</i> , 1998, 63, 6727-6731.	3.2	63
69	Investigating Bacterial N-Linked Glycosylation: Synthesis and Glycosyl Acceptor Activity of the Undecaprenyl Pyrophosphate-Linked Bacillosamine. <i>Journal of the American Chemical Society</i> , 2005, 127, 13766-13767.	13.7	63
70	Probing the Effect of the Outer Saccharide Residues of N-Linked Glycans on Peptide Conformation. <i>Journal of the American Chemical Society</i> , 2001, 123, 6187-6188.	13.7	62
71	Synthesis of ansamycins: the ansa chain of rifamycin S. <i>Journal of the American Chemical Society</i> , 1982, 104, 5528-5531.	13.7	61
72	A General Screening Strategy for Peptide-Based Fluorogenic Ligands: Probes for Dynamic Studies of PDZ Domain-Mediated Interactions. <i>Journal of the American Chemical Society</i> , 2009, 131, 6680-6682.	13.7	57

#	ARTICLE	IF	CITATIONS
73	Sulfhydryl Modification of the Yeast Wbp1p Inhibits Oligosaccharyl Transferase Activity. <i>Biochemistry</i> , 1995, 34, 4179-4185.	2.5	56
74	<i>Campylobacter jejuni</i> PglH Is a Single Active Site Processive Polymerase that Utilizes Product Inhibition to Limit Sequential Glycosyl Transfer Reactions. <i>Biochemistry</i> , 2009, 48, 2807-2816.	2.5	56
75	Oligomerization of Uniquely Folded Mini-Protein Motifs: Development of a Homotrimeric $\beta^2\beta^2\beta^2$ Peptide. <i>Journal of the American Chemical Society</i> , 2001, 123, 3885-3891.	13.7	54
76	Asymmetric Synthesis of a New 8-Hydroxyquinoline-Derived $\beta$ -Amino Acid and Its Incorporation in a Peptidylsensor for Divalent Zinc. <i>Journal of Organic Chemistry</i> , 2001, 66, 3224-3228.	3.2	53
77	Enantioselective synthesis and application of the highly fluorescent and environment-sensitive amino acid 6-(2-dimethylaminonaphthoyl) alanine (DANA) Electronic supplementary information (ESI) available: experimental details. See <a href="http://www.rsc.org/suppdata/cc/b2/b205224e/">http://www.rsc.org/suppdata/cc/b2/b205224e/</a> . <i>Chemical Communications</i> , 2002, 1912-1913.	4.1	53
78	Thiol-Reactive Derivatives of the Solvatochromic 4-N,N-Dimethylamino-1,8-naphthalimide Fluorophore: A Highly Sensitive Toolset for the Detection of Biomolecular Interactions. <i>Bioconjugate Chemistry</i> , 2009, 20, 2133-2141.	3.6	53
79	Lanthanide-Binding Tags with Unnatural Amino Acids: Sensitizing Tb <sup>3+</sup> and Eu <sup>3+</sup> Luminescence at Longer Wavelengths. <i>Bioconjugate Chemistry</i> , 2008, 19, 588-591.	3.6	52
80	Semisynthesis of bipyridyl-alanine cytochrome c mutants: novel proteins with enhanced electron-transfer properties. <i>Journal of the American Chemical Society</i> , 1993, 115, 8455-8456.	13.7	51
81	(S)- $\alpha$ -Amino-(2,2'-bipyridine)-6-propanoic acid: a versatile amino acid for de novo metalloprotein design. <i>Journal of the American Chemical Society</i> , 1991, 113, 8527-8528.	13.7	50
82	Biochemical evidence for an alternate pathway in N-linked glycoprotein biosynthesis. <i>Nature Chemical Biology</i> , 2013, 9, 367-373.	8.0	50
83	Bacterial phosphoglycosyl transferases: initiators of glycan biosynthesis at the membrane interface. <i>Glycobiology</i> , 2017, 27, 820-833.	2.5	50
84	Coenzyme-Amino Acid Chimeras: New Residues for the Assembly of Functional Proteins. <i>Journal of the American Chemical Society</i> , 1994, 116, 12083-12084.	13.7	49
85	Study of the stability and unfolding mechanism of BBA1 by molecular dynamics simulations at different temperatures. <i>Protein Science</i> , 1999, 8, 1292-1304.	7.6	49
86	Substrate Specificity of the Glycosyl Donor for Oligosaccharyl Transferase. <i>Journal of Organic Chemistry</i> , 2001, 66, 6217-6228.	3.2	48
87	Rapid Combinatorial Screening of Peptide Libraries for the Selection of Lanthanide-Binding Tags (LBTs). <i>QSAR and Combinatorial Science</i> , 2005, 24, 1149-1157.	1.4	48
88	Asparagine surrogates for the assembly of N-linked glycopeptide mimetics by chemoselective ligation. <i>Tetrahedron Letters</i> , 2001, 42, 2085-2087.	1.4	47
89	Monitoring Protein Kinases in Cellular Media with Highly Selective Chimeric Reporters. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 6828-6831.	13.8	47
90	Monotopic Membrane Proteins Join the Fold. <i>Trends in Biochemical Sciences</i> , 2019, 44, 7-20.	7.5	47

#	ARTICLE	IF	CITATIONS
91	Synthesis of Red-Shifted 8-Hydroxyquinoline Derivatives Using Click Chemistry and Their Incorporation into Phosphorylation Chemosensors. <i>Journal of Organic Chemistry</i> , 2009, 74, 7309-7314.	3.2	46
92	Analysis of the conserved glycosylation site in the nicotinic acetylcholine receptor: potential roles in complex assembly. <i>Chemistry and Biology</i> , 1995, 2, 751-759.	6.0	45
93	The engineering of membrane-permeable peptides. <i>Analytical Biochemistry</i> , 2005, 341, 290-298.	2.4	44
94	Polyisoprenol Specificity in the <i>Campylobacter jejuni</i> N-Linked Glycosylation Pathway. <i>Biochemistry</i> , 2007, 46, 14342-14348.	2.5	44
95	Encoded loop-lanthanide-binding tags for long-range distance measurements in proteins by NMR and EPR spectroscopy. <i>Journal of Biomolecular NMR</i> , 2015, 63, 275-282.	2.8	44
96	Genetic and molecular analyses reveal an evolutionary trajectory for glycan synthesis in a bacterial protein glycosylation system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 9643-9648.	7.1	43
97	Bacterial carbohydrate diversity – a Brave New World. <i>Current Opinion in Chemical Biology</i> , 2019, 53, 1-8.	6.1	43
98	Caged Phospho-Amino Acid Building Blocks for Solid-Phase Peptide Synthesis. <i>Journal of Organic Chemistry</i> , 2003, 68, 6795-6798.	3.2	42
99	Synthesis of dolichols via asymmetric hydrogenation of plant polyprenols. <i>Tetrahedron Letters</i> , 1988, 29, 5343-5344.	1.4	41
100	Design of a discretely folded mini-protein motif with predominantly beta-structure. , 2001, 8, 535-539.		41
101	Biosynthesis of UDP-GlcNAc(3NAc)A by WbpB, WbpE, and WbpD: Enzymes in the Wbp Pathway Responsible for O-Antigen Assembly in <i>Pseudomonas aeruginosa</i> PAO1. <i>Biochemistry</i> , 2009, 48, 5446-5455.	2.5	41
102	General Method for the Synthesis of Caged Phosphopeptides: Tools for the Exploration of Signal Transduction Pathways. <i>Organic Letters</i> , 2002, 4, 2865-2868.	4.6	40
103	Crystal Structure and Catalytic Mechanism of PglD from <i>Campylobacter jejuni</i> . <i>Journal of Biological Chemistry</i> , 2008, 283, 27937-27946.	3.4	40
104	Metal Ion Dependence of Oligosaccharyl Transferase: Implications for Catalysis. <i>Biochemistry</i> , 1995, 34, 9444-9450.	2.5	39
105	Membrane association of monotopic phosphoglycosyl transferase underpins function. <i>Nature Chemical Biology</i> , 2018, 14, 538-541.	8.0	39
106	Synthesis of dolichylpyrophosphate-linked oligosaccharides. <i>Tetrahedron Letters</i> , 1990, 31, 6485-6488.	1.4	38
107	Improving Glycopeptide Synthesis: A Convenient Protocol for the Preparation of $\beta^2$ -Glycosylamines and the Synthesis of Glycopeptides. <i>Journal of Organic Chemistry</i> , 2005, 70, 3574-3578.	3.2	37
108	Solution Structure of Alg13: The Sugar Donor Subunit of a Yeast N-Acetylglucosamine Transferase. <i>Structure</i> , 2008, 16, 965-975.	3.3	37

#	ARTICLE	IF	CITATIONS
109	Stereoselective Synthesis and Peptide Incorporation of a Pyridoxal Coenzyme-Amino Acid Chimera. <i>Journal of Organic Chemistry</i> , 1995, 60, 1891-1894.	3.2	36
110	Interrogating Signaling Nodes Involved in Cellular Transformations Using Kinase Activity Probes. <i>Chemistry and Biology</i> , 2012, 19, 210-217.	6.0	35
111	Design of a Heterospecific, Tetrameric, 21-Residue Miniprotein with Mixed $\alpha/\beta$ Structure. <i>Structure</i> , 2005, 13, 225-234.	3.3	33
112	Bacterial N-Glycosylation Efficiency Is Dependent on the Structural Context of Target Sequons. <i>Journal of Biological Chemistry</i> , 2016, 291, 22001-22010.	3.4	33
113	A p38 $\beta$ -Selective Chemosensor for use in Unfractionated Cell Lysates. <i>ACS Chemical Biology</i> , 2011, 6, 101-105.	3.4	32
114	Conservation and Covariance in Small Bacterial Phosphoglycosyltransferases Identify the Functional Catalytic Core. <i>Biochemistry</i> , 2015, 54, 7326-7334.	2.5	30
115	Analysis of a dual domain phosphoglycosyl transferase reveals a ping-pong mechanism with a covalent enzyme intermediate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 7019-7024.	7.1	30
116	In Situ Photoactivation of a Caged Phosphotyrosine Peptide Derived from Focal Adhesion Kinase Temporarily Halts Lamellar Extension of Single Migrating Tumor Cells. <i>Journal of Biological Chemistry</i> , 2005, 280, 22091-22101.	3.4	29
117	Exploiting Topological Constraints To Reveal Buried Sequence Motifs in the Membrane-Bound N-Linked Oligosaccharyl Transferases. <i>Biochemistry</i> , 2011, 50, 7557-7567.	2.5	29
118	Chemistry and biology of asparagine-linked glycosylation. <i>Pure and Applied Chemistry</i> , 1999, 71, 777-787.	1.9	27
119	Neoglycopeptides as Inhibitors of Oligosaccharyl Transferase. <i>Chemistry and Biology</i> , 2002, 9, 1323-1328.	6.0	27
120	Lanthanide-Binding Tags for 3D X-ray Imaging of Proteins in Cells at Nanoscale Resolution. <i>Journal of the American Chemical Society</i> , 2020, 142, 2145-2149.	13.7	27
121	Structural and Functional Characterization of a Constrained Asx-Turn Motif. <i>Journal of the American Chemical Society</i> , 1994, 116, 8424-8425.	13.7	26
122	A Modular Approach to Phosphoglycosyltransferase Inhibitors Inspired by Nucleoside Antibiotics. <i>Chemistry - A European Journal</i> , 2016, 22, 3856-3864.	3.3	26
123	Insights into the key determinants of membrane protein topology enable the identification of new monotopic folds. <i>ELife</i> , 2018, 7, .	6.0	26
124	Design and Evaluation of Potent Inhibitors of Asparagine-Linked Protein Glycosylation. <i>Journal of the American Chemical Society</i> , 1996, 118, 7636-7637.	13.7	25
125	The essential yeast NLT1 gene encodes the 64 kDa glycoprotein subunit of the oligosaccharyl transferase. <i>FEBS Letters</i> , 1995, 362, 229-234.	2.8	24
126	Synthesis of the glucoallosamidin pseudo-disaccharide: Use of an efficient Hg(II) mediated cyclization. <i>Tetrahedron Letters</i> , 1996, 37, 599-602.	1.4	24



#	ARTICLE	IF	CITATIONS
127	A Dual Affinity Tag on the 64-kDa Nlt1p Subunit Allows the Rapid Characterization of Mutant Yeast Oligosaccharyl Transferase Complexes. <i>Archives of Biochemistry and Biophysics</i> , 1997, 338, 1-6.	3.0	24
128	A Potent Oligosaccharyl Transferase Inhibitor That Crosses the Intracellular Endoplasmic Reticulum Membrane. <i>Biochemistry</i> , 1999, 38, 5430-5437.	2.5	24
129	Light-Triggered Myosin Activation for Probing Dynamic Cellular Processes. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 5667-5670.	13.8	24
130	Caged Mono- and Divalent Ligands for Light-Assisted Disruption of PDZ Domain-Mediated Interactions. <i>Journal of the American Chemical Society</i> , 2013, 135, 4580-4583.	13.7	24
131	A Rapid and Efficient Luminescence-based Method for Assaying Phosphoglycosyltransferase Enzymes. <i>Scientific Reports</i> , 2016, 6, 33412.	3.3	24
132	Peptidyl chemosensors incorporating a fret mechanism for detection of Ni(II). <i>Bioorganic and Medicinal Chemistry Letters</i> , 1998, 8, 1963-1968.	2.2	23
133	The Chemistry of Glycobiology Frontier. <i>Journal of the American Chemical Society</i> , 2012, 134, 17835-17839.	13.7	23
134	Lipid bilayer nanodisc platform for investigating polyprenol-dependent enzyme interactions and activities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 20863-20870.	7.1	23
135	Tailoring Chimeric Ligands for Studying and Biasing ErbB Receptor Family Interactions. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2662-2666.	13.8	23
136	Antibodies from multiple sclerosis patients preferentially recognize hyperglucosylated adhesin of non-typeable <i>Haemophilus influenzae</i> . <i>Scientific Reports</i> , 2016, 6, 39430.	3.3	23
137	Structural and mechanistic themes in glycoconjugate biosynthesis at membrane interfaces. <i>Current Opinion in Structural Biology</i> , 2019, 59, 81-90.	5.7	23
138	N-Linked Glycans Are Assembled on Highly Reduced Dolichol Phosphate Carriers in the Hyperthermophilic Archaea <i>Pyrococcus furiosus</i> . <i>PLoS ONE</i> , 2015, 10, e0130482.	2.5	23
139	Tailoring Encodable Lanthanide-Binding Tags as MRI Contrast Agents. <i>ChemBioChem</i> , 2012, 13, 2567-2574.	2.6	22
140	Biosynthesis of UDP-N <sup>6</sup> -diacetylbaucosamine in <i>Acinetobacter baumannii</i> : Biochemical characterization and correlation to existing pathways. <i>Archives of Biochemistry and Biophysics</i> , 2013, 536, 72-80.	3.0	22
141	Stereochemical Divergence of Polyprenol Phosphate Glycosyltransferases. <i>Trends in Biochemical Sciences</i> , 2018, 43, 10-17.	7.5	22
142	Semisynthesis of unnatural amino acid mutants of paxillin: Protein probes for cell migration studies. <i>Protein Science</i> , 2007, 16, 550-556.	7.6	21
143	Chemoenzymatic synthesis of polyprenyl phosphates. <i>Bioorganic and Medicinal Chemistry</i> , 2008, 16, 5149-5156.	3.0	21
144	Synthesis of anhydride precursors of the environment-sensitive fluorophores 4-DMAP and 6-DMN. <i>Nature Protocols</i> , 2007, 2, 3219-3225.	12.0	20

#	ARTICLE	IF	CITATIONS
145	Affinity-Capture Tandem Mass Spectrometric Characterization of Polyprenyl-Linked Oligosaccharides: Tool to Study Protein N-Glycosylation Pathways. <i>Analytical Chemistry</i> , 2008, 80, 5468-5475.	6.5	20
146	Structural Analysis of WbpE from <i>Pseudomonas aeruginosa</i> PAO1: A Nucleotide Sugar Aminotransferase Involved in O-Antigen Assembly. <i>Biochemistry</i> , 2010, 49, 7227-7237.	2.5	20
147	Selective Mitogen Activated Protein Kinase Activity Sensors through the Application of Directionally Programmable D Domain Motifs. <i>Biochemistry</i> , 2014, 53, 5771-5778.	2.5	20
148	Tools for investigating peptide-protein interactions: peptide incorporation of environment-sensitive fluorophores via on-resin derivatization. <i>Nature Protocols</i> , 2007, 2, 3201-3209.	12.0	19
149	A rapid method for generation of selective Sox-based chemosensors of Ser/Thr kinases using combinatorial peptide libraries. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 1258-1260.	2.2	19
150	Strategies and Tactics for the Development of Selective Glycan-Binding Proteins. <i>ACS Chemical Biology</i> , 2021, 16, 1795-1813.	3.4	19
151	Stereoselective synthesis of $\beta^2$ -linked TBDMS-protected chitobiose-asparagine: a versatile building block for amyloidogenic glycopeptides. <i>Tetrahedron Letters</i> , 2001, 42, 7207-7210.	1.4	18
152	X-ray structure analysis of a designed oligomeric miniprotein reveals a discrete quaternary architecture. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 12183-12188.	7.1	18
153	Development of a fluorogenic sensor for activated Cdc42. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 5058-5061.	2.2	18
154	Targeting Bacillosamine Biosynthesis in Bacterial Pathogens: Development of Inhibitors to a Bacterial Amino-Sugar Acetyltransferase from <i>Campylobacter jejuni</i> . <i>Journal of Medicinal Chemistry</i> , 2017, 60, 2099-2118.	6.4	17
155	Glycoconjugate pathway connections revealed by sequence similarity network analysis of the monotopic phosphoglycosyl transferases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	17
156	Design strategies for the construction of independently folded polypeptide motifs. , 1998, 47, 23-29.		16
157	Modulating pyridoxamine-mediated transamination through a $\beta^2\beta^1$ motif peptide scaffold. <i>Bioorganic and Medicinal Chemistry</i> , 1999, 7, 1993-2002.	3.0	16
158	Discovery and Characterization of a Discretely Folded Homotrimeric $\beta^2\beta^1$ Peptide. <i>Journal of the American Chemical Society</i> , 2001, 123, 1002-1003.	13.7	16
159	Expression of N-terminal Cys-protein fragments using an intein refolding strategy. <i>Bioorganic and Medicinal Chemistry</i> , 2006, 14, 5043-5048.	3.0	16
160	Design and Construction of Novel Peptides and Proteins by Tailored Incorporation of Coenzyme Functionality. <i>Topics in Current Chemistry</i> , 1999, , 1-38.	4.0	16
161	Structural and Functional Analysis of Peptidyl Oligosaccharyl Transferase Inhibitors. <i>Biochemistry</i> , 1997, 36, 12554-12559.	2.5	15
162	FRET-Capture: A Sensitive Method for the Detection of Dynamic Protein Interactions. <i>ChemBioChem</i> , 2013, 14, 53-57.	2.6	15

#	ARTICLE	IF	CITATIONS
163	Optimized protocol for expression and purification of membrane-bound PglB, a bacterial oligosaccharyl transferase. <i>Protein Expression and Purification</i> , 2013, 89, 241-250.	1.3	15
164	Stereoselective synthesis of a pyridoxamine coenzyme-amino acid chimera: Assembly of a polypeptide incorporating the pyridoxamine moiety. <i>Tetrahedron Letters</i> , 1996, 37, 2129-2132.	1.4	14
165	Tools for investigating peptide-protein interactions: peptide incorporation of environment-sensitive fluorophores through SPPS-based 'building block' approach. <i>Nature Protocols</i> , 2007, 2, 3210-3218.	12.0	14
166	Quantification of Protein Kinase Enzymatic Activity in Unfractionated Cell Lysates Using CSox-Based Sensors. <i>Current Protocols in Chemical Biology</i> , 2014, 6, 135-156.	1.7	14
167	Biochemical Analysis and Structure Determination of Bacterial Acetyltransferases Responsible for the Biosynthesis of UDP-N,N <sup>ε</sup> -Diacetylbaucillosamine. <i>Journal of Biological Chemistry</i> , 2013, 288, 32248-32260.	3.4	13
168	Two-Photon Fluorescence Spectroscopy and Imaging of 4-Dimethylaminonaphthalimide Peptide and Protein Conjugates. <i>Journal of Physical Chemistry B</i> , 2013, 117, 15935-15942.	2.6	13
169	A Strategic Approach for Fluorescence Imaging of Membrane Proteins in a Native-like Environment. <i>Cell Chemical Biology</i> , 2020, 27, 245-251.e3.	5.2	13
170	A reversible affinity tag for the purification of N-glycolyl capped peptides. <i>Tetrahedron Letters</i> , 1998, 39, 8241-8244.	1.4	12
171	Substrate specificity of N-acetylglucosaminyl(diphosphodolichol) N-acetylglucosaminyl transferase, a key enzyme in the dolichol pathway. <i>Bioorganic and Medicinal Chemistry</i> , 2001, 9, 1133-1140.	3.0	12
172	Chemoenzymatic Assembly of Bacterial Glycoconjugates for Site-Specific Orthogonal Labeling. <i>Journal of the American Chemical Society</i> , 2015, 137, 12446-12449.	13.7	12
173	Chemical Tools for Studying Directed Cell Migration. <i>ACS Chemical Biology</i> , 2011, 6, 1164-1174.	3.4	11
174	Selective biochemical labeling of <i>Campylobacter jejuni</i> cell-surface glycoconjugates. <i>Glycobiology</i> , 2015, 25, 756-766.	2.5	11
175	Design Principles for SuCESsFul Biosensors: Specific Fluorophore/Analyte Binding and Minimization of Fluorophore/Scaffold Interactions. <i>Journal of Molecular Biology</i> , 2016, 428, 4228-4241.	4.2	11
176	Investigation of the conserved reentrant membrane helix in the monotopic phosphoglycosyl transferase superfamily supports key molecular interactions with polyprenol phosphate substrates. <i>Archives of Biochemistry and Biophysics</i> , 2019, 675, 108111.	3.0	11
177	Uridine natural products: Challenging targets and inspiration for novel small molecule inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2020, 28, 115661.	3.0	11
178	Application of a gut-immune co-culture system for the study of <i>N</i> -glycan-dependent host-pathogen interactions of <i>Campylobacter jejuni</i> . <i>Glycobiology</i> , 2020, 30, 374-381.	2.5	11
179	The surprising structural and mechanistic dichotomy of membrane-associated phosphoglycosyl transferases. <i>Biochemical Society Transactions</i> , 2021, 49, 1189-1203.	3.4	11
180	Model study for the incorporation of the (syn,anti)-2-amino-1,3-diol functionality in carbocycles. <i>Tetrahedron Letters</i> , 1998, 39, 7215-7218.	1.4	10

#	ARTICLE	IF	CITATIONS
181	Oligomeric $\beta$ -Miniprotein Motifs: Pivotal Role of Single Hinge Residue in Determining the Oligomeric State. <i>Journal of the American Chemical Society</i> , 2002, 124, 428-433.	13.7	10
182	Peptides to peptidomimetics: towards the design and synthesis of bioavailable inhibitors of oligosaccharyl transferase. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 93-99.	2.8	10
183	Caged O-phosphorothioyl amino acids as building blocks for Fmoc-based solid phase peptide synthesis. <i>Tetrahedron</i> , 2007, 63, 6185-6190.	1.9	10
184	Probing the extended binding determinants of oligosaccharyl transferase with synthetic inhibitors of asparagine-linked glycosylation. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2000, 10, 281-284.	2.2	9
185	Heterologous expression and biophysical characterization of soluble oligosaccharyl transferase subunits. <i>Archives of Biochemistry and Biophysics</i> , 2004, 431, 63-70.	3.0	9
186	Development of a multicomponent kinetic assay of the early enzymes in the <i>Campylobacter jejuni</i> N-linked glycosylation pathway. <i>Bioorganic and Medicinal Chemistry</i> , 2010, 18, 8167-8171.	3.0	9
187	Facile Solid-Phase Synthesis and Assessment of Nucleoside Analogs as Inhibitors of Bacterial UDP-Sugar Processing Enzymes. <i>ACS Chemical Biology</i> , 2018, 13, 2542-2550.	3.4	9
188	Modulation of Shank3 PDZ Domain Ligand Binding Affinity by Dimerization. <i>ChemBioChem</i> , 2010, 11, 1979-1984.	2.6	8
189	The Best and the Brightest: Exploiting Tryptophan-Sensitized Tb <sup>3+</sup> Luminescence to Engineer Lanthanide-Binding Tags. <i>Methods in Molecular Biology</i> , 2015, 1248, 201-220.	0.9	8
190	Probing Polytopic Membrane Protein Substrate Interactions by Luminescence Resonance Energy Transfer. <i>Journal of the American Chemical Society</i> , 2016, 138, 3806-3812.	13.7	8
191	Conformational dynamics and alignment properties of loop lanthanide-binding-tags (LBTs) studied in interleukin-1 $\beta$ . <i>Journal of Biomolecular NMR</i> , 2017, 68, 187-194.	2.8	8
192	Biogenesis of Asparagine-Linked Glycoproteins Across Domains of Life Similarities and Differences. <i>ACS Chemical Biology</i> , 2018, 13, 833-837.	3.4	8
193	The conformational basis of asparagine-linked glycosylation. <i>Pure and Applied Chemistry</i> , 1998, 70, 33-40.	1.9	7
194	$\beta$ -Chloroacetyl capping of peptides: an N-terminal capping strategy suitable for Edman sequencing. <i>Tetrahedron Letters</i> , 2000, 41, 827-829.	1.4	7
195	Biopolymers Chemical and biological approaches for understanding form and function Editorial Overview. <i>Current Opinion in Chemical Biology</i> , 2000, 4, 599-601.	6.1	6
196	Chemoenzymatic Synthesis and Applications of Prokaryote-Specific UDP-Sugars. <i>Methods in Enzymology</i> , 2017, 597, 145-186.	1.0	6
197	Equilibrium and dynamic design principles for binding molecules engineered for reagentless biosensors. <i>Analytical Biochemistry</i> , 2014, 460, 9-15.	2.4	5
198	Design, solid-phase synthesis and evaluation of enterobactin analogs for iron delivery into the human pathogen <i>Campylobacter jejuni</i> . <i>Bioorganic and Medicinal Chemistry</i> , 2018, 26, 5314-5321.	3.0	5

#	ARTICLE	IF	CITATIONS
199	Deploying Fluorescent Nucleoside Analogues for High-Throughput Inhibitor Screening. <i>ChemBioChem</i> , 2020, 21, 108-112.	2.6	4
200	Peptide platforms for metal ion sensing. , 1999, 3858, 135.		3
201	Interrogating biology with a chemical lexicon. <i>Nature Chemistry</i> , 2009, 1, 9-10.	13.6	3
202	Synthesis of Tylonolide, The Aglycone of Tylosin. <i>Strategies and Tactics in Organic Synthesis</i> , 1984, 1, 123-153.	0.1	2
203	Backbone-Anchoring, Solid-Phase Synthesis Strategy To Access a Library of Peptidouridine-Containing Small Molecules. <i>Organic Letters</i> , 2022, 24, 2170-2174.	4.6	2
204	Chemistry and Biochemistry of Asparagine-Linked Protein Glycosylation. , 2005, , 281-303.		1
205	Protein Oligomerization: How and Why. <i>ChemInform</i> , 2005, 36, no.	0.0	0
206	Preface. <i>Methods in Enzymology</i> , 2017, 597, xv-xix.	1.0	0
207	Preface. <i>Methods in Enzymology</i> , 2018, 598, xv-xix.	1.0	0
208	Design, Synthesis, and Characterization of Caged Compounds. <i>Cold Spring Harbor Protocols</i> , 2007, 2007, pdb.ip25-pdb.ip25.	0.3	0