Tom W Muir

List of Publications by Year
in descending order

233 papers	26,422 citations	5248 83 h-index	6979 154 g-index
255 all docs	255 docs citations	255 times ranked	20922 citing authors

#	Article	IF	Citations
1	Synthesis of proteins by native chemical ligation. Science, 1994, 266, 776-779.	6.0	3,712
2	Expressed protein ligation: A general method for protein engineering. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 6705-6710.	3.3	1,099
3	Inhibition of PRC2 Activity by a Gain-of-Function H3 Mutation Found in Pediatric Glioblastoma. Science, 2013, 340, 857-861.	6.0	1,074
4	Semisynthesis of Proteins by Expressed Protein Ligation. Annual Review of Biochemistry, 2003, 72, 249-289.	5.0	679
5	Histone H2A deubiquitinase activity of the Polycomb repressive complex PR-DUB. Nature, 2010, 465, 243-247.	13.7	674
6	How many human proteoforms are there?. Nature Chemical Biology, 2018, 14, 206-214.	3.9	580
7	Chemically ubiquitylated histone H2B stimulates hDot1L-mediated intranucleosomal methylation. Nature, 2008, 453, 812-816.	13.7	494
8	RAD6-Mediated Transcription-Coupled H2B Ubiquitylation Directly Stimulates H3K4 Methylation in Human Cells. Cell, 2009, 137, 459-471.	13.5	453
9	Structure-activity analysis of synthetic autoinducing thiolactone peptides from Staphylococcus aureus responsible for virulence. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 1218-1223.	3.3	436
10	Histone H2B ubiquitylation disrupts local and higher-order chromatin compaction. Nature Chemical Biology, 2011, 7, 113-119.	3.9	392
11	Protein ligation: an enabling technology for the biophysical analysis of proteins. Nature Methods, 2006, 3, 429-438.	9.0	351
12	The TGFÎ² Receptor Activation Process. Molecular Cell, 2001, 8, 671-682.	4.5	346
13	Histone H3K36 mutations promote sarcomagenesis through altered histone methylation landscape. Science, 2016, 352, 844-849.	6.0	327
14	Inteins: nature's gift to protein chemists. Chemical Science, 2014, 5, 446-461.	3.7	310
15	Recognition of a Mononucleosomal Histone Modification Pattern by BPTF via Multivalent Interactions. Cell, 2011, 145, 692-706.	13.5	300
16	Histone serotonylation is a permissive modification that enhances TFIID binding to H3K4me3. Nature, 2019, 567, 535-539.	13.7	292
17	Exfoliatin-Producing Strains Define a Fourthagr Specificity Group in Staphylococcus aureus. Journal of Bacteriology, 2000, 182, 6517-6522.	1.0	284
18	Crystal Structure of a Phosphorylated Smad2. Molecular Cell, 2001, 8, 1277-1289.	4.5	271

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19	The expanding landscape of â€˜oncohistoneâ€™ mutations in human cancers. Nature, 2019, 567, 473-478.	13.7	271
20	Rational design of a global inhibitor of the virulence response in Staphylococcus aureus, based in part on localization of the site of inhibition to the receptor-histidine kinase, AgrC. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 13330-13335.	3.3	232
21	Structure of Microcin J25, a Peptide Inhibitor of Bacterial RNA Polymerase, is a Lassoed Tail. Journal of the American Chemical Society, 2003, 125, 12475-12483.	6.6	227
22	Disulfide-directed histone ubiquitylation reveals plasticity in hDot1L activation. Nature Chemical Biology, 2010, 6, 267-269.	3.9	227
23	Chemical ligation of folded recombinant proteins: Segmental isotopic labeling of domains for NMR studies. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 388-393.	3.3	219
24	A Modular Cross-Linking Approach for Exploring Protein Interactions. Journal of the American Chemical Society, 2003, 125, 2416-2425.	6.6	189
25	Key Determinants of Receptor Activation in theagrAutoinducing Peptides ofStaphylococcus aureusâ€. Biochemistry, 2002, 41, 10095-10104.	1.2	188
26	Histones: At the Crossroads of Peptide and Protein Chemistry. Chemical Reviews, 2015, 115, 2296-2349.	23.0	188
27	Molecular analysis of PRC2 recruitment to DNA in chromatin and its inhibition by RNA. Nature Structural and Molecular Biology, 2017, 24, 1028-1038.	3.6	186
28	Expressed Protein Ligation, a Novel Method for Studying Protein-Protein Interactions in Transcription. Journal of Biological Chemistry, 1998, 273, 16205-16209.	1.6	178
29	Auxiliary-Mediated Site-Specific Peptide Ubiquitylation. Angewandte Chemie - International Edition, 2007, 46, 2814-2818.	7.2	168
30	Regulation of Virulence in Staphylococcus aureus : Molecular Mechanisms and Remaining Puzzles. Cell Chemical Biology, 2016, 23, 214-224.	2.5	166
31	Semisynthesis and Folding of the Potassium Channel KcsA. Journal of the American Chemical Society, 2002, 124, 9113-9120.	6.6	165
32	Protein Semi-Synthesis in Living Cells. Journal of the American Chemical Society, 2003, 125, 7180-7181.	6.6	162
33	Semisynthesis of a segmental isotopically labeled protein splicing precursor: NMR evidence for an unusual peptide bond at the N-extein-intein junction. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6397-6402.	3.3	158
34	Protein Splicing Triggered by a Small Molecule. Journal of the American Chemical Society, 2002, 124, 9044-9045.	6.6	156
35	Conditional Protein Splicing:â€‰ A New Tool to Control Protein Structure and Function in Vitro and in Vivo. Journal of the American Chemical Society, 2003, 125, 10561-10569.	6.6	153
36	Biological Applications of Protein Splicing. Cell, 2010, 143, 191-200.	13.5	152

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37	ISWI chromatin remodellers sense nucleosome modifications to determine substrate preference. Nature, 2017, 548, 607-611.	13.7	148
38	SET1 and p300 Act Synergistically, through Coupled Histone Modifications, in Transcriptional Activation by p53. Cell, 2013, 154, 297-310.	13.5	147
39	Genetically Encoded 1,2-Aminothiols Facilitate Rapid and Site-Specific Protein Labeling via a Bio-orthogonal Cyanobenzothiazole Condensation. Journal of the American Chemical Society, 2011, 133, 11418-11421.	6.6	144
40	Chemoenzymatic Semisynthesis of Proteins. Chemical Reviews, 2020, 120, 3051-3126.	23.0	142
41	Virulence gene regulation by peptides in staphylococci and other Gram-positive bacteria. Current Opinion in Microbiology, 1999, 2, 40-45.	2.3	140
42	Biosynthesis of a Head-to-Tail Cyclized Protein with Improved Biological Activity. Journal of the American Chemical Society, 1999, 121, 5597-5598.	6.6	140
43	Activation of protein splicing with light in yeast. Nature Methods, 2008, 5, 303-305.	9.0	140
44	Molecular Mechanisms ofagr Quorum Sensing in Virulent Staphylococci. ChemBioChem, 2007, 8, 847-855.	1.3	136
45	PFA ependymoma-associated protein EZHIP inhibits PRC2 activity through a H3 K27M-like mechanism. Nature Communications, 2019, 10, 2146.	5.8	136
46	Chemical tagging and customizing of cellular chromatin states using ultrafast trans-splicing inteins. Nature Chemistry, 2015, 7, 394-402.	6.6	133
47	Design of a Split Intein with Exceptional Protein Splicing Activity. Journal of the American Chemical Society, 2016, 138, 2162-2165.	6.6	133
48	<i>agr</i> receptor mutants reveal distinct modes of inhibition by staphylococcal autoinducing peptides. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1216-1221.	3.3	129
49	Accelerated chromatin biochemistry using DNA-barcoded nucleosome libraries. Nature Methods, 2014, 11, 834-840.	9.0	129
50	Cyclic Peptide Inhibitors of Staphylococcal Virulence Prepared by Fmoc-Based Thiolactone Peptide Synthesis. Journal of the American Chemical Society, 2008, 130, 4914-4924.	6.6	127
51	Development of Stable Phosphohistidine Analogues. Journal of the American Chemical Society, 2010, 132, 14327-14329.	6.6	126
52	Ion Selectivity in a Semisynthetic K+ Channel Locked in the Conductive Conformation. Science, 2006, 314, 1004-1007.	6.0	124
53	Ultrafast Protein Splicing is Common among Cyanobacterial Split Inteins: Implications for Protein Engineering. Journal of the American Chemical Society, 2012, 134, 11338-11341.	6.6	122
54	The n-SET Domain of Set1 Regulates H2B Ubiquitylation-Dependent H3K4 Methylation. Molecular Cell, 2013, 49, 1121-1133.	4.5	119

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55	A pan-specific antibody for direct detection of protein histidine phosphorylation. Nature Chemical Biology, 2013, 9, 416-421.	3.9	119
56	Development of a Tandem Protein Trans-Splicing System Based on Native and Engineered Split Inteins. Journal of the American Chemical Society, 2005, 127, 6198-6206.	6.6	118
57	H3R42me2a is a histone modification with positive transcriptional effects. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14894-14899.	3.3	115
58	Chemical Synthesis of a Circular Protein Domain: Evidence for Folding-Assisted Cyclization. Angewandte Chemie - International Edition, 1998, 37, 347-349.	7.2	112
59	Autoregulation of a bacterial Â factor explored by using segmental isotopic labeling and NMR. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 8536-8541.	3.3	111
60	Expressed Protein Ligation (EPL) in the Study of Signal Transduction, Ion Conduction, And Chromatin Biology. Accounts of Chemical Research, 2009, 42, 107-116.	7.6	110
61	Activation and Inhibition of the Receptor Histidine Kinase AgrC Occurs through Opposite Helical Transduction Motions. Molecular Cell, 2014, 53, 929-940.	4.5	110
62	Insertion of a Synthetic Peptide into a Recombinant Protein Framework:Â A Protein Biosensor. Journal of the American Chemical Society, 1999, 121, 1100-1101.	6.6	109
63	Chemical Signaling among Bacteria and Its Inhibition. Chemistry and Biology, 2003, 10, 1007-1021.	6.2	109
64	Structureâ€"Activity Analysis of Semisynthetic Nucleosomes: Mechanistic Insights into the Stimulation of Dot1L by Ubiquitylated Histone H2B. ACS Chemical Biology, 2009, 4, 958-968.	1.6	109
65	Chromatin as an expansive canvas for chemical biology. Nature Chemical Biology, 2012, 8, 417-427.	3.9	109
66	Chemical ligation of unprotected peptides directly from a solid support. Chemical Biology and Drug Design, 1998, 51, 303-316.	1.2	108
67	Chasing Phosphohistidine, an Elusive Sibling in the Phosphoamino Acid Family. ACS Chemical Biology, 2012, 7, 44-51.	1.6	107
68	A promiscuous split intein with expanded protein engineering applications. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8538-8543.	3.3	102
69	[13] Protein synthesis by chemical ligation of unprotected peptides in aqueous solution. Methods in Enzymology, 1997, 289, 266-298.	0.4	101
70	Traceless protein splicing utilizing evolved split inteins. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10999-11004.	3.3	100
71	Rescuing a destabilized protein fold through backbone cyclization. Journal of Molecular Biology, 2001, 308, 1045-1062.	2.0	98
72	Chemical Ligation of Cysteine-Containing Peptides: Synthesis of a 22 kDa Tethered Dimer of HIV-1 Protease. Journal of the American Chemical Society, 1995, 117, 1881-1887.	6.6	95

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73	Strategy for â€œDetoxificationâ€• of a Cancer-Derived Histone Mutant Based on Mapping Its Interaction with the Methyltransferase PRC2. Journal of the American Chemical Society, 2014, 136, 13498-13501.	6.6	95
74	Surface-attached molecules control Staphylococcus aureus quorum sensing and biofilm development. Nature Microbiology, 2017, 2, 17080.	5.9	95
75	Chemoselective backbone cyclization of unprotected peptides. Chemical Communications, 1997, , 1369-1370.	2.2	94
76	Toward Fully Synthetic N-Linked Glycoproteins. Angewandte Chemie - International Edition, 2003, 42, 431-434.	7.2	93
77	Recent advances in the application of expressed protein ligation to protein engineering. Current Opinion in Biotechnology, 2002, 13, 297-303.	3.3	91
78	Design and Chemical Synthesis of a Neoprotein Structural Model for the Cytoplasmic Domain of a Multisubunit Cell-Surface Receptor: Integrin .alpha.IIb.beta.3 (Platelet GPIIb-IIIa). Biochemistry, 1994, 33, 7701-7708.	1.2	90
79	Generation of a dual-labeled fluorescence biosensor for Crk-II phosphorylation using solid-phase expressed protein ligation. Chemistry and Biology, 2000, 7, 253-261.	6.2	90
80	Streamlined Expressed Protein Ligation Using Split Inteins. Journal of the American Chemical Society, 2013, 135, 286-292.	6.6	90
81	A two-state activation mechanism controls the histone methyltransferase Suv39h1. Nature Chemical Biology, 2016, 12, 188-193.	3.9	90
82	Small-molecule-mediated rescue of protein function by an inducible proteolytic shunt. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11209-11214.	3.3	88
83	Identification of Ligand Specificity Determinants in AgrC, the Staphylococcus aureus Quorum-sensing Receptor. Journal of Biological Chemistry, 2008, 283, 8930-8938.	1.6	88
84	HELLS and CDCA7 comprise a bipartite nucleosome remodeling complex defective in ICF syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E876-E885.	3.3	88
85	Glycine as a D-amino acid surrogate in the K+-selectivity filter. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17045-17049.	3.3	86
86	Manipulating proteins with chemistry: a cross-section of chemical biology. Trends in Biochemical Sciences, 2005, 30, 26-34.	3.7	85
87	Chemical Approaches for Studying Histone Modifications. Journal of Biological Chemistry, 2010, 285, 11045-11050.	1.6	85
88	Impaired cell fate through gain-of-function mutations in a chromatin reader. Nature, 2020, 577, 121-126.	13.7	84
89	Simultaneous Triggering of Protein Activity and Fluorescence. Journal of the American Chemical Society, 2004, 126, 7170-7171.	6.6	83
90	Stability of Nucleosomes Containing Homogenously Ubiquitylated H2A and H2B Prepared Using Semisynthesis. Journal of the American Chemical Society, 2012, 134, 19548-19551.	6.6	83

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91	Hydrophobic interactions drive ligand-receptor recognition for activation and inhibition of staphylococcal quorum sensing. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16168-16173.	3.3	82
92	Reversible and Specific Extracellular Antagonism of Receptor-Histidine Kinase Signaling. Journal of Biological Chemistry, 2002, 277, 6247-6253.	1.6	81
93	Identification of a DNA N6-Adenine Methyltransferase Complex and Its Impact on Chromatin Organization. Cell, 2019, 177, 1781-1796.e25.	13.5	81
94	Post-translational enzyme activation in an animal via optimized conditional protein splicing. , 2007, 3, 50-54.		79
95	Ubiquitin utilizes an acidic surface patch to alter chromatin structure. Nature Chemical Biology, 2017, 13, 105-110.	3.9	79
96	Peptide ligation and its application to protein engineering. Chemistry and Biology, 1999, 6, R247-R256.	6.2	78
97	Photocontrol of Smad2, a Multiphosphorylated Cell-Signaling Protein, through Caging of Activating Phosphoserines. Angewandte Chemie - International Edition, 2004, 43, 5800-5803.	7.2	78
98	Recurrent SMARCB1 Mutations Reveal a Nucleosome Acidic Patch Interaction Site That Potentiates mSWI/SNF Complex Chromatin Remodeling. Cell, 2019, 179, 1342-1356.e23.	13.5	72
99	Introduction of unnatural amino acids into proteins using expressed protein ligation. , 1999, 51, 343-354.		71
100	Histone H3 tail binds a unique sensing pocket in EZH2 to activate the PRC2 methyltransferase. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8295-8300.	3.3	71
101	Activation of Protein Splicing by Proteaseâ€•or Lightâ€Triggered O to N Acyl Migration. Angewandte Chemie - International Edition, 2008, 47, 7764-7767.	7.2	69
102	ASH2L Regulates Ubiquitylation Signaling to MLL: trans-Regulation of H3 K4 Methylation in Higher Eukaryotes. Molecular Cell, 2013, 49, 1108-1120.	4.5	69
103	Site-Specific 18F-Labeling of the Protein Hormone Leptin Using a General Two-Step Ligation Procedure. Journal of the American Chemical Society, 2008, 130, 9106-9112.	6.6	67
104	Spreading Chromatin into Chemical Biology. ChemBioChem, 2011, 12, 264-279.	1.3	67
105	Acetylation blocks DNA damageâ€"induced chromatin ADP-ribosylation. Nature Chemical Biology, 2018, 14, 837-840.	3.9	66
106	Direct Interaction between an Allosteric Agonist Pepducin and the Chemokine Receptor CXCR4. Journal of the American Chemical Society, 2011, 133, 15878-15881.	6.6	64
107	A Phosphohistidine Proteomics Strategy Based on Elucidation of a Unique Gas-Phase Phosphopeptide Fragmentation Mechanism. Journal of the American Chemical Society, 2014, 136, 12899-12911.	6.6	64
108	Chromatin landscape signals differentially dictate the activities of mSWI/SNF family complexes. Science, 2021, 373, 306-315.	6.0	64

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109	Extein Residues Play an Intimate Role in the Rate-Limiting Step of Protein <i>Trans</i>-Splicing. Journal of the American Chemical Society, 2013, 135, 5839-5847.	6.6	63
110	Naturally Split Inteins Assemble through a â€œCapture and Collapseâ€•Mechanism. Journal of the American Chemical Society, 2013, 135, 18673-18681.	6.6	63
111	Branched intermediate formation stimulates peptide bond cleavage in protein splicing. Nature Chemical Biology, 2010, 6, 527-533.	3.9	62
112	Kinetic Control of Oneâ€Pot Transâ€Splicing Reactions by Using a Wildâ€Type and Designed Split Intein. Angewandte Chemie - International Edition, 2011, 50, 6511-6515.	7.2	61
113	Histone H3K27 Trimethylation Inhibits H3 Binding and Function of SET1-Like H3K4 Methyltransferase Complexes. Molecular and Cellular Biology, 2013, 33, 4936-4946.	1.1	61
114	[29] Protein engineering by expressed protein ligation. Methods in Enzymology, 2000, 328, 478-496.	0.4	60
115	Symmetric signalling within asymmetric dimers of the <i>Staphylococcus aureus</i> receptor histidine kinase AgrC. Molecular Microbiology, 2009, 74, 44-57.	1.2	60
116	Application of the Protein Semisynthesis Strategy to the Generation of Modified Chromatin. Annual Review of Biochemistry, 2015, 84, 265-290.	5.0	60
117	A Ligation and Photorelease Strategy for the Temporal and Spatial Control of Protein Function in Living Cells. Angewandte Chemie - International Edition, 2005, 44, 5713-5717.	7.2	59
118	A Semisynthetic Strategy to Generate Phosphorylated and Acetylated Histone H2B. ChemBioChem, 2009, 10, 2182-2187.	1.3	59
119	Evidence that ubiquitylated H2B corrals hDot1L on the nucleosomal surface to induce H3K79 methylation. Nature Communications, 2016, 7, 10589.	5.8	59
120	Functional crosstalk between histone H2B ubiquitylation and H2A modifications and variants. Nature Communications, 2018, 9, 1394.	5.8	59
121	Peptide chemical ligation inside living cells: in vivo generation of a circular protein domain. Bioorganic and Medicinal Chemistry, 2001, 9, 2479-2484.	1.4	58
122	Long-term hepatitis B infection in a scalable hepatic co-culture system. Nature Communications, 2017, 8, 125.	5.8	58
123	Efficient Semisynthesis of a Tetraphosphorylated Analogue of the Type I TGFÎ² Receptor. Organic Letters, 2002, 4, 165-168.	2.4	55
124	Structural and Dynamical Features of Inteins and Implications on Protein Splicing. Journal of Biological Chemistry, 2014, 289, 14506-14511.	1.6	55
125	Semisynthesis of Hyperphosphorylated Type I TGFÎ² Receptor:Â Addressing the Mechanism of Kinase Activation. Journal of the American Chemical Society, 2000, 122, 8337-8338.	6.6	54
126	Semisynthesis of a Functional K+ Channel. Angewandte Chemie - International Edition, 2004, 43, 2504-2507.	7.2	53

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127	Structural and Functional Consequences of an Amide-to-Ester Substitution in the Selectivity Filter of a Potassium Channel. Journal of the American Chemical Society, 2006, 128, 11591-11599.	6.6	53
128	Genomic targeting of epigenetic probes using a chemically tailored Cas9 system. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 681-686.	3.3	53
129	In situ chromatin interactomics using a chemical bait and trap approach. Nature Chemistry, 2020, 12, 520-527.	6.6	53
130	Anthrax Lethal Toxin Induced Lysosomal Membrane Permeabilization and Cytosolic Cathepsin Release Is Nlrp1b/Nalp1b-Dependent. PLoS ONE, 2009, 4, e7913.	1.1	53
131	PET Imaging of Leptin Biodistribution and Metabolism in Rodents and Primates. Cell Metabolism, 2009, 10, 148-159.	7.2	52
132	Method for the Synthesis of Mono-ADP-ribose Conjugated Peptides. Journal of the American Chemical Society, 2010, 132, 15878-15880.	6.6	52
133	Semisynthetic proteins in mechanistic studies: using chemistry to go where nature canâ€™t. Current Opinion in Chemical Biology, 2006, 10, 487-491.	2.8	51
134	A Full-Length Group 1 Bacterial Sigma Factor Adopts a Compact Structure Incompatible with DNA Binding. Chemistry and Biology, 2008, 15, 1091-1103.	6.2	51
135	A basic motif anchoring ISWI to nucleosome acidic patch regulates nucleosome spacing. Nature Chemical Biology, 2020, 16, 134-142.	3.9	51
136	Segmental Isotopic Labeling Using Expressed Protein Ligation. Methods in Enzymology, 2001, 339, 41-54.	0.4	50
137	Oncohistone mutations enhance chromatin remodeling and alter cell fates. Nature Chemical Biology, 2021, 17, 403-411.	3.9	50
138	Chromatin as a key consumer in the metabolite economy. Nature Chemical Biology, 2020, 16, 620-629.	3.9	50
139	The chemical synthesis of proteins. Current Opinion in Biotechnology, 1993, 4, 420-427.	3.3	49
140	Covalent Capture of Phospho-Dependent Protein Oligomerization by Site-Specific Incorporation of a Diazirine Photo-Cross-Linker. Journal of the American Chemical Society, 2007, 129, 8068-8069.	6.6	47
141	Bisphosphoglycerate mutase controls serine pathway flux via 3-phosphoglycerate. Nature Chemical Biology, 2017, 13, 1081-1087.	3.9	47
142	Activation of an Autoregulated Protein Kinase by Conditional Protein Splicing. Angewandte Chemie - International Edition, 2004, 43, 5189-5192.	7.2	45
143	Identification of a functional hotspot on ubiquitin required for stimulation of methyltransferase activity on chromatin. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10365-10370.	3.3	44
144	A Chemical Probe for Protein Crotonylation. Journal of the American Chemical Society, 2018, 140, 4757-4760.	6.6	44

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145	Mapping the molecular interface between the Ïƒ70 subunit of E. coli RNA polymerase and T4 AsiA. Journal of Molecular Biology, 2001, 306, 631-642.	2.0	42
146	A Second-Generation Phosphohistidine Analog for Production of Phosphohistidine Antibodies. Organic Letters, 2015, 17, 187-189.	2.4	42
147	A molecular engineering toolbox for the structural biologist. Quarterly Reviews of Biophysics, 2017, 50, e7.	2.4	42
148	Single-molecule and in silico dissection of the interaction between Polycomb repressive complex 2 and chromatin. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30465-30475.	3.3	41
149	Solution Structure and Folding Characteristics of the C-Terminal SH3 Domain of c-Crk-II,. Biochemistry, 2006, 45, 8874-8884.	1.2	40
150	Intein Zymogens: Conditional Assembly and Splicing of Split Inteins via Targeted Proteolysis. Journal of the American Chemical Society, 2017, 139, 8074-8077.	6.6	39
151	Semisynthesis of Phosphovariants of Smad2 Reveals a Substrate Preference of the Activated TÎ²RI Kinase. Biochemistry, 2004, 43, 5698-5706.	1.2	38
152	Direct Measurement of Cathepsin B Activity in the Cytosol of Apoptotic Cells by an Activity-Based Probe. Chemistry and Biology, 2009, 16, 1001-1012.	6.2	36
153	Reactive intermediates for interactome mapping. Chemical Society Reviews, 2021, 50, 2911-2926.	18.7	35
154	3-Thiopropionic acid as a highly versatile multidetachable thioester resin linker. International Journal of Peptide Research and Therapeutics, 2000, 7, 17-21.	0.1	34
155	Key driving forces in the biosynthesis of autoinducing peptides required for staphylococcal virulence. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10679-10684.	3.3	34
156	Activation of the focal adhesion kinase signaling pathway by structural alterations in the carboxyl-terminal region of c-Crkâ€‰II. Oncogene, 2001, 20, 951-961.	2.6	33
157	PRC2 engages a bivalent H3K27M-H3K27me3 dinucleosome inhibitor. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22152-22157.	3.3	33
158	Synthesis of Multi-Domain Proteins Using Expressed Protein Ligation: Strategies for Segmental Isotopic Labeling of Internal Regions. Tetrahedron, 2000, 56, 9461-9470.	1.0	32
159	Histone Monoubiquitylation Position Determines Specificity and Direction of Enzymatic Cross-talk with Histone Methyltransferases Dot1L and PRC2. Journal of Biological Chemistry, 2012, 287, 23718-23725.	1.6	32
160	Increasing AIP Macrocycle Size Reveals Key Features of <i>agr</i> Activation in <i>Staphylococcus aureus</i>. ChemBioChem, 2015, 16, 1093-1100.	1.3	32
161	Protein engineering through tandem transamidation. Nature Chemistry, 2019, 11, 737-743.	6.6	32
162	The Chaperone FACT and Histone H2B Ubiquitination Maintain S.Âpombe Genome Architecture through Genic and Subtelomeric Functions. Molecular Cell, 2020, 77, 501-513.e7.	4.5	32

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163	The nucleosome acidic patch and H2A ubiquitination underlie mSWI/SNF recruitment in synovial sarcoma. Nature Structural and Molecular Biology, 2020, 27, 836-845.	3.6	32
164	Split Inteins: Natureâ€™s Protein Ligases. Israel Journal of Chemistry, 2011, 51, 854-861.	1.0	31
165	Tuning protein autoinhibition by domain destabilization. Nature Structural and Molecular Biology, 2011, 18, 550-555.	3.6	30
166	A Semisynthetic Eph Receptor Tyrosine Kinase Provides Insight into Ligand- Induced Kinase Activation. Chemistry and Biology, 2011, 18, 361-371.	6.2	30
167	Induction of innate and adaptive immunity by delivery of poly dA:dT to dendritic cells. Nature Chemical Biology, 2013, 9, 250-256.	3.9	30
168	A chemical approach to the construction of multimeric protein assemblies. Structure, 1995, 3, 649-652.	1.6	29
169	Domain-Specific Incorporation of Noninvasive Optical Probes into Recombinant Proteins. Journal of the American Chemical Society, 2004, 126, 14004-14012.	6.6	29
170	H2B ubiquitylation enhances H3K4 methylation activities of human KMT2 family complexes. Nucleic Acids Research, 2020, 48, 5442-5456.	6.5	29
171	Live-cell protein engineering with an ultra-short split intein. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12041-12049.	3.3	29
172	Fluorescent monitoring of kinase activity in real time: development of a robust fluorescence-based assay for Abl tyrosine kinase activity. Bioorganic and Medicinal Chemistry Letters, 2001, 11, 3091-3094.	1.0	28
173	Histone H3Q5 serotonylation stabilizes H3K4 methylation and potentiates its readout. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	27
174	Structure of the branched intermediate in protein splicing. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8422-8427.	3.3	26
175	DNA-guided establishment of nucleosome patterns within coding regions of a eukaryotic genome. Genome Research, 2015, 25, 1727-1738.	2.4	26
176	DOT1L complex regulates transcriptional initiation in human erythroleukemic cells. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	26
177	Synthesis of ADP-Ribosylated Histones Reveals Site-Specific Impacts on Chromatin Structure and Function. Journal of the American Chemical Society, 2021, 143, 10847-10852.	6.6	26
178	Functional Plasticity of the AgrC Receptor Histidine Kinase Required for Staphylococcal Virulence. Cell Chemical Biology, 2017, 24, 76-86.	2.5	25
179	Emerging Chemistry Strategies for Engineering Native Chromatin. Journal of the American Chemical Society, 2017, 139, 9090-9096.	6.6	25
180	Chapter 11 Semisynthesis of Ubiquitylated Proteins. Methods in Enzymology, 2009, 462, 225-243.	0.4	24

#	Article	IF	Citations
181	Segmental Isotopic Labeling for Structural Biological Applications of NMR. , 2004, 278, 047-056.		23
182	Studying protein structure and function using semisynthesis. Biopolymers, 2008, 90, 743-750.	1.2	22
183	Nucleic Acidâ€Barcoding Technologies: Converting DNA Sequencing into a Broadâ€Spectrum Molecular Counter. Angewandte Chemie - International Edition, 2019, 58, 4144-4162.	7.2	22
184	Native Chemical Ligation of Polypeptides. Current Protocols in Protein Science, 1999, 15, Unit18.4.	2.8	21
185	Tunable Photoactivation of a Postâ€translationally Modified Signaling Protein and its Unmodified Counterpart in Live Cells. ChemBioChem, 2007, 8, 2100-2105.	1.3	21
186	Single-Particle Dynamic Light Scattering: Shapes of Individual Nanoparticles. Nano Letters, 2019, 19, 5530-5536.	4.5	21
187	Synthetic, structural and biological studies of the ubiquitin system: synthesis and crystal structure of an analogue containing unnatural amino acids. Biochemical Journal, 1997, 323, 727-734.	1.7	20
188	Crosstalk among Set1 complex subunits involved in H2B ubiquitylation-dependent H3K4 methylation. Nucleic Acids Research, 2018, 46, 11129-11143.	6.5	19
189	Discovery of quorum quenchers targeting the membrane-embedded sensor domain of the<i>Staphylococcus aureus</i>receptor histidine kinase, AgrC. Chemical Communications, 2020, 56, 11223-11226.	2.2	19
190	Total Chemical Synthesis of a Folded .beta.-Sandwich Protein Domain: An Analog of the Tenth Fibronectin Type 3 Module. Journal of the American Chemical Society, 1994, 116, 10797-10798.	6.6	18
191	Identification of a Molecular Latch that Regulates Staphylococcal Virulence. Cell Chemical Biology, 2019, 26, 548-558.e4.	2.5	18
192	JASPer controls interphase histone H3S10 phosphorylation by chromosomal kinase JIL-1 in Drosophila. Nature Communications, 2019, 10, 5343.	5.8	18
193	Targeted Histone Peptides: Insights into the Spatial Regulation of the Methyltransferase PRC2 by using a Surrogate of Heterotypic Chromatin. Angewandte Chemie - International Edition, 2015, 54, 6457-6461.	7.2	16
194	Proximity Induced Splicing Utilizing Caged Split Inteins. Journal of the American Chemical Society, 2019, 141, 13708-13712.	6.6	16
195	Nucleation and Propagation of Heterochromatin by the Histone Methyltransferase PRC2: Geometric Constraints and Impact of the Regulatory Subunit JARID2. Journal of the American Chemical Society, 2019, 141, 15029-15039.	6.6	16
196	Probing the chemical basis of binding activity in an SH3 domain by protein signature analysis. Chemistry and Biology, 1996, 3, 817-825.	6.2	15
197	Improved protein splicing using embedded split inteins. Protein Science, 2018, 27, 614-619.	3.1	15
198	An Atypical Mechanism of Split Intein Molecular Recognition and Folding. Journal of the American Chemical Society, 2018, 140, 11791-11799.	6.6	15

#	Article	IF	Citations
199	Methods for the Chemical Synthesis and Readout of Self-Encoded Arrays of Polypeptide Analogues. Journal of the American Chemical Society, 1997, 119, 7917-7927.	6.6	14
200	Adding â€˜spliceâ€™ to protein engineering. Structure, 1998, 6, 951-956.	1.6	14
201	Development and Application of Expressed Protein Ligation. Synlett, 2001, 2001, 0733-0740.	1.0	14
202	An amalgamation of solid phase peptide synthesis and ribosomal peptide synthesis. Biopolymers, 2008, 90, 406-414.	1.2	14
203	3-thiopropionic acid as a highly versatile multidetachable thioester resin linker. International Journal of Peptide Research and Therapeutics, 2000, 7, 17-21.	0.1	13
204	Toward the semisynthesis of multidomain transmembrane receptors: Modification of Eph tyrosine kinases. Protein Science, 2008, 17, 1740-1747.	3.1	13
205	Studying Receptorâˆ'Ligand Interactions Using Encoded Amino Acid Scanningâ€. Biochemistry, 1998, 37, 7487-7495.	1.2	12
206	â€œThe splice is rightâ€• how protein splicing is opening new doors in protein science. Chemical Communications, 2003, , 2087-2090.	2.2	11
207	Turning virulence on and off inStaphylococci. Journal of Peptide Science, 2003, 9, 612-619.	0.8	10
208	Engineering of a Peptide Î±â€Nâ€Methyltransferase to Methylate Nonâ€Proteinogenic Amino Acids. Angewandte Chemie - International Edition, 2021, 60, 14319-14323.	7.2	10
209	Molecular Epigenetics: Chemical Biology Tools Come of Age. Annual Review of Biochemistry, 2021, 90, 287-320.	5.0	9
210	Janus Bioparticles: Asymmetric Nucleosomes and Their Preparation Using Chemical Biology Approaches. Accounts of Chemical Research, 2021, 54, 3215-3227.	7.6	8
211	Bisphosphoglycerate Mutase Deficiency Protects against Cerebral Malaria and Severe Malaria-Induced Anemia. Cell Reports, 2020, 32, 108170.	2.9	7
212	Synthesis of Oriented Hexasomes and Asymmetric Nucleosomes Using a Template Editing Process. Journal of the American Chemical Society, 2022, 144, 2284-2291.	6.6	5
213	Cutting out the middle man. Nature, 2006, 442, 517-518.	13.7	4
214	A Genetically Encoded Approach for Breaking Chromatin Symmetry. ACS Central Science, 2022, 8, 176-183.	5.3	4
215	Chemical Biology in a Time of Transition. ACS Chemical Biology, 2009, 4, 241-243.	1.6	3
216	From EPOthilone to EPO: A challenge for natural product synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7134-7135.	3.3	3

#	Article	IF	Citations
217	Introduction of unnatural amino acids into proteins using expressed protein ligation. , 1999, 51, 343.		3
218	Segmental Isotopic Labeling: Prospects for a New Tool to Study the Structure-function Relationships in Multi-domain Proteins. , 2002, , 35-51.		3
219	[24] Protein signature analysis: A practical new approach for studying structure-activity relationships in peptides and proteins. Methods in Enzymology, 1997, 289, 545-564.	0.4	2
220	Systems- and Molecular-Level Elucidation of Signaling Processes Through Chemistry. Science Signaling, 2008, 1, pe45.	1.6	2
221	Determining the Spheroid Geometry of Individual Metallic Nanoparticles by Two-Dimensional Single-Particle Dynamic Light Scattering. Journal of Physical Chemistry C, 2019, 123, 18565-18572.	1.5	2
222	Barcoding mit NukleinsÃuren: Anwendung der DNAâ€Sequenzierung als molekulares ZÃhlwerk. Angewandte Chemie, 2019, 131, 4188-4207.	1.6	2
223	Chemical biology approaches to study histone interactors. Biochemical Society Transactions, 2021, 49, 2431-2441.	1.6	2
224	Preface. Methods in Enzymology, 2009, 462, xiii-xv.	0.4	1
225	Identification of ligand specificity determinants in AgrC, the Staphylococcus aureus quorum-sensing receptor.. Journal of Biological Chemistry, 2012, 287, 18588.	1.6	1
226	Structural and dynamical features of inteins and implications on protein splicing.. Journal of Biological Chemistry, 2014, 289, 19278.	1.6	1
227	Biopolymers. Current Opinion in Chemical Biology, 2005, 9, 545-547.	2.8	0
228	2005 Irving Sigal Young Investigator Award. Protein Science, 2005, 14, 3140-3144.	3.1	0
229	Engineering of a Peptide Î±â€Nâ€Methyltransferase to Methylate Nonâ€Proteinogenic Amino Acids. Angewandte Chemie, 2021, 133, 14440-14444.	1.6	0
230	Fluorescent Biosensor for CrkII Phosphorylation by the Abl Tyrosine Kinase. , 2001, , 992-993.		0
231	EXPLORING CHROMATIN BIOLOGY USING PROTEIN CHEMISTRY. , 2014, , .		0
232	Studying receptor-ligand interactions using encoded amino acid scanning. , 2002, , 61-62.		0
233	Expressed protein ligation: A new tool for studying protein structure and function. , 2002, , 487-489.		0