Ronald T Raines

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1035730/publications.pdf

Version: 2024-02-01

417 papers	33,593 citations	3726 89 h-index	5118 166 g-index
440 all docs	440 docs citations	440 times ranked	29934 citing authors

#	Article	IF	Citations
1	Collagen Structure and Stability. Annual Review of Biochemistry, 2009, 78, 929-958.	5.0	2,705
2	Simple Chemical Transformation of Lignocellulosic Biomass into Furans for Fuels and Chemicals. Journal of the American Chemical Society, 2009, 131, 1979-1985.	6.6	1,343
3	Bright Ideas for Chemical Biology. ACS Chemical Biology, 2008, 3, 142-155.	1.6	1,085
4	Ribonuclease A. Chemical Reviews, 1998, 98, 1045-1066.	23.0	940
5	Collagenâ€based biomaterials for wound healing. Biopolymers, 2014, 101, 821-833.	1.2	731
6	Hydrolytic Stability of Hydrazones and Oximes. Angewandte Chemie - International Edition, 2008, 47, 7523-7526.	7.2	709
7	Prolyl 4-hydroxylase. Critical Reviews in Biochemistry and Molecular Biology, 2010, 45, 106-124.	2.3	514
8	Staudinger Ligation:â€‰ A Peptide from a Thioester and Azide. Organic Letters, 2000, 2, 1939-1941.	2.4	482
9	Code for collagen's stability deciphered. Nature, 1998, 392, 666-667.	13.7	479
10	Fermentable sugars by chemical hydrolysis of biomass. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4516-4521.	3.3	429
11	Conformational Stability of Collagen Relies on a Stereoelectronic Effect. Journal of the American Chemical Society, 2001, 123, 777-778.	6.6	414
12	Bright Building Blocks for Chemical Biology. ACS Chemical Biology, 2014, 9, 855-866.	1.6	413
13	Pathway for Polyarginine Entry into Mammalian Cellsâ€. Biochemistry, 2004, 43, 2438-2444.	1.2	347
14	The nâ†'Ï€* Interaction. Accounts of Chemical Research, 2017, 50, 1838-1846.	7.6	340
15	nâ†'Ï€* interactions in proteins. Nature Chemical Biology, 2010, 6, 615-620.	3.9	323
16	Collagen Stability:Â Insights from NMR Spectroscopic and Hybrid Density Functional Computational Investigations of the Effect of Electronegative Substituents on Prolyl Ring Conformations. Journal of the American Chemical Society, 2002, 124, 2497-2505.	6.6	318
17	Advances in Bioconjugation. Current Organic Chemistry, 2010, 14, 138-147.	0.9	315
18	Chemical Synthesis of Proteins. Annual Review of Biophysics and Biomolecular Structure, 2005, 34, 91-118.	18.3	290

#	Article	IF	Citations
19	Self-assembly of synthetic collagen triple helices. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3028-3033.	3.3	281
20	Triosephosphate isomerase catalysis is diffusion controlled. Biochemistry, 1988, 27, 1158-1165.	1.2	277
21	Selenocysteine in Native Chemical Ligation and Expressed Protein Ligation. Journal of the American Chemical Society, 2001, 123, 5140-5141.	6.6	263
22	Nature of Amide Carbonylâ^'Carbonyl Interactions in Proteins. Journal of the American Chemical Society, 2009, 131, 7244-7246.	6.6	260
23	The CXXC Motif:â€‰ A Rheostat in the Active Site. Biochemistry, 1997, 36, 4061-4066.	1.2	255
24	Increasing the secretory capacity of Saccharomyces cerevisiae for production of single-chain antibody fragments. Nature Biotechnology, 1998, 16, 773-777.	9.4	244
25	An electronic effect on protein structure. Protein Science, 2003, 12, 1188-1194.	3.1	243
26	A hyperstable collagen mimic. Chemistry and Biology, 1999, 6, 63-70.	6.2	241
27	High-Yielding Staudinger Ligation of a Phosphinothioester and Azide To Form a Peptide. Organic Letters, 2001, 3, 9-12.	2.4	234
28	Synthesis of Furfural from Xylose and Xylan. ChemSusChem, 2010, 3, 1268-1272.	3.6	230
29	Site-Specific Protein Immobilization by Staudinger Ligation. Journal of the American Chemical Society, 2003, 125, 11790-11791.	6.6	228
30	Inductive Effects on the Energetics of Prolyl Peptide Bond Isomerization:Â Implications for Collagen Folding and Stability. Journal of the American Chemical Society, 1996, 118, 12261-12266.	6.6	226
31	Translocation of a Î²-Peptide Across Cell Membranes. Journal of the American Chemical Society, 2002, 124, 368-369.	6.6	226
32	Insights on the conformational stability of collagen. Natural Product Reports, 2002, 19, 49-59.	5.2	213
33	Boronate-Mediated Biologic Delivery. Journal of the American Chemical Society, 2012, 134, 3631-3634.	6.6	208
34	Biomass to Furanics: Renewable Routes to Chemicals and Fuels. ACS Sustainable Chemistry and Engineering, 2015, 3, 2591-2605.	3.2	207
35	An Evaluation of Peptideâ€Bond Isosteres. ChemBioChem, 2011, 12, 1801-1807.	1.3	205
36	Protein Prosthesis:â€‰ 1,5-Disubstituted[1,2,3]triazoles as cis-Peptide Bond Surrogates. Journal of the American Chemical Society, 2007, 129, 12670-12671.	6.6	196

#	Article	IF	Citations
37	The Essential Function of Protein-disulfide Isomerase Is to Unscramble Non-native Disulfide Bonds. Journal of Biological Chemistry, 1995, 270, 28006-28009.	1.6	192
38	Fluorogenic Label for Biomolecular Imaging. ACS Chemical Biology, 2006, 1, 252-260.	1.6	183
39	Cancer chemotherapy â€“ ribonucleases to the rescue. Chemistry and Biology, 2001, 8, 405-413.	6.2	181
40	Stereoelectronic effects on polyproline conformation. Protein Science, 2006, 15, 74-83.	3.1	181
41	Ribonuclease Sâ€peptide as a carrier in fusion proteins. Protein Science, 1993, 2, 348-356.	3.1	178
42	nâ†'Ï€* Interactions of Amides and Thioamides: Implications for Protein Stability. Journal of the American Chemical Society, 2013, 135, 7843-7846.	6.6	175
43	Stereoelectronic Effects on Collagen Stability:Â The Dichotomy of 4-Fluoroproline Diastereomers. Journal of the American Chemical Society, 2003, 125, 9262-9263.	6.6	174
44	Ribonuclease Inhibitor: Structure and Function. Progress in Molecular Biology and Translational Science, 2005, 80, 349-374.	1.9	171
45	Mechanistic insights on the conversion of sugars into 5-hydroxymethylfurfural. Energy and Environmental Science, 2010, 3, 765.	15.6	170
46	Microscopic pKaValues ofEscherichia coliThioredoxinâ€. Biochemistry, 1997, 36, 14985-14991.	1.2	165
47	Diazo Compounds: Versatile Tools for Chemical Biology. ACS Chemical Biology, 2016, 11, 3233-3244.	1.6	164
48	Evolutionary optimization of the catalytic effectiveness of an enzyme. Biochemistry, 1989, 28, 9293-9305.	1.2	163
49	Bovine Pancreatic Ribonuclease: Fifty Years of the First Enzymatic Reaction Mechanism. Biochemistry, 2011, 50, 7835-7841.	1.2	163
50	Reaction Mechanism and Kinetics of the Traceless Staudinger Ligation. Journal of the American Chemical Society, 2006, 128, 8820-8828.	6.6	157
51	Stereoelectronic and steric effects in side chains preorganize a protein main chain. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 559-564.	3.3	154
52	Stereoelectronic and Steric Effects in the Collagen Triple Helix:Â Toward a Code for Strand Association. Journal of the American Chemical Society, 2005, 127, 15923-15932.	6.6	143
53	Value of General Acid-Base Catalysis to Ribonuclease A. Journal of the American Chemical Society, 1994, 116, 5467-5468.	6.6	140
54	Effect of 3-Hydroxyproline Residues on Collagen Stability. Journal of the American Chemical Society, 2003, 125, 6422-6427.	6.6	138

#	Article	IF	Citations
55	Tuning the pK_aof Fluorescein to Optimize Binding Assays. Analytical Chemistry, 2007, 79, 6775-6782.	3.2	138
56	Contribution of disulfide bonds to the conformational stability and catalytic activity of ribonuclease A. FEBS Journal, 2000, 267, 566-572.	0.2	136
57	Structural Determinants of Enzymic Processivity. Biochemistry, 1994, 33, 6031-6037.	1.2	133
58	Protein Assembly by Orthogonal Chemical Ligation Methods. Journal of the American Chemical Society, 2003, 125, 5268-5269.	6.6	133
59	Reciprocity of Steric and Stereoelectronic Effects in the Collagen Triple Helix. Journal of the American Chemical Society, 2006, 128, 8112-8113.	6.6	131
60	Inhibition of Human Pancreatic Ribonuclease by the Human Ribonuclease Inhibitor Protein. Journal of Molecular Biology, 2007, 368, 434-449.	2.0	130
61	Enzyme-Activated Fluorogenic Probes for Live-Cell and in Vivo Imaging. ACS Chemical Biology, 2018, 13, 1810-1823.	1.6	130
62	Stabilization of the Collagen Triple Helix byO-Methylation of Hydroxyproline Residues. Journal of the American Chemical Society, 2008, 130, 2952-2953.	6.6	129
63	Amide-Amide and Amide-Water Hydrogen Bonds: Implications for Protein Folding and Stability. Journal of the American Chemical Society, 1994, 116, 2149-2150.	6.6	126
64	Energetics of Catalysis by Ribonucleases: Fate of the 2',3'-Cyclic Phosphodiester Intermediate. Biochemistry, 1994, 33, 7408-7414.	1.2	121
65	Energetics of annâ†'Ï€* Interaction that Impacts Protein Structure. Organic Letters, 2006, 8, 4695-4697.	2.4	121
66	Interplay of Hydrogen Bonds and nâ†'Ï€* Interactions in Proteins. Journal of the American Chemical Society, 2013, 135, 18682-18688.	6.6	121
67	Ï€ Pauli Repulsion Are Antagonistic for Protein Stability. Journal of the American Chemical Society, 2010, 132, 6651-6653.	6.6	120
68	Olefin metathesis for chemical biology. Current Opinion in Chemical Biology, 2008, 12, 767-773.	2.8	119
69	Protein Prosthesis:â€‰ A Semisynthetic Enzyme with a Î²-Peptide Reverse Turn. Journal of the American Chemical Society, 2002, 124, 8522-8523.	6.6	117
70	Reaction energetics of a mutant triose phosphate isomerase in which the active-site glutamate has been changed to aspartate. Biochemistry, 1986, 25, 7142-7154.	1.2	116
71	Ribonuclease A: Revealing Structure-Function Relationships with Semisynthesis. Journal of the American Chemical Society, 1995, 117, 8057-8060.	6.6	115
72	Inductive effects on the structure of proline residues. International Journal of Peptide and Protein Research, 1994, 44, 262-269.	0.1	115

#	Article	IF	Citations
73	Secondary Forces in Protein Folding. ACS Chemical Biology, 2019, 14, 1677-1686.	1.6	115
74	Ribonuclease inhibitor as an intracellular sentry. Nucleic Acids Research, 2003, 31, 1024-1032.	6.5	114
75	Cytosolic Delivery of Proteins by Bioreversible Esterification. Journal of the American Chemical Society, 2017, 139, 14396-14398.	6.6	114
76	General Acid/Base Catalysis in the Active Site ofEscherichia coliThioredoxinâ€. Biochemistry, 1997, 36, 15810-15816.	1.2	113
77	Trimethyl lock: a trigger for molecular release in chemistry, biology, and pharmacology. Chemical Science, 2012, 3, 2412.	3.7	113
78	Engineering ribonuclease A: production, purification and characterization of wild-type enzyme and mutants at Gln11. Protein Engineering, Design and Selection, 1995, 8, 261-273.	1.0	112
79	Native disulfide bond formation in proteins. Current Opinion in Chemical Biology, 2000, 4, 533-539.	2.8	110
80	Solvent effects on the energetics of prolyl peptide bond isomerization. Journal of the American Chemical Society, 1992, 114, 5437-5439.	6.6	109
81	A Potent, Versatile Disulfide-Reducing Agent from Aspartic Acid. Journal of the American Chemical Society, 2012, 134, 4057-4059.	6.6	106
82	Imaging the Binding Ability of Proteins Immobilized on Surfaces with Different Orientations by Using Liquid Crystals. Journal of the American Chemical Society, 2004, 126, 9024-9032.	6.6	105
83	Polyarginine as a multifunctional fusion tag. Protein Science, 2009, 14, 1538-1544.	3.1	103
84	Latent Fluorophore Based on the Trimethyl Lock. Journal of the American Chemical Society, 2005, 127, 1652-1653.	6.6	99
85	Secretory ribonucleases are internalized by a dynamin-independent endocytic pathway. Journal of Cell Science, 2003, 116, 313-324.	1.2	98
86	Staudinger Ligation of Î±-Azido Acids Retains Stereochemistry. Journal of Organic Chemistry, 2002, 67, 4993-4996.	1.7	96
87	Olefin Metathesis in Homogeneous Aqueous Media Catalyzed by Conventional Ruthenium Catalysts. Organic Letters, 2007, 9, 4885-4888.	2.4	96
88	Ribonucleases as Novel Chemotherapeutics. BioDrugs, 2008, 22, 53-58.	2.2	96
89	Chemoselectivity in Chemical Biology: Acyl Transfer Reactions with Sulfur and Selenium. Accounts of Chemical Research, 2011, 44, 752-761.	7.6	95
90	Water-Soluble Phosphinothiols for Traceless Staudinger Ligation and Integration with Expressed Protein Ligation. Journal of the American Chemical Society, 2007, 129, 11421-11430.	6.6	94

#	Article	IF	Citations
91	Evasion of Ribonuclease Inhibitor as a Determinant of Ribonuclease Cytotoxicity. Current Pharmaceutical Biotechnology, 2008, 9, 185-199.	0.9	93
92	A Phosphineâ€Mediated Conversion of Azides into Diazo Compounds. Angewandte Chemie - International Edition, 2009, 48, 2359-2363.	7.2	93
93	Intimate Interactions with Carbonyl Groups: Dipoleâ€“Dipole or nâ†'Ï€*?. Journal of Organic Chemistry, 2013, 78, 2099-2103.	1.7	91
94	A prevalent intraresidue hydrogen bond stabilizes proteins. Nature Chemical Biology, 2016, 12, 1084-1088.	3.9	91
95	Kinetics and thermodynamics of the interaction of 5-fluoro-2'-deoxyuridylate with thymidylate synthase. Biochemistry, 1987, 26, 8606-8613.	1.2	90
96	Mechanism of Ribonuclease Cytotoxicity. Journal of Biological Chemistry, 1995, 270, 31097-31102.	1.6	88
97	Limits to Catalysis by Ribonuclease A. Bioorganic Chemistry, 1995, 23, 471-481.	2.0	87
98	The CXC Motif:Â A Functional Mimic of Protein Disulfide Isomeraseâ€. Biochemistry, 2003, 42, 5387-5394.	1.2	87
99	Conformational Stability Is a Determinant of Ribonuclease A Cytotoxicity. Journal of Biological Chemistry, 2000, 275, 17463-17467.	1.6	86
100	Identifying Latent Enzyme Activities:Â Substrate Ambiguity within Modern Bacterial Sugar Kinasesâ€. Biochemistry, 2004, 43, 6387-6392.	1.2	86
101	Synthesis and utility of fluorogenic acetoxymethyl ethers. Chemical Science, 2011, 2, 521-530.	3.7	82
102	Signatures of nâ†'Ï€* interactions in proteins. Protein Science, 2014, 23, 284-288.	3.1	82
103	Quantitative Analysis of the Effect of Salt Concentration on Enzymatic Catalysis. Journal of the American Chemical Society, 2001, 123, 11472-11479.	6.6	80
104	Peptide Bond Isosteres:â€‰ Ester or (E)-Alkene in the Backbone of the Collagen Triple Helix. Organic Letters, 2005, 7, 2619-2622.	2.4	80
105	A small-molecule catalyst of protein folding in vitro and in vivo. Chemistry and Biology, 1999, 6, 871-879.	6.2	79
106	Endowing Human Pancreatic Ribonuclease with Toxicity for Cancer Cells. Journal of Biological Chemistry, 2001, 276, 43095-43102.	1.6	78
107	Semisynthesis and Characterization of Mammalian Thioredoxin Reductaseâ€. Biochemistry, 2006, 45, 5158-5170.	1.2	78
108	Salicylaldimine Ruthenium Alkylidene Complexes: Metathesis Catalysts Tuned for Protic Solvents. Advanced Synthesis and Catalysis, 2007, 349, 395-404.	2.1	77

#	Article	IF	Citations
109	Catalysis of imido group hydrolysis in a maleimide conjugate. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 6286-6289.	1.0	77
110	HisÂ·Â·Â·Asp Catalytic Dyad of Ribonuclease A:Â Structure and Function of the Wild-Type, D121N, and D121A Enzymesâ€. Biochemistry, 1998, 37, 8886-8898.	1.2	76
111	4â€Chloroprolines: Synthesis, conformational analysis, and effect on the collagen triple helix. Biopolymers, 2008, 89, 443-454.	1.2	76
112	Coulombic Effects of Remote Subsites on the Active Site of Ribonuclease A. Biochemistry, 1998, 37, 17386-17401.	1.2	75
113	Arginine Grafting to Endow Cell Permeability. ACS Chemical Biology, 2007, 2, 167-170.	1.6	75
114	Peptide tessellation yields micrometre-scale collagen triple helices. Nature Chemistry, 2016, 8, 1008-1014.	6.6	75
115	Diazo compounds for the bioreversible esterification of proteins. Chemical Science, 2015, 6, 752-755.	3.7	74
116	Organocatalytic conversion of cellulose into a platform chemical. Chemical Science, 2013, 4, 196-199.	3.7	73
117	General Method for Site-Specific Protein Immobilization by Staudinger Ligation. Bioconjugate Chemistry, 2007, 18, 1064-1069.	1.8	72
118	Optimized Diazo Scaffold for Protein Esterification. Organic Letters, 2015, 17, 2358-2361.	2.4	72
119	Diazo Groups Endure Metabolism and Enable Chemoselectivity in Cellulo. Journal of the American Chemical Society, 2015, 137, 2412-2415.	6.6	69
120	Analysis of Receptor-Ligand Interactions. Journal of Chemical Education, 1995, 72, 119.	1.1	67
121	Structural Basis for the Biological Activities of Bovine Seminal Ribonuclease. Journal of Biological Chemistry, 1995, 270, 10525-10530.	1.6	66
122	Contribution of Active-Site Residues to the Function of Onconase, a Ribonuclease with Antitumoral Activity. Biochemistry, 2003, 42, 11443-11450.	1.2	66
123	Thioamides in the collagen triple helix. Chemical Communications, 2015, 51, 9624-9627.	2.2	66
124	The Aberrance of the 4SDiastereomer of 4-Hydroxyproline. Journal of the American Chemical Society, 2010, 132, 10857-10865.	6.6	65
125	Catalysis of Protein Folding by Protein Disulfide Isomerase and Small-Molecule Mimics. Antioxidants and Redox Signaling, 2003, 5, 413-424.	2.5	64
126	Annâ†'Ï€* Interaction in Aspirin: Implications for Structure and Reactivity. Journal of Organic Chemistry, 2011, 76, 7933-7937.	1.7	64

#	Article	IF	Citations
127	Diazo compounds as highly tunable reactants in 1,3-dipolar cycloaddition reactions with cycloalkynes. Chemical Science, 2012, 3, 3237.	3.7	64
128	Genetic selection for dissociative inhibitors of designated proteinâ€“protein interactions. Nature Biotechnology, 2000, 18, 847-851.	9.4	63
129	Protein Prosthesis:Â A Nonnatural Residue Accelerates Folding and Increases Stability. Journal of the American Chemical Society, 2003, 125, 7500-7501.	6.6	63
130	Conversion of biomass to sugars via ionic liquid hydrolysis: process synthesis and economic evaluation. Biofuels, Bioproducts and Biorefining, 2012, 6, 444-452.	1.9	63
131	Potent Inhibition of Ribonuclease A by Oligo(vinylsulfonic Acid). Journal of Biological Chemistry, 2003, 278, 20934-20938.	1.6	62
132	Conversion of Fructose into 5â€(Hydroxymethyl)furfural in Sulfolane. ChemSusChem, 2011, 4, 353-356.	3.6	62
133	Substituted 2-Azabicyclo[2.1.1]hexanes as Constrained Proline Analogues:â€‰ Implications for Collagen Stability. Journal of Organic Chemistry, 2004, 69, 8565-8573.	1.7	61
134	Reactivity of Intein Thioesters: Appending a Functional Group to a Protein. ChemBioChem, 2006, 7, 1375-1383.	1.3	61
135	Dimer formation by a â€œmonomericâ€•protein. Protein Science, 2000, 9, 2026-2033.	3.1	60
136	Self-assembled collagen-like peptide fibers as templates for metallic nanowires. Journal of Materials Chemistry, 2008, 18, 3865.	6.7	60
137	A Residue to Residue Hydrogen Bond Mediates the Nucleotide Specificity of Ribonuclease A. Journal of Molecular Biology, 1995, 252, 328-336.	2.0	59
138	Coulombic Forces in Proteinâ˜'RNA Interactions:Â Binding and Cleavage by Ribonuclease A and Variants at Lys7, Arg10, and Lys66â€. Biochemistry, 1998, 37, 12121-12132.	1.2	59
139	1,3-Dipolar Cycloadditions of Diazo Compounds in the Presence of Azides. Organic Letters, 2016, 18, 1538-1541.	2.4	59
140	The Ribonucleolytic Activity of Angiogenin. Biochemistry, 2002, 41, 1343-1350.	1.2	58
141	Signature of nâ†'Ï€* interactions in Î±â€helices. Protein Science, 2011, 20, 1077-1081.	3.1	58
142	A Key nâ†'Ï€* Interaction in N-Acyl Homoserine Lactones. ACS Chemical Biology, 2014, 9, 880-883.	1.6	58
143	Using Measurements of Anchoring Energies of Liquid Crystals on Surfaces To Quantify Proteins Captured by Immobilized Ligands. Journal of the American Chemical Society, 2007, 129, 11223-11231.	6.6	57
144	nâ†'Ï€* interactions in poly(lactic acid) suggest a role in protein folding. Chemical Communications, 2013, 49, 7699.	2.2	57

#	Article	IF	Citations
145	[23] The SÂ·tag fusion system for protein purification. Methods in Enzymology, 2000, 326, 362-376.	0.4	56
146	Disruption of Shape-Complementarity Markers to Create Cytotoxic Variants of Ribonuclease A. Journal of Molecular Biology, 2005, 354, 41-54.	2.0	56
147	Structures of the Noncanonical RNA Ligase RtcB Reveal the Mechanism of Histidine Guanylylation. Biochemistry, 2013, 52, 2518-2525.	1.2	56
148	Functional Evolution of Ribonuclease Inhibitor: Insights from Birds and Reptiles. Journal of Molecular Biology, 2014, 426, 3041-3056.	2.0	56
149	Substrate Binding and Turnover by the Highly Specific I-PpoI Endonucleaseâ€. Biochemistry, 1996, 35, 1076-1083.	1.2	54
150	A Ribonuclease A Variant with Low Catalytic Activity but High Cytotoxicity. Journal of Biological Chemistry, 2000, 275, 9893-9896.	1.6	54
151	A synapomorphic disulfide bond is critical for the conformational stability and cytotoxicity of an amphibian ribonuclease. FEBS Letters, 2000, 477, 203-207.	1.3	54
152	Contrast Agents for Magnetic Resonance Imaging Synthesized with Ring-Opening Metathesis Polymerization. Journal of the American Chemical Society, 2006, 128, 6534-6535.	6.6	54
153	Staudinger Ligation of Peptides at Non-Glycyl Residues. Journal of Organic Chemistry, 2006, 71, 9824-9830.	1.7	54
154	Fine-Tuning Strain and Electronic Activation of Strain-Promoted 1,3-Dipolar Cycloadditions with Endocyclic Sulfamates in SNO-OCTs. Journal of the American Chemical Society, 2017, 139, 8029-8037.	6.6	54
155	A Boronic Acid Conjugate of Angiogenin that Shows ROSâ€Responsive Neuroprotective Activity. Angewandte Chemie - International Edition, 2017, 56, 2619-2622.	7.2	53
156	A New Remote Subsite in Ribonuclease A. Journal of Biological Chemistry, 1998, 273, 34134-34138.	1.6	52
157	Cytotoxic Ribonucleases:â€‰ The Dichotomy of Coulombic Forces. Biochemistry, 2007, 46, 10308-10316.	1.2	52
158	Interaction of Nucleic Acids with the Glycocalyx. Journal of the American Chemical Society, 2012, 134, 6218-6223.	6.6	52
159	Structural Basis for Catalysis by Onconase. Journal of Molecular Biology, 2008, 375, 165-177.	2.0	51
160	His ... Asp Catalytic Dyad of Ribonuclease A: Histidine pKa Values in the Wild-Type, D121N, and D121A Enzymes. Biophysical Journal, 1999, 76, 1571-1579.	0.2	50
161	Mechanism of Ribonuclease A Endocytosis: Analogies to Cell-Penetrating Peptides. Biochemistry, 2011, 50, 8374-8382.	1.2	50
162	A tRNA splicing operon: Archease endows RtcB with dual GTP/ATP cofactor specificity and accelerates RNA ligation. Nucleic Acids Research, 2014, 42, 3931-3942.	6.5	50

#	Article	IF	Citations
163	Molecular basis for the autonomous promotion of cell proliferation by angiogenin. Nucleic Acids Research, 2017, 45, 818-831.	6.5	50
164	Cytotoxicity of Bovine Seminal Ribonuclease:Â Monomer versus Dimerâ€. Biochemistry, 2005, 44, 15760-15767.	1.2	49
165	Origin of the stability conferred upon collagen by fluorination. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 3859-3862.	1.0	49
166	Mechanism-based inactivation of ribonuclease A. Journal of Organic Chemistry, 1995, 60, 6930-6936.	1.7	48
167	Adjacent cysteine residues as a redox switch. Protein Engineering, Design and Selection, 2001, 14, 939-942.	1.0	48
168	Activation of the Prolyl Hydroxylase Oxygen-sensor Results in Induction of GLUT1, Heme Oxygenase-1, and Nitric-oxide Synthase Proteins and Confers Protection from Metabolic Inhibition to Cardiomyocytes. Journal of Biological Chemistry, 2003, 278, 20235-20239.	1.6	48
169	A Stereoelectronic Effect in Prebiotic Nucleotide Synthesis. ACS Chemical Biology, 2010, 5, 655-657.	1.6	48
170	Boronic Acid for the Traceless Delivery of Proteins into Cells. ACS Chemical Biology, 2016, 11, 319-323.	1.6	48
171	Collagen Prolyl 4-Hydroxylase as a Therapeutic Target. Journal of Medicinal Chemistry, 2018, 61, 10403-10411.	2.9	48
172	Catalysis by Ribonuclease A Is Limited by the Rate of Substrate Association. Biochemistry, 2003, 42, 3509-3518.	1.2	47
173	Tunable, Post-translational Hydroxylation of Collagen Domains in Escherichia coli. ACS Chemical Biology, 2011, 6, 320-324.	1.6	47
174	Glycosylation of onconase increases its conformational stability and toxicity for cancer cells. Biochemical and Biophysical Research Communications, 2004, 315, 976-983.	1.0	46
175	Contribution of the Active Site Histidine Residues of Ribonuclease A to Nucleic Acid Binding. Biochemistry, 2001, 40, 4949-4956.	1.2	45
176	Onconase cytotoxicity relies on the distribution of its positive charge. FEBS Journal, 2009, 276, 3846-3857.	2.2	45
177	Sub-picomolar Inhibition of HIV-1 Protease with a Boronic Acid. Journal of the American Chemical Society, 2018, 140, 14015-14018.	6.6	45
178	nâ†'Ï€* Interactions Engender Chirality in Carbonyl Groups. Organic Letters, 2014, 16, 3421-3423.	2.4	44
179	Anchoring a cytoactive factor in a wound bed promotes healing. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, 1012-1020.	1.3	44
180	Replacing a Surface Loop Endows Ribonuclease A with Angiogenic Activity. Journal of Biological Chemistry, 1995, 270, 17180-17184.	1.6	43

#	Article	IF	Citations
181	Creation of a zymogen. Nature Structural Biology, 2003, 10, 115-119.	9.7	43
182	Decavanadate Inhibits Catalysis by Ribonuclease A. Archives of Biochemistry and Biophysics, 2000, 381, 25-30.	1.4	42
183	O-acylation of hydroxyproline residues: Effect on peptide-bond isomerization and collagen stability. Biopolymers, 2005, 80, 1-8.	1.2	42
184	Reconstitution of a Defunct Glycolytic Pathway via Recruitment of Ambiguous Sugar Kinasesâ€. Biochemistry, 2005, 44, 10776-10783.	1.2	42
185	Latent Blue and Red Fluorophores Based on the Trimethyl Lock. ChemBioChem, 2006, 7, 1151-1154.	1.3	42
186	nâ†'Ï€* Interactions Modulate the Properties of Cysteine Residues and Disulfide Bonds in Proteins. Journal of the American Chemical Society, 2018, 140, 17606-17611.	6.6	42
187	Contribution of a tyrosine side chain to ribonuclease A catalysis and stabilityâ€“Contribution of Tyr 97 to RNase A catalysis and stability. Protein Science, 1996, 5, 1697-1703.	3.1	41
188	Pentavalent Organo-Vanadates as Transition State Analogues for Phosphoryl Transfer Reactions. Journal of the American Chemical Society, 2000, 122, 9911-9916.	6.6	41
189	X-ray Structure of Two Crystalline Forms of aStreptomycete Ribonuclease with Cytotoxic Activity. Journal of Biological Chemistry, 2002, 277, 47325-47330.	1.6	41
190	Ribonuclease Inhibitor Regulates Neovascularization by Human Angiogenin. Biochemistry, 2009, 48, 3804-3806.	1.2	41
191	Boronic acid with high oxidative stability and utility in biological contexts. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	41
192	Semisynthesis of Proteins Containing Selenocysteine. Methods in Enzymology, 2002, 347, 70-83.	0.4	40
193	Conversion of Azides into Diazo Compounds in Water. Journal of the American Chemical Society, 2013, 135, 14936-14939.	6.6	40
194	4-Fluoroprolines: Conformational Analysis and Effects on the Stability and Folding of Peptides and Proteins. Topics in Heterocyclic Chemistry, 2016, 48, 1-25.	0.2	40
195	HisÂ·Â·Â·Asp Catalytic Dyad of Ribonuclease A:Â Conformational Stability of the Wild-Type, D121N, D121A, and H119A Enzymesâ€. Biochemistry, 1998, 37, 17958-17964.	1.2	39
196	Characterization of Protein Immobilization at Silver Surfaces by Near Edge X-ray Absorption Fine Structure Spectroscopy. Langmuir, 2006, 22, 7719-7725.	1.6	39
197	Cellular Uptake of Ribonuclease A Relies on Anionic Glycans. Biochemistry, 2010, 49, 10666-10673.	1.2	39
198	Peptides that anneal to natural collagen in vitro and ex vivo. Organic and Biomolecular Chemistry, 2012, 10, 5892.	1.5	39

#	Article	IF	Citations
199	Human angiogenin is a potent cytotoxin in the absence of ribonuclease inhibitor. Rna, 2018, 24, 1018-1027.	1.6	39
200	Stereoelectronic Effects Impact Glycan Recognition. Journal of the American Chemical Society, 2020, 142, 2386-2395.	6.6	39
201	Chemical Mechanism of DNA Cleavage by the Homing Endonuclease I-Ppolâ€. Biochemistry, 1999, 38, 16178-16186.	1.2	37
202	Structure and Function of Bacillus subtilis YphP, a Prokaryotic Disulfide Isomerase with a CXC Catalytic Motif,. Biochemistry, 2009, 48, 8664-8671.	1.2	37
203	nâ†'Ï€* Interactions Are Competitive with Hydrogen Bonds. Organic Letters, 2016, 18, 3614-3617.	2.4	37
204	KFERQ Sequence in Ribonuclease A-mediated Cytotoxicity. Journal of Biological Chemistry, 2002, 277, 11576-11581.	1.6	36
205	2005 Emil Thomas Kaiser Award. Protein Science, 2006, 15, 1219-1225.	3.1	36
206	Green fluorescent protein as a signal for proteinâ€“protein interactions. Protein Science, 1997, 6, 2344-2349.	3.1	36
207	Conformational Preferences of Substrates for Human Prolyl 4-Hydroxylase. Biochemistry, 2008, 47, 9447-9455.	1.2	36
208	Comparative functional analysis of ribonuclease 1 homologs: molecular insights into evolving vertebrate physiology. Biochemical Journal, 2017, 474, 2219-2233.	1.7	36
209	Degenerate DNA recognition by I-PpoI endonuclease. Gene, 1998, 206, 11-21.	1.0	35
210	A highly sensitive fluorogenic probe for cytochrome P450 activity in live cells. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5864-5866.	1.0	35
211	Separation of Lignin from Corn Stover Hydrolysate with Quantitative Recovery of Ionic Liquid. ACS Sustainable Chemistry and Engineering, 2015, 3, 606-613.	3.2	35
212	Thermodynamic origin of prolyl peptide bond isomers. Tetrahedron Letters, 1993, 34, 3055-3056.	0.7	34
213	ROMP from ROMP: A New Approach to Graft Copolymer Synthesis. Macromolecules, 2009, 42, 4023-4027.	2.2	34
214	Optimal Interstrand Bridges for Collagen-like Biomaterials. Journal of the American Chemical Society, 2014, 136, 13490-13493.	6.6	34
215	Hox genes maintain critical roles in the adult skeleton. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7296-7304.	3.3	34
216	Click Chemistry with Cyclopentadiene. Chemical Reviews, 2021, 121, 6777-6801.	23.0	34

#	Article	IF	Citations
217	Comprehensive comparison of the cytotoxic activities of onconase and bovine seminal ribonuclease. Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology, 2003, 136, 343-356.	1.3	33
218	Target selection by natural and redesigned PUF proteins. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15868-15873.	3.3	33
219	Esterification Delivers a Functional Enzyme into a Human Cell. ACS Chemical Biology, 2019, 14, 599-602.	1.6	33
220	Fast, Facile, Hypersensitive Assays for Ribonucleolytic Activity. Methods in Enzymology, 2001, 341, 81-94.	0.4	32
221	Fluorescence Assay for the Binding of Ribonuclease A to the Ribonuclease Inhibitor Protein. Analytical Biochemistry, 2002, 306, 100-107.	1.1	32
222	Production of human prolyl 4-hydroxylase in Escherichia coli. Protein Expression and Purification, 2004, 38, 279-291.	0.6	32
223	Increasing the potency of a cytotoxin with an arginine graft. Protein Engineering, Design and Selection, 2007, 20, 505-9.	1.0	32
224	An nâ†'Ï€* interaction reduces the electrophilicity of the acceptor carbonyl group. Chemical Communications, 2013, 49, 8166.	2.2	32
225	Contribution of Individual Disulfide Bonds to the Oxidative Folding of Ribonuclease Aâ€. Biochemistry, 2000, 39, 12033-12042.	1.2	31
226	Fluorescence Polarization Assay to Quantify Proteinâ€“Protein Interactions. , 2004, 261, 161-166.		31
227	Variants of ribonuclease inhibitor that resist oxidation. Protein Science, 1999, 8, 430-434.	3.1	31
228	Binding energy and enzymatic catalysis. Journal of Chemical Education, 1990, 67, 483.	1.1	30
229	Synthesis and characterization of a novel class of reducing agents that are highly neuroprotective for retinal ganglion cells. Experimental Eye Research, 2006, 83, 1252-1259.	1.2	30
230	Genetic Selection for Critical Residues in Ribonucleases. Journal of Molecular Biology, 2006, 362, 459-478.	2.0	30
231	Multilayered Films Fabricated from an Oligoarginine-Conjugated ProteinÂPromoteÂEfficientÂSurface-MediatedÂProteinÂTransduction. Biomacromolecules, 2007, 8, 857-863.	2.6	30
232	Thiols and Selenols as Electronâ€Relay Catalysts for Disulfideâ€Bond Reduction. Angewandte Chemie - International Edition, 2013, 52, 12901-12904.	7.2	30
233	Triple, Mutually Orthogonal Bioorthogonal Pairs through the Design of Electronically Activated Sulfamate-Containing Cycloalkynes. Journal of the American Chemical Society, 2020, 142, 18826-18835.	6.6	30
234	No Role for Pepstatin-A-Sensitive Acidic Proteinases in Reovirus Infections of L or MDCK Cells. Virology, 1998, 251, 264-272.	1.1	29

#	Article	IF	Citations
235	High-Level Soluble Production and Characterization of Porcine Ribonuclease Inhibitor. Protein Expression and Purification, 2001, 22, 174-179.	0.6	29
236	Cleavage of 3â€˜,5â€˜-Pyrophosphate-Linked Dinucleotides by Ribonuclease A and Angioginâ€,â€¡. Biochemistry, 2001, 40, 10262-10272.	1.2	29
237	Is glycine a surrogate for a D-amino acid in the collagen triple helix?. Protein Science, 2006, 16, 208-215.	3.1	29
238	Rational Design and Evaluation of Mammalian Ribonuclease Cytotoxins. Methods in Enzymology, 2012, 502, 273-290.	0.4	29
239	Fluorogenic Assay for Inhibitors of HIV-1 Protease with Sub-picomolar Affinity. Scientific Reports, 2015, 5, 11286.	1.6	29
240	Collagen Prolyl Hydroxylases Are Bifunctional Growth Regulators in Melanoma. Journal of Investigative Dermatology, 2019, 139, 1118-1126.	0.3	29
241	Conformational Stability and Catalytic Activity of PTEN Variants Linked to Cancers and Autism Spectrum Disorders. Biochemistry, 2015, 54, 1576-1582.	1.2	28
242	Selective Inhibition of Collagen Prolyl 4-Hydroxylase in Human Cells. ACS Chemical Biology, 2016, 11, 193-199.	1.6	28
243	Immunosuppressive Activity of Bovine Seminal Ribonuclease and its Mode of Action.. Immunobiology, 1996, 195, 271-285.	0.8	27
244	Contribution of tertiary amides to the conformational stability of collagen triple helices. Biopolymers, 2001, 59, 24-28.	1.2	27
245	A ribonuclease zymogen activated by the NS3 protease of the hepatitis C virus. FEBS Journal, 2006, 273, 5457-5465.	2.2	27
246	tRNA Ligase Catalyzes the GTP-Dependent Ligation of RNA with3â€²-Phosphate and 5â€²-Hydroxyl Termini. Biochemistry, 2012, 51, 1333-1335.	1.2	27
247	Simulated Moving Bed Chromatography: Separation and Recovery of Sugars and Ionic Liquid from Biomass Hydrolysates. ChemSusChem, 2013, 6, 2083-2089.	3.6	27
248	Structure and stability of the P93G variant of ribonuclease A. Protein Science, 1998, 7, 1620-1625.	3.1	26
249	The CXXC motif: crystal structure of an active-site variant of Escherichia coli thioredoxin. Acta Crystallographica Section D: Biological Crystallography, 1999, 55, 1533-1538.	2.5	26
250	Electronic and steric effects on the rate of the traceless Staudinger ligation. Organic and Biomolecular Chemistry, 2008, 6, 1173.	1.5	26
251	Practical syntheses of 4-fluoroprolines. Journal of Fluorine Chemistry, 2008, 129, 781-784.	0.9	25
252	Design and Characterization of an HIV-Specific Ribonuclease Zymogen. AIDS Research and Human Retroviruses, 2008, 24, 1357-1363.	0.5	25

#	Article	IF	Citations
253	Chapter 2 Protein Engineering with the Traceless Staudinger Ligation. Methods in Enzymology, 2009, 462, 25-44.	0.4	25
254	Decreasing Distortion Energies without Strain: Diazo-Selective 1,3-Dipolar Cycloadditions. Journal of Organic Chemistry, 2016, 81, 5998-6006.	1.7	25
255	Stilbene Boronic Acids Form a Covalent Bond with Human Transthyretin and Inhibit Its Aggregation. Journal of Medicinal Chemistry, 2017, 60, 7820-7834.	2.9	25
256	Evolution of Ribonuclease Inhibitor by Exon Duplication. Molecular Biology and Evolution, 2002, 19, 959-963.	3.5	24
257	Compensating effects on the cytotoxicity of ribonuclease A variants. Archives of Biochemistry and Biophysics, 2003, 415, 172-177.	1.4	24
258	Coulombic effects on the traceless Staudinger ligation in water. Bioorganic and Medicinal Chemistry, 2009, 17, 1055-1063.	1.4	24
259	An nâ†'Ï€* Interaction in the Bound Substrate of Aspartic Proteases Replicates the Oxyanion Hole. ACS Catalysis, 2019, 9, 1464-1471.	5.5	24
260	Catalysis of Protein Disulfide Bond Isomerization in a Homogeneous Substrate. Biochemistry, 2005, 44, 12168-12178.	1.2	23
261	Arginine Residues Are More Effective than Lysine Residues in Eliciting the Cellular Uptake of Onconase. Biochemistry, 2011, 50, 10293-10299.	1.2	23
262	Catalysis by the Tumor-Suppressor Enzymes PTEN and PTEN-L. PLoS ONE, 2015, 10, e0116898.	1.1	23
263	Coevolution of RtcB and Archease created a multiple-turnover RNA ligase. Rna, 2015, 21, 1866-1872.	1.6	23
264	1,3-Dipolar Cycloaddition with Diazo Groups: Noncovalent Interactions Overwhelm Strain. Organic Letters, 2016, 18, 4466-4469.	2.4	23
265	Angiogenin activates the astrocytic Nrf2/antioxidant-response element pathway and thereby protects murine neurons from oxidative stress. Journal of Biological Chemistry, 2019, 294, 15095-15103.	1.6	23
266	An intuitive approach to steady state kinetics. Journal of Chemical Education, 1988, 65, 757.	1.1	22
267	Nature's transitory covalent bond. Nature Structural Biology, 1997, 4, 424-427.	9.7	22
268	Macrocyclic Scaffold for the Collagen Triple Helix. Organic Letters, 2006, 8, 4735-4738.	2.4	22
269	Oligomers of a 5-Carboxy-methanopyrrolidine Î²-Amino Acid. A Search for Order. Organic Letters, 2010, 12, 5438-5441.	2.4	22
270	Contribution of Electrostatics to the Binding of Pancreatic-Type Ribonucleases to Membranes. Biochemistry, 2013, 52, 6304-6312.	1.2	22

#	Article	IF	Citations
271	Bovine Brain Ribonuclease Is the Functional Homolog of Human Ribonuclease 1. Journal of Biological Chemistry, 2014, 289, 25996-26006.	1.6	22
272	Replacing a single atom accelerates the folding of a protein and increases its thermostability. Organic and Biomolecular Chemistry, 2016, 14, 6780-6785.	1.5	22
273	A Boronic Acid Conjugate of Angiogenin that Shows ROSâ€Responsive Neuroprotective Activity. Angewandte Chemie, 2017, 129, 2663-2666.	1.6	22
274	Stringency of the 2-Hisâ€“1-Asp Active-Site Motif in Prolyl 4-Hydroxylase. PLoS ONE, 2009, 4, e7635.	1.1	22
275	Excavating an Active Site:â€‰ The Nucleobase Specificity of Ribonuclease A. Biochemistry, 2000, 39, 14487-14494.	1.2	21
276	Catalysis of Protein Folding by an Immobilized Small-Molecule Dithiol. Biotechnology Progress, 2008, 19, 1307-1314.	1.3	21
277	Interaction of onconase with the human ribonuclease inhibitor protein. Biochemical and Biophysical Research Communications, 2008, 377, 512-514.	1.0	21
278	Fluorogenic affinity label for the facile, rapid imaging of proteins in live cells. Organic and Biomolecular Chemistry, 2009, 7, 3969.	1.5	21
279	Antitumor Activity of Ribonuclease Multimers Created by Site-Specific Covalent Tethering. Bioconjugate Chemistry, 2010, 21, 1691-1702.	1.8	21
280	Quantum mechanical origin of the conformational preferences of 4-thiaproline and its S-oxides. Amino Acids, 2011, 41, 181-186.	1.2	21
281	Human Collagen Prolyl 4-Hydroxylase Is Activated by Ligands for Its Iron Center. Biochemistry, 2016, 55, 3224-3233.	1.2	21
282	Knockout of the Ribonuclease Inhibitor Gene Leaves Human Cells Vulnerable to Secretory Ribonucleases. Biochemistry, 2016, 55, 6359-6362.	1.2	21
283	Modulation of an nâ†'Ï€* interaction with Î±-fluoro groups. Arkivoc, 2010, 2010, 251-262.	0.3	21
284	Protein prosthesis: Î²â€peptides as reverseâ€turn surrogates. Protein Science, 2013, 22, 274-279.	3.1	20
285	Fluorogenic Probe for Constitutive Cellular Endocytosis. Chemistry and Biology, 2013, 20, 614-618.	6.2	20
286	Electronic and Steric Optimization of Fluorogenic Probes for Biomolecular Imaging. Journal of Organic Chemistry, 2017, 82, 4297-4304.	1.7	20
287	A Misfolded but Active Dimer of Bovine Seminal Ribonuclease. FEBS Journal, 1994, 224, 109-114.	0.2	19
288	Trimethyl Lock: A Stable Chromogenic Substrate for Esterases. Molecules, 2008, 13, 204-211.	1.7	19

#	Article	IF	Citations
289	Sensitive fluorogenic substrate for alkaline phosphatase. Analytical Biochemistry, 2011, 418, 247-252.	1.1	19
290	Fluorogenic label to quantify the cytosolic delivery of macromolecules. Molecular BioSystems, 2013, 9, 339.	2.9	19
291	Hyperconjugative Antiaromaticity Activates 4H-Pyrazoles as Inverse-Electron-Demand Dielsâ€“Alder Dienes. Organic Letters, 2019, 21, 8492-8495.	2.4	19
292	Optimization of interstrand interactions enables burn detection with a collagen-mimetic peptide. Organic and Biomolecular Chemistry, 2019, 17, 9906-9912.	1.5	19
293	Origin of the â€˜inactivationâ€™ of ribonuclease A at low salt concentration. FEBS Letters, 2000, 468, 199-202.	1.3	18
294	Direct and continuous assay for prolyl 4-hydroxylase. Analytical Biochemistry, 2009, 386, 181-185.	1.1	18
295	Separable fluorous ionic liquids for the dissolution and saccharification of cellulose. Green Chemistry, 2011, 13, 2719.	4.6	18
296	Interstrand Dipole-Dipole Interactions Can Stabilize the Collagen Triple Helix. Journal of Biological Chemistry, 2011, 286, 22905-22912.	1.6	18
297	An Evolved Mxe GyrA Intein for Enhanced Production of Fusion Proteins. ACS Chemical Biology, 2015, 10, 527-538.	1.6	18
298	Nucleoside Tetra- and Pentaphosphates Prepared Using a Tetraphosphorylation Reagent Are Potent Inhibitors of Ribonuclease A. Journal of the American Chemical Society, 2019, 141, 18400-18404.	6.6	18
299	Delivery of Proteins and Nucleic Acids: Achievements and Challenges. Bioconjugate Chemistry, 2019, 30, 261-262.	1.8	18
300	Enzyme relaxation in the reaction catalyzed by triosephosphate isomerase: detection and kinetic characterization of two unliganded forms of the enzyme. Biochemistry, 1987, 26, 7014-7020.	1.2	17
301	Ribonuclease-Activated Cancer Prodrug. ACS Medicinal Chemistry Letters, 2012, 3, 268-272.	1.3	17
302	Facile Chemical Functionalization of Proteins through Intein-Linked Yeast Display. Bioconjugate Chemistry, 2013, 24, 1634-1644.	1.8	17
303	A novel fully human antitumor ImmunoRNase resistant to the RNase inhibitor. Protein Engineering, Design and Selection, 2013, 26, 243-248.	1.0	17
304	Consequences of the Endogenous N-Glycosylation of Human Ribonuclease 1. Biochemistry, 2019, 58, 987-996.	1.2	17
305	Templated Collagen â€œDouble Helicesâ€•Maintain Their Structure. Journal of the American Chemical Society, 2020, 142, 1137-1141.	6.6	17
306	A Highly Active Immobilized Ribonuclease. Analytical Biochemistry, 2000, 286, 312-314.	1.1	16

#	Article	IF	Citations
307	Effects of a second-generation human anti-ErbB2 ImmunoRNase on trastuzumab-resistant tumors and cardiac cells. Protein Engineering, Design and Selection, 2014, 27, 83-88.	1.0	16
308	Palladiumâ€“Protein Oxidative Addition Complexes by Amine-Selective Acylation. Journal of the American Chemical Society, 2020, 142, 21237-21242.	6.6	16
309	Modulating Collagen Triple-Helix Stability with 4-Chloro, 4-Fluoro, and 4-Methylprolines. Advances in Experimental Medicine and Biology, 2009, 611, 251-252.	0.8	16
310	Molecular basis for catabolism of the abundant metabolite trans-4-hydroxy-L-proline by a microbial glycyl radical enzyme. ELife, 2020, 9, .	2.8	16
311	Sulfur Shuffle:Â Modulating Enzymatic Activity by Thiol-Disulfide Interchange. Bioconjugate Chemistry, 2000, 11, 408-413.	1.8	15
312	Binding of non-natural 3â€²-nucleotides to ribonuclease A. FEBS Journal, 2005, 272, 744-755.	2.2	15
313	Carpe Diubiquitin. Angewandte Chemie - International Edition, 2010, 49, 9042-9044.	7.2	15
314	Synthesis of 5-Fluoro- and 5-Hydroxymethanoprolines via Lithiation of N-BOC-methanopyrrolidines. Constrained C^{Î³}-Exo and C^{Î³}-Endo Flp and Hyp Conformer Mimics. Journal of Organic Chemistry, 2012, 77, 5331-5344.	1.7	15
315	Rapid cycloaddition of a diazo group with an unstrained dipolarophile. Tetrahedron Letters, 2016, 57, 2347-2350.	0.7	15
316	Optical imaging of collagen fiber damage to assess thermally injured human skin. Wound Repair and Regeneration, 2020, 28, 848-855.	1.5	15
317	Synthesis of Conformationally Constrained 5-Fluoro- and 5-Hydroxymethanopyrrolidines. Ring-Puckered Mimics of Gauche- and Anti-3-Fluoro- and 3-Hydroxypyrrolidines. Journal of Organic Chemistry, 2011, 76, 3626-3634.	1.7	14
318	Human Cancer Antigen Globo H Is a Cell-Surface Ligand for Human Ribonuclease 1. ACS Central Science, 2015, 1, 181-190.	5.3	14
319	Selective inhibition of prolyl 4-hydroxylases by bipyridinedicarboxylates. Bioorganic and Medicinal Chemistry, 2015, 23, 3081-3090.	1.4	14
320	Prolyl 4-Hydroxylase: Substrate Isosteres in Which an (E)- or (Z)-Alkene Replaces the Prolyl Peptide Bond. Biochemistry, 2017, 56, 219-227.	1.2	14
321	Cytosolic Uptake of Large Monofunctionalized Dextrans. Bioconjugate Chemistry, 2018, 29, 1942-1949.	1.8	14
322	Site-specific PEGylation endows a mammalian ribonuclease with antitumor activity. Cancer Biology and Therapy, 2011, 12, 208-214.	1.5	13
323	Organocatalysts of oxidative protein folding inspired by protein disulfide isomerase. Organic and Biomolecular Chemistry, 2014, 12, 8598-8602.	1.5	13
324	Phenotype of ribonuclease 1 deficiency in mice. Rna, 2019, 25, 921-934.	1.6	13

#	Article	IF	Citations
325	nâ†'Ï€* Interactions Modulate the Disulfide Reduction Potential of Epidithiodiketopiperazines. Journal of the American Chemical Society, 2020, 142, 15107-15115.	6.6	13
326	Acceleration of 1,3-Dipolar Cycloadditions by Integration of Strain and Electronic Tuning. Journal of the American Chemical Society, 2021, 143, 9489-9497.	6.6	13
327	Extending the Limits to Enzymatic Catalysis:Â Diffusion of Ribonuclease A in One Dimensionâ€. Biochemistry, 1999, 38, 5302-5307.	1.2	12
328	Functional and structural analyses of <i>Nâ€«/i>acylsulfonamideâ€linked dinucleoside inhibitors of RNaseâ€ƒA. FEBS Journal, 2011, 278, 541-549.	2.2	12
329	Terbium(III) Luminescence-Based Assay for Esterase Activity. Analytical Chemistry, 2019, 91, 8615-8621.	3.2	12
330	Efficient metal-free conversion of glucose to 5-hydroxymethylfurfural using a boronic acid. Biomass Conversion and Biorefinery, 2019, 9, 471-477.	2.9	12
331	Cyclic Peptide Mimetic of Damaged Collagen. Biomacromolecules, 2020, 21, 1539-1547.	2.6	12
332	Emerging biological functions of ribonuclease 1 and angiogenin. Critical Reviews in Biochemistry and Molecular Biology, 2022, 57, 244-260.	2.3	12
333	[16] Green fluorescent protein chimeras to probe protein-protein interactions. Methods in Enzymology, 2000, 328, 251-261.	0.4	11
334	Zinc(II)-mediated inhibition of a ribonuclease by an N-hydroxyurea nucleotide. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 409-412.	1.0	11
335	Ribonuclease S redux. Chemical Communications, 2011, 47, 973-975.	2.2	11
336	4â€ketoproline: An electrophilic proline analog for bioconjugation. Biopolymers, 2015, 104, 110-115.	1.2	11
337	Ribonucleases Endowed with Specific Toxicity for Spermatogenic Layers. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 1997, 118, 881-888.	0.7	10
338	Intraspecies Regulation of Ribonucleolytic Activity. Biochemistry, 2007, 46, 13131-13140.	1.2	10
339	Genetic selection reveals the role of a buried, conserved polar residue. Protein Science, 2007, 16, 1609-1616.	3.1	10
340	A conserved interaction with the chromophore of fluorescent proteins. Protein Science, 2012, 21, 171-177.	3.1	10
341	Antimicrobial Synergy of a Ribonuclease and a Peptide Secreted by Human Cells. ACS Infectious Diseases, 2020, 6, 3083-3088.	1.8	10
342	Two-Step Synthesis of Î±-Aryl-Î±-diazoamides as Modular Bioreversible Labels. Organic Letters, 2021, 23, 3110-3114.	2.4	10

#	Article	IF	Citations
343	Fluorescence Polarization Assay to Quantify Protein-Protein Interactions: An Update. Methods in Molecular Biology, 2015, 1278, 323-327.	0.4	10
344	First-in-human phase I clinical trial of QBI-139, a human ribonuclease variant, in solid tumors.. Journal of Clinical Oncology, 2012, 30, TPS3113-TPS3113.	0.8	10
345	Modulation of an nâ†'Ï€* interaction with Î±-fluoro groups. Arkivoc, 2010, 2010, 251-262.	0.3	10
346	Production of Human Pancreatic Ribonuclease inSaccharomyces cerevisiaeandEscherichia coli. Protein Expression and Purification, 1996, 7, 253-261.	0.6	9
347	Semisynthesis of Ribonuclease A using Intein-Mediated Protein Ligation. Scientific World Journal, The, 2002, 2, 1838-1842.	0.8	9
348	Site-specific folate conjugation to a cytotoxic protein. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 5029-5032.	1.0	9
349	Human Ribonuclease with a Pendant Poly(Ethylene Glycol) Inhibits Tumor Growth in Mice. Translational Oncology, 2013, 6, 392-397.	1.7	9
350	Pyramidalization of a carbonyl C atom in (2S)-N-(selenoacetyl)proline methyl ester. Acta Crystallographica Section E: Structure Reports Online, 2013, 69, o805-o806.	0.2	9
351	Catalysis of Hydrogenâ€“Deuterium Exchange Reactions by 4-Substituted Proline Derivatives. Journal of Organic Chemistry, 2019, 84, 1247-1256.	1.7	9
352	Role for Cell-Surface Collagen of Streptococcus pyogenes in Infections. ACS Infectious Diseases, 2020, 6, 1836-1843.	1.8	9
353	Structural changes to ribonuclease A and their effects on biological activity. Comparative Biochemistry and Physiology C, Comparative Pharmacology and Toxicology, 1999, 123, 103-111.	0.5	8
354	A divalent protecting group for benzoxaboroles. RSC Advances, 2013, 3, 21331.	1.7	8
355	Pyrazine-derived disulfide-reducing agent for chemical biology. Chemical Communications, 2014, 50, 9591.	2.2	8
356	Peptides on the Rise. Accounts of Chemical Research, 2017, 50, 2419-2419.	7.6	8
357	A pendant peptide endows a sunscreen with water-resistance. Organic and Biomolecular Chemistry, 2018, 16, 7139-7142.	1.5	8
358	Structure and Dynamics of N-Glycosylated Human Ribonuclease 1. Biochemistry, 2020, 59, 3148-3156.	1.2	8
359	Abstract 1838: Efficacy of ribonuclease QBI-139 in combination with standard of care therapies. Cancer Research, 2012, 72, 1838-1838.	0.4	8
360	Contextâ€Ðependence of the Reactivity of Cysteine and Lysine Residues. ChemBioChem, 2022, 23, .	1.3	8

#	Article	IF	Citations
361	The Mechanistic Pathway of a Mutant Triosephosphate Isomerase. Annals of the New York Academy of Sciences, 1986, 471, 266-271.	1.8	7
362	Effect of bovine seminal ribonuclease and bovine pancreatic ribonuclease A on bovine oocyte maturation. The Journal of Experimental Zoology, 2000, 287, 394-399.	1.4	7
363	Zinc(II)-mediated inhibition of ribonuclease Sa by an N-hydroxyurea nucleotide and its basis. Biochemical and Biophysical Research Communications, 2004, 319, 152-156.	1.0	7
364	Bioavailable affinity label for collagen prolyl 4-hydroxylase. Bioorganic and Medicinal Chemistry, 2013, 21, 3597-3601.	1.4	7
365	A Human Ribonuclease Variant and ERK-Pathway Inhibitors Exhibit Highly Synergistic Toxicity for Cancer Cells. Molecular Cancer Therapeutics, 2018, 17, 2622-2632.	1.9	7
366	Synthesis and Dielsâ€“Alder Reactivity of 4-Fluoro-4-Methyl-4H-Pyrazoles. International Journal of Molecular Sciences, 2020, 21, 3964.	1.8	7
367	Synthetic Surfaces for Ribonuclease Adsorption. Langmuir, 2005, 21, 187-190.	1.6	6
368	Peptides and peptidomimetics as prototypes. Current Opinion in Chemical Biology, 2008, 12, 690-691.	2.8	6
369	Potentiation of ribonuclease cytotoxicity by a poly(amidoamine) dendrimer. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 2756-2758.	1.0	6
370	Differential Effects of Nitrogen Substitution in 5â€•and 6â€Membered Aromatic Motifs. Chemistry - A European Journal, 2020, 26, 8862-8866.	1.7	6
371	Disulfide Chromophores Arise from Stereoelectronic Effects. Journal of Physical Chemistry B, 2020, 124, 3931-3935.	1.2	6
372	Creating Site-Specific Isopeptide Linkages Between Proteins with the Traceless Staudinger Ligation. Methods in Molecular Biology, 2015, 1248, 55-65.	0.4	6
373	Bifunctional Peptide that Anneals to Damaged Collagen and Clusters TGF-Î² Receptors Enhances Wound Healing. ACS Chemical Biology, 2022, 17, 314-321.	1.6	6
374	Genetic screen to dissect proteinâ€“protein interactions: ribonuclease inhibitorâ€“ribonuclease A as a model system. Methods, 2002, 28, 346-352.	1.9	5
375	Genetic selection for peptide inhibitors of angiogenin. Protein Engineering, Design and Selection, 2008, 21, 289-294.	1.0	5
376	Silencing an Inhibitor Unleashes a Cytotoxic Enzyme. Biochemistry, 2009, 48, 5051-5053.	1.2	5
377	Ribonucleoside 3â€²â€Phosphates as Proâ€Moieties for an Orally Administered Drug. ChemMedChem, 2012, 7, 1361-1364.	1.6	5
378	Convenient synthesis of collagenâ€related tripeptides for segment condensation. Biopolymers, 2015, 104, 674-681.	1.2	5

#	Article	IF	Citations
379	Hyperconjugative Ï€ â†' Ïƒ*_{CF} Interactions Stabilize the Enol Form of Perfluorinated Cyclic Ketoâ€"Enol Systems. Journal of Organic Chemistry, 2019, 84, 6432-6436.	1.7	5
380	5(6)-anti-Substituted-2-azabicyclo[2.1.1]hexanes: A Nucleophilic Displacement Route. Journal of Organic Chemistry, 2009, 74, 8232-8242.	1.7	4
381	Affinity of monoclonal antibodies for Globo-series glycans. Carbohydrate Research, 2014, 397, 1-6.	1.1	4
382	PTENpred: A Designer Protein Impact Predictor for PTEN-related Disorders. Journal of Computational Biology, 2016, 23, 969-975.	0.8	4
383	Circular zymogens of human ribonuclease 1. Protein Science, 2019, 28, 1713-1719.	3.1	4
384	Geminal repulsion disrupts Dielsâ€"Alder reactions of geminally substituted cyclopentadienes and 4H-pyrazoles. Tetrahedron, 2021, 91, 132160.	1.0	4
385	One-dimensional diffusion of a protein along a single-stranded nucleic acid. Techniques in Protein Chemistry, 1997, , 565-572.	0.3	3
386	Jeremy R. Knowles (1935â^'2008). ACS Chemical Biology, 2008, 3, 262-264.	1.6	3
387	Structure of RNA 3â€²-phosphate cyclase bound to substrate RNA. Rna, 2014, 20, 1560-1566.	1.6	3
388	Assignments of RNase A by ADAPT-NMR and enhancer. Biomolecular NMR Assignments, 2015, 9, 81-88.	0.4	3
389	A substrate selected by phage display exhibits enhanced side-chain hydrogen bonding to HIV-1 protease. Acta Crystallographica Section D: Structural Biology, 2018, 74, 690-694.	1.1	3
390	Intrinsic siteâ€selectivity of ubiquitin dimer formation. Protein Science, 2015, 24, 182-189.	3.1	2
391	Altering Substrate Specificity and Detecting Processivity in Nucleases. Techniques in Protein Chemistry, 1994, 5, 313-320.	0.3	2
392	Stronger and (now) longer synthetic collagen. Advances in Experimental Medicine and Biology, 2009, 611, xci-xcviii.	0.8	2
393	Canavanine versus arginine: Prospects for cell-penetrating peptides. Tetrahedron Letters, 2022, 99, 153848.	0.7	2
394	Innentitelbild: Thiols and Selenols as Electron-Relay Catalysts for Disulfide-Bond Reduction (Angew.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.6	1
395	Endogenous Enzymes Enable Antimicrobial Activity. ACS Chemical Biology, 2021, 16, 800-805.	1.6	1
396	Abstract C42: QBIâ€139, a human RNase variant in a phase I trial, has broadin vivoefficacy. , 2009, , .		1

#	Article	IF	Citations
397	Ribonuclease zymogen induces cytotoxicity upon HIV-1 infection. AIDS Research and Therapy, 2021, 18, 77.	0.7	1
398	Protein Assembly to Mine the Human Genome. NATO Science Series Series II, Mathematics, Physics and Chemistry, 2003, , 359-369.	0.1	1
399	Enzymes as Chemotherapeutic Agents. , 2012, , 281-291.		1
400	The stereoelectronic basis of collagen stability. , 2002, , 344-346.		1
401	Assessing and utilizing esterase specificity in antimicrobial prodrug development. Methods in Enzymology, 2022, 664, 199-220.	0.4	1
402	Semisynthesis of Protein variants Using Intein-Mediated Protein Ligation. Scientific World Journal, The, 2001, 1, 117-117.	0.8	0
403	Symbiosis: Chemical Biology at Wisconsin. ACS Chemical Biology, 2006, 1, 481-484.	1.6	0
404	Self-Assembly of Collagen Mimetic Peptides. , 2006, , 688-689.		0
405	Stronger and Longer Synthetic Collagen. Materials Research Society Symposia Proceedings, 2007, 1062, 1.	0.1	0
406	Hyperstable Collagen Based on 4-Fluoroproline Residues. ACS Symposium Series, 2007, , 447-486.	0.5	0
407	1,9-Bis(2-pyridyl)-1,2,8,9-tetrathia-5-oxanonane. MolBank, 2009, 2009, M642.	0.2	0
408	Daniel S. Kemp (1936â€“2020): A Pioneer of Bioorganic Chemistry. ACS Chemical Biology, 2020, 15, 2620-2622.	1.6	0
409	Differential Effects of Nitrogen Substitution in 5â€•and 6â€Membered Aromatic Motifs. Chemistry - A European Journal, 2020, 26, 8833-8833.	1.7	0
410	Semisynthesis of Human Ribonucleaseâ€“S. Bioconjugate Chemistry, 2021, 32, 82-87.	1.8	0
411	Antagonists of ribonuclease inhibitor: Small molecules, dendrimers, and peptides. FASEB Journal, 2008, 22, 651.1.	0.2	0
412	Substrate specificity and conformational preferences of prolyl 4â€hydroxylase. FASEB Journal, 2008, 22, 609.1.	0.2	0
413	Latent Fluorophores for Biomolecular Imaging. FASEB Journal, 2008, 22, 117.3.	0.2	0
414	Contribution of mainchain-mainchain hydrogen bonds to the conformational stability of triple-helical collagen. , 2002, , 347-348.		0

#	Article	IF	Citations
415	Effect of fluoro-substituted proline residues on the conformational stability of triple-helical collagen mimics. , 2002, , 355-356.		0
416	Modulating the conformational stability of triple-helical collagen by chemical modification. , 2002, , 357-358.		0
417	Structurally investigating a niche pathway for chemical reversal of proline hydroxylation in the pathogen Clostridioides difficile. FASEB Journal, 2022, 36, .	0.2	0