JoAnne Stubbe

List of Publications by Year in Descending Order

213 papers	13,028 citations	61 h-index	105 g-index
222 ext. papers	13,994 ext. citations	11.3 avg, IF	6.47 L-index

#	Paper	IF	Citations
213	Ribonucleotide reductase, a novel drug target for gonorrhea.. *ELife*, **2022**, 11,	8.9	1
212	Detection of Water Molecules on the Radical Transfer Pathway of Ribonucleotide Reductase by O Electron-Nuclear Double Resonance Spectroscopy. *Journal of the American Chemical Society*, **2021**, 143, 7237-7241	16.4	10
211	Gated Proton Release during Radical Transfer at the Subunit Interface of Ribonucleotide Reductase. *Journal of the American Chemical Society*, **2021**, 143, 176-183	16.4	9
210	Statistical analysis of ENDOR spectra. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	3
209	Radicals in Biology: Your Life Is in Their Hands. *Journal of the American Chemical Society*, **2021**, 143, 13463-13473	16.4	3
208	Ribonucleotide Reductases: Structure, Chemistry, and Metabolism Suggest New Therapeutic Targets. *Annual Review of Biochemistry*, **2020**, 89, 45-75	29.1	50
207	PET Polymer Recycling. *Biochemistry*, **2020**, 59, 2316-2318	3.2	4
206	Subunit Interaction Dynamics of Class Ia Ribonucleotide Reductases: In Search of a Robust Assay. *Biochemistry*, **2020**, 59, 1442-1453	3.2	6
205	Structure of a trapped radical transfer pathway within a ribonucleotide reductase holocomplex. *Science*, **2020**, 368, 424-427	33.3	52
204	Conformational Motions and Water Networks at the α/β Interface in Ribonucleotide Reductase. *Journal of the American Chemical Society*, **2020**, 142, 13768-13778	16.4	11
203	Convergent allostery in ribonucleotide reductase. *Nature Communications*, **2019**, 10, 2653	17.4	20
202	Selenocysteine Substitution in a Class I Ribonucleotide Reductase. *Biochemistry*, **2019**, 58, 5074-5084	3.2	9
201	Discovery of a New Class I Ribonucleotide Reductase with an Essential DOPA Radical and NO Metal as an Initiator of Long-Range Radical Transfer. *Biochemistry*, **2019**, 58, 435-437	3.2	7
200	Properties of Site-Specifically Incorporated 3-Aminotyrosine in Proteins To Study Redox-Active Tyrosines: Escherichia coli Ribonucleotide Reductase as a Paradigm. *Biochemistry*, **2018**, 57, 3402-3415	3.2	10
199	An endogenous dAMP ligand in class Ib RNR promotes assembly of a noncanonical dimer for regulation by dATP. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E4594-E4603	11.5	13
198	Basis of dATP inhibition of RNRs. *Journal of Biological Chemistry*, **2018**, 293, 10413-10414	5.4	4
197	3.3-Å resolution cryo-EM structure of human ribonucleotide reductase with substrate and allosteric regulators bound. *ELife*, **2018**, 7,	8.9	28

196	Photochemical Rescue of a Conformationally Inactivated Ribonucleotide Reductase. *Journal of the American Chemical Society*, **2018**, 140, 15744-15752	16.4	9
195	Glutamate 350 Plays an Essential Role in Conformational Gating of Long-Range Radical Transport in Escherichia coli Class Ia Ribonucleotide Reductase. *Biochemistry*, **2017**, 56, 856-868	3.2	17
194	Formal Reduction Potentials of Difluorotyrosine and Trifluorotyrosine Protein Residues: Defining the Thermodynamics of Multistep Radical Transfer. *Journal of the American Chemical Society*, **2017**, 139, 2994-3004	16.4	25
193	Glutamate 52-□at the □subunit interface of class Ia ribonucleotide reductase is essential for conformational gating of radical transfer. *Journal of Biological Chemistry*, **2017**, 292, 9229-9239	5.4	22
192	Conformationally Dynamic Radical Transfer within Ribonucleotide Reductase. *Journal of the American Chemical Society*, **2017**, 139, 16657-16665	16.4	27
191	The diferric-tyrosyl radical cluster of ribonucleotide reductase and cytosolic iron-sulfur clusters have distinct and similar biogenesis requirements. *Journal of Biological Chemistry*, **2017**, 292, 11445-11451	5.4	15
190	Spectroscopic Evidence for a H Bond Network at Y Located at the Subunit Interface of Active E. coli Ribonucleotide Reductase. *Biochemistry*, **2017**, 56, 3647-3656	3.2	22
189	A >200 meV Uphill Thermodynamic Landscape for Radical Transport in Escherichia coli Ribonucleotide Reductase Determined Using Fluorotyrosine-Substituted Enzymes. *Journal of the American Chemical Society*, **2016**, 138, 13706-13716	16.4	22
188	Structure of the Catalytic Domain of the Class I Polyhydroxybutyrate Synthase from Cupriavidus necator. *Journal of Biological Chemistry*, **2016**, 291, 25264-25277	5.4	55
187	Photochemical Generation of a Tryptophan Radical within the Subunit Interface of Ribonucleotide Reductase. *Biochemistry*, **2016**, 55, 3234-40	3.2	13
186	Biophysical Characterization of Fluorotyrosine Probes Site-Specifically Incorporated into Enzymes: E. coli Ribonucleotide Reductase As an Example. *Journal of the American Chemical Society*, **2016**, 138, 7951-64	16.4	31
185	Charge-Transfer Dynamics at the □Subunit Interface of a Photochemical Ribonucleotide Reductase. *Journal of the American Chemical Society*, **2016**, 138, 1196-205	16.4	23
184	Radical transfer in ribonucleotide reductase: a NHY/RA-□mutant unmasks a new conformation of the pathway residue 731. *Chemical Science*, **2016**, 7, 2170-2178	9.4	31
183	Allosteric Inhibition of Human Ribonucleotide Reductase by dATP Entails the Stabilization of a Hexamer. *Biochemistry*, **2016**, 55, 373-81	3.2	37
182	Chemistry with an artificial primer of polyhydroxybutyrate synthase suggests a mechanism for chain termination. *Biochemistry*, **2015**, 54, 2117-25	3.2	13
181	Modulation of Phenol Oxidation in Cofacial Dyads. *Journal of the American Chemical Society*, **2015**, 137, 11860-3	16.4	8
180	Direct Interfacial Y Oxidation in □by a Photo□Subunit of Class Ia Ribonucleotide Reductase. *Chemical Science*, **2015**, 6, 4519-4524	9.4	7
179	A Ferredoxin Disulfide Reductase Delivers Electrons to the Methanosarcina barkeri Class III Ribonucleotide Reductase. *Biochemistry*, **2015**, 54, 7019-28	3.2	12

178	Reverse Electron Transfer Completes the Catalytic Cycle in a 2,3,5-Trifluorotyrosine-Substituted Ribonucleotide Reductase. *Journal of the American Chemical Society*, **2015**, 137, 14387-95	16.4	17
177	Composition and Structure of the Inorganic Core of Relaxed Intermediate X(Y122F) of Escherichia coli Ribonucleotide Reductase. *Journal of the American Chemical Society*, **2015**, 137, 15558-66	16.4	15
176	Hydrogen bond network between amino acid radical intermediates on the proton-coupled electron transfer pathway of E. coli ⍰2 ribonucleotide reductase. *Journal of the American Chemical Society*, **2015**, 137, 289-98	16.4	56
175	Probing Conformational Change During Radical Propagation in the E.coli Class 1a RNR Using 3-aminotyrosine as a Radical ⍰ink⍰*FASEB Journal*, **2015**, 29, 572.10	0.9	
174	Quaternary Structure and Activity Modulation in Human Ribonucleotide Reductase. *FASEB Journal*, **2015**, 29, 360.1	0.9	
173	Streptococcus sanguinis class Ib ribonucleotide reductase: high activity with both iron and manganese cofactors and structural insights. *Journal of Biological Chemistry*, **2014**, 289, 6259-72	5.4	36
172	Kinetics of hydrogen atom abstraction from substrate by an active site thiyl radical in ribonucleotide reductase. *Journal of the American Chemical Society*, **2014**, 136, 16210-6	16.4	26
171	Bacillus subtilis class Ib ribonucleotide reductase: high activity and dynamic subunit interactions. *Biochemistry*, **2014**, 53, 766-76	3.2	15
170	A chemically competent thiosulfuranyl radical on the Escherichia coli class III ribonucleotide reductase. *Journal of the American Chemical Society*, **2014**, 136, 9001-13	16.4	25
169	Mechanistic insight with HBCH2CoA as a probe to polyhydroxybutyrate (PHB) synthases. *ACS Chemical Biology*, **2014**, 9, 1773-9	4.9	10
168	Conserved electron donor complex Dre2-Tah18 is required for ribonucleotide reductase metallocofactor assembly and DNA synthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E1695-704	11.5	38
167	The class III ribonucleotide reductase from Neisseria bacilliformis can utilize thioredoxin as a reductant. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E3756-65	11.5	19
166	Choosing the right metal: case studies of class I ribonucleotide reductases. *Journal of Biological Chemistry*, **2014**, 289, 28104-11	5.4	33
165	Genetic characterization and role in virulence of the ribonucleotide reductases of Streptococcus sanguinis. *Journal of Biological Chemistry*, **2014**, 289, 6273-87	5.4	35
164	Redox-linked changes to the hydrogen-bonding network of ribonucleotide reductase ⍰2. *Journal of the American Chemical Society*, **2013**, 135, 6380-3	16.4	20
163	Function of the diiron cluster of Escherichia coli class Ia ribonucleotide reductase in proton-coupled electron transfer. *Journal of the American Chemical Society*, **2013**, 135, 8585-93	16.4	43
162	Reversible, long-range radical transfer in E. coli class Ia ribonucleotide reductase. *Accounts of Chemical Research*, **2013**, 46, 2524-35	24.3	188
161	Mechanism of assembly of the dimanganese-tyrosyl radical cofactor of class Ib ribonucleotide reductase: enzymatic generation of superoxide is required for tyrosine oxidation via a Mn(III)Mn(IV) intermediate. *Journal of the American Chemical Society*, **2013**, 135, 4027-39	16.4	78

160	Formal reduction potential of 3,5-difluorotyrosine in a structured protein: insight into multistep radical transfer. *Biochemistry*, **2013**, 52, 8907-15	3.2	22
159	Investigation of in vivo roles of the C-terminal tails of the small subunit (β) of Saccharomyces cerevisiae ribonucleotide reductase: contribution to cofactor formation and intersubunit association within the active holoenzyme. *Journal of Biological Chemistry*, **2013**, 288, 13951-13959	5.4	9
158	Modulation of Y356 photooxidation in E. coli class Ia ribonucleotide reductase by Y731 across the α:β interface. *Journal of the American Chemical Society*, **2013**, 135, 13250-3	16.4	14
157	Generation of a stable, aminotyrosyl radical-induced αβ complex of Escherichia coli class Ia ribonucleotide reductase. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 3835-40	11.5	39
156	Radicals: Your life is in their hands. *FASEB Journal*, **2013**, 27, 337.3	0.9	
155	Clofarabine targets the large subunit (R1) of human ribonucleotide reductase in live cells by assembly into persistent hexamers. *Chemistry and Biology*, **2012**, 19, 799-805		36
154	Christian R. Raetz (1946–2011). *ACS Chemical Biology*, **2012**, 7, 12-13	4.9	1
153	Metallation and mismetallation of iron and manganese proteins in vitro and in vivo: the class I ribonucleotide reductases as a case study. *Metallomics*, **2012**, 4, 1020-36	4.5	96
152	The dimanganese(II) site of Bacillus subtilis class Ib ribonucleotide reductase. *Biochemistry*, **2012**, 51, 3861-71	3.2	27
151	Deciphering radical transport in the large subunit of class I ribonucleotide reductase. *Journal of the American Chemical Society*, **2012**, 134, 1172-80	16.4	38
150	Tangled up in knots: structures of inactivated forms of E. coli class Ia ribonucleotide reductase. *Structure*, **2012**, 20, 1374-83	5.2	55
149	Purification of polyhydroxybutyrate synthase from its native organism, Ralstonia eutropha: implications for the initiation and elongation of polymer formation in vivo. *Biochemistry*, **2012**, 51, 2276-88	3.2	32
148	Growth and localization of polyhydroxybutyrate granules in Ralstonia eutropha. *Journal of Bacteriology*, **2012**, 194, 1092-9	3.5	58
147	ENDOR spectroscopy and DFT calculations: evidence for the hydrogen-bond network within α in the PCET of E. coli ribonucleotide reductase. *Journal of the American Chemical Society*, **2012**, 134, 17661-70	16.4	45
146	Mechanistic studies of semicarbazone triapine targeting human ribonucleotide reductase in vitro and in mammalian cells: tyrosyl radical quenching not involving reactive oxygen species. *Journal of Biological Chemistry*, **2012**, 287, 35768-35778	5.4	55
145	Photo-ribonucleotide reductase α by selective cysteine labeling with a radical phototrigger. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 39-43	11.5	47
144	Incorporation of fluorotyrosines into ribonucleotide reductase using an evolved, polyspecific aminoacyl-tRNA synthetase. *Journal of the American Chemical Society*, **2011**, 133, 15942-5	16.4	81
143	Class I ribonucleotide reductases: metallocofactor assembly and repair in vitro and in vivo. *Annual Review of Biochemistry*, **2011**, 80, 733-67	29.1	155

142	Biochemistry. The two faces of SAM. *Science*, **2011**, 332, 544-5	33.3	10
141	Control of metallation and active cofactor assembly in the class Ia and Ib ribonucleotide reductases: diiron or dimanganese?. *Current Opinion in Chemical Biology*, **2011**, 15, 284-90	9.7	22
140	Kinetics of radical intermediate formation and deoxynucleotide production in 3-aminotyrosine-substituted Escherichia coli ribonucleotide reductases. *Journal of the American Chemical Society*, **2011**, 133, 9430-40	16.4	56
139	Use of 2,3,5-F(3)Y-β2 and 3-NH(2)Y-β2 to study proton-coupled electron transfer in Escherichia coli ribonucleotide reductase. *Biochemistry*, **2011**, 50, 1403-11	3.2	10
138	Escherichia coli class Ib ribonucleotide reductase contains a dimanganese(III)-tyrosyl radical cofactor in vivo. *Biochemistry*, **2011**, 50, 1672-81	3.2	61
137	Bacillus subtilis class Ib ribonucleotide reductase is a dimanganese(III)-tyrosyl radical enzyme. *Biochemistry*, **2011**, 50, 5615-23	3.2	46
136	Equilibration of tyrosyl radicals (Y356$_{\beta2}$ Y731$_{\alpha2}$ Y730$_{\alpha2}$) in the radical propagation pathway of the Escherichia coli class Ia ribonucleotide reductase. *Journal of the American Chemical Society*, **2011**, 133, 18420-32	16.4	54
135	Clofarabine 5'-di and -triphosphates inhibit human ribonucleotide reductase by altering the quaternary structure of its large subunit. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 9815-20	11.5	51
134	Investigation of in vivo diferric tyrosyl radical formation in Saccharomyces cerevisiae Rnr2 protein: requirement of Rnr4 and contribution of Grx3/4 AND Dre2 proteins. *Journal of Biological Chemistry*, **2011**, 286, 41499-41509	5.4	45
133	Structural interconversions modulate activity of Escherichia coli ribonucleotide reductase. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 21046-51	11.5	77
132	Structural basis for activation of class Ib ribonucleotide reductase. *Science*, **2010**, 329, 1526-30	33.3	114
131	Site-specific incorporation of 3-nitrotyrosine as a probe of pKa perturbation of redox-active tyrosines in ribonucleotide reductase. *Journal of the American Chemical Society*, **2010**, 132, 8385-97	16.4	69
130	A hot oxidant, 3-NO2Y122 radical, unmasks conformational gating in ribonucleotide reductase. *Journal of the American Chemical Society*, **2010**, 132, 15368-79	16.4	51
129	An active dimanganese(III)-tyrosyl radical cofactor in Escherichia coli class Ib ribonucleotide reductase. *Biochemistry*, **2010**, 49, 1297-309	3.2	107
128	Inactivation of Lactobacillus leichmannii ribonucleotide reductase by 2',2'-difluoro-2'-deoxycytidine 5'-triphosphate: adenosylcobalamin destruction and formation of a nucleotide-based radical. *Biochemistry*, **2010**, 49, 1396-403	3.2	6
127	Cytosolic monothiol glutaredoxins function in intracellular iron sensing and trafficking via their bound iron-sulfur cluster. *Cell Metabolism*, **2010**, 12, 373-385	24.6	224
126	Mechanism of inactivation of human ribonucleotide reductase with p53R2 by gemcitabine 5'-diphosphate. *Biochemistry*, **2009**, 48, 11612-21	3.2	44
125	Insight into the mechanism of inactivation of ribonucleotide reductase by gemcitabine 5'-diphosphate in the presence or absence of reductant. *Biochemistry*, **2009**, 48, 11622-9	3.2	44

124	Use of 3-aminotyrosine to examine the pathway dependence of radical propagation in Escherichia coli ribonucleotide reductase. *Biochemistry*, **2009**, 48, 12125-32	3.2	21
123	Re(bpy)(CO)3CN as a probe of conformational flexibility in a photochemical ribonucleotide reductase. *Biochemistry*, **2009**, 48, 5832-8	3.2	15
122	Identification of protonated oxygenic ligands of ribonucleotide reductase intermediate X. *Journal of the American Chemical Society*, **2009**, 131, 3370-6	16.4	36
121	Replacement of Y730 and Y731 in the alpha2 subunit of Escherichia coli ribonucleotide reductase with 3-aminotyrosine using an evolved suppressor tRNA/tRNA-synthetase pair. *Methods in Enzymology*, **2009**, 462, 45-76	1.7	10
120	Structural examination of the transient 3-aminotyrosyl radical on the PCET pathway of E. coli ribonucleotide reductase by multifrequency EPR spectroscopy. *Journal of the American Chemical Society*, **2009**, 131, 15729-38	16.4	24
119	Detection of covalent and noncovalent intermediates in the polymerization reaction catalyzed by a C149S class III polyhydroxybutyrate synthase. *Biochemistry*, **2009**, 48, 9202-11	3.2	18
118	Structure of the nucleotide radical formed during reaction of CDP/TTP with the E441Q-alpha2beta2 of E. coli ribonucleotide reductase. *Journal of the American Chemical Society*, **2009**, 131, 200-11	16.4	50
117	Unnatural amino acids: better than the real things?. *F1000 Biology Reports*, **2009**, 1, 88		2
116	Methodology to probe subunit interactions in ribonucleotide reductases. *Biochemistry*, **2008**, 47, 13046-55	3.2	14
115	Importance of the maintenance pathway in the regulation of the activity of Escherichia coli ribonucleotide reductase. *Biochemistry*, **2008**, 47, 3989-99	3.2	33
114	Mechanistic studies on bleomycin-mediated DNA damage: multiple binding modes can result in double-stranded DNA cleavage. *Nucleic Acids Research*, **2008**, 36, 3781-90	20.1	89
113	NrdI, a flavodoxin involved in maintenance of the diferric-tyrosyl radical cofactor in Escherichia coli class Ib ribonucleotide reductase. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 14383-8	11.5	57
112	Ribonucleotide Reductase: Recent Advances **2008**,		1
111	Mapping the subunit interface of ribonucleotide reductase (RNR) using photo cross-linking. *Bioorganic and Medicinal Chemistry Letters*, **2008**, 18, 5923-5	2.9	4
110	Forward and reverse electron transfer with the Y356DOPA-beta2 heterodimer of E. coli ribonucleotide reductase. *Journal of the American Chemical Society*, **2007**, 129, 2226-7	16.4	33
109	Photoactive peptides for light-initiated tyrosyl radical generation and transport into ribonucleotide reductase. *Journal of the American Chemical Society*, **2007**, 129, 8500-9	16.4	41
108	PELDOR spectroscopy with DOPA-beta2 and NH2Y-alpha2s: distance measurements between residues involved in the radical propagation pathway of E. coli ribonucleotide reductase. *Journal of the American Chemical Society*, **2007**, 129, 15748-9	16.4	59
107	Site-specific insertion of 3-aminotyrosine into subunit alpha2 of E. coli ribonucleotide reductase: direct evidence for involvement of Y730 and Y731 in radical propagation. *Journal of the American Chemical Society*, **2007**, 129, 15060-71	16.4	117

106	Direct observation of a transient tyrosine radical competent for initiating turnover in a photochemical ribonucleotide reductase. *Journal of the American Chemical Society*, **2007**, 129, 13828-30	16.4	46
105	YfaE, a ferredoxin involved in diferric-tyrosyl radical maintenance in Escherichia coli ribonucleotide reductase. *Biochemistry*, **2007**, 46, 11577-88	3.2	48
104	Adenosylcobalamin-Dependent Ribonucleotide Reductases: Still Amazing but No Longer Confusing **2007**, 321-331		2
103	Site-specific incorporation of fluorotyrosines into the R2 subunit of E. coli ribonucleotide reductase by expressed protein ligation. *Nature Protocols*, **2007**, 2, 1225-35	18.8	53
102	Enhanced subunit interactions with gemcitabine-5'-diphosphate inhibit ribonucleotide reductases. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 14324-9	11.5	87
101	Nuclear localization of the Saccharomyces cerevisiae ribonucleotide reductase small subunit requires a karyopherin and a WD40 repeat protein. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 1422-7	11.5	37
100	Determination of the in vivo stoichiometry of tyrosyl radical per betabeta' in Saccharomyces cerevisiae ribonucleotide reductase. *Biochemistry*, **2006**, 45, 12282-94	3.2	20
99	Complexed structures of formylglycinamide ribonucleotide amidotransferase from Thermotoga maritima describe a novel ATP binding protein superfamily. *Biochemistry*, **2006**, 45, 14880-95	3.2	25
98	Mono-, di-, tri-, and tetra-substituted fluorotyrosines: new probes for enzymes that use tyrosyl radicals in catalysis. *Journal of the American Chemical Society*, **2006**, 128, 1569-79	16.4	115
97	pH Rate profiles of FnY356-R2s (n = 2, 3, 4) in Escherichia coli ribonucleotide reductase: evidence that Y356 is a redox-active amino acid along the radical propagation pathway. *Journal of the American Chemical Society*, **2006**, 128, 1562-8	16.4	102
96	Site-specific replacement of Y356 with 3,4-dihydroxyphenylalanine in the beta2 subunit of E. coli ribonucleotide reductase. *Journal of the American Chemical Society*, **2006**, 128, 2522-3	16.4	81
95	Electron transfer reactions of fluorotyrosyl radicals. *Journal of the American Chemical Society*, **2006**, 128, 13654-5	16.4	49
94	Proton-coupled electron transfer: the mechanistic underpinning for radical transport and catalysis in biology. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2006**, 361, 1351-64	5.8	238
93	Polyhydroxybutyrate (PHB) Synthases (PhaC): Toward understanding elongation granule formation and chain termination.. *FASEB Journal*, **2006**, 20, A888	0.9	
92	The active form of the Saccharomyces cerevisiae ribonucleotide reductase small subunit is a heterodimer in vitro and in vivo. *Biochemistry*, **2005**, 44, 15366-77	3.2	28
91	EPR distance measurements support a model for long-range radical initiation in E. coli ribonucleotide reductase. *Journal of the American Chemical Society*, **2005**, 127, 15014-5	16.4	93
90	Structure of the nitrogen-centered radical formed during inactivation of E. coli ribonucleotide reductase by 2'-azido-2'-deoxyuridine-5'-diphosphate: trapping of the 3'-ketonucleotide. *Journal of the American Chemical Society*, **2005**, 127, 7729-38	16.4	45
89	Detection of intermediates from the polymerization reaction catalyzed by a D302A mutant of class III polyhydroxyalkanoate (PHA) synthase. *Biochemistry*, **2005**, 44, 1495-503	3.2	29

88	In vitro analysis of the chain termination reaction in the synthesis of poly-(R)-beta-hydroxybutyrate by the class III synthase from Allochromatium vinosum. *Biomacromolecules*, **2005**, 6, 2113-9	6.9	24
87	Class III polyhydroxybutyrate synthase: involvement in chain termination and reinitiation. *Biochemistry*, **2005**, 44, 8369-77	3.2	28
86	pH Dependence of charge transfer between tryptophan and tyrosine in dipeptides. *Biochimica Et Biophysica Acta - Bioenergetics*, **2005**, 1706, 232-8	4.6	38
85	Kinetic studies of polyhydroxybutyrate granule formation in Wautersia eutropha H16 by transmission electron microscopy. *Journal of Bacteriology*, **2005**, 187, 3814-24	3.5	94
84	Nontemplate-dependent polymerization processes: polyhydroxyalkanoate synthases as a paradigm. *Annual Review of Biochemistry*, **2005**, 74, 433-80	29.1	123
83	Analysis of transient polyhydroxybutyrate production in Wautersia eutropha H16 by quantitative Western analysis and transmission electron microscopy. *Journal of Bacteriology*, **2005**, 187, 3825-32	3.5	55
82	Site-specific replacement of a conserved tyrosine in ribonucleotide reductase with an aniline amino acid: a mechanistic probe for a redox-active tyrosine. *Journal of the American Chemical Society*, **2004** , 126, 16702-3	16.4	38
81	Turning on ribonucleotide reductase by light-initiated amino acid radical generation. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 6882-7	11.5	47
80	Bleomycins: new methods will allow reinvestigation of old issues. *Current Opinion in Chemical Biology*, **2004**, 8, 175-81	9.7	52
79	A model for the Bacillus subtilis formylglycinamide ribonucleotide amidotransferase multiprotein complex. *Biochemistry*, **2004**, 43, 10343-52	3.2	24
78	The formylglycinamide ribonucleotide amidotransferase complex from Bacillus subtilis: metabolite-mediated complex formation. *Biochemistry*, **2004**, 43, 10314-27	3.2	25
77	Structures of the yeast ribonucleotide reductase Rnr2 and Rnr4 homodimers. *Biochemistry*, **2004**, 43, 7736-42	3.2	34
76	Subcellular localization of yeast ribonucleotide reductase regulated by the DNA replication and damage checkpoint pathways. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 6628-33	11.5	121
75	Radical Initiation in the Class I Ribonucleotide Reductase: Long-Range Proton-Coupled Electron Transfer?. *ChemInform*, **2003**, 34, no		1
74	Di-iron-tyrosyl radical ribonucleotide reductases. *Current Opinion in Chemical Biology*, **2003**, 7, 183-8	9.7	108
73	Pulsed ELDOR spectroscopy measures the distance between the two tyrosyl dadicals in the R2 subunit of the E. coli ribonucleotide reductase. *Journal of the American Chemical Society*, **2003**, 125, 14988-9	16.4	55
72	2,3-difluorotyrosine at position 356 of ribonucleotide reductase R2: a probe of long-range proton-coupled electron transfer. *Journal of the American Chemical Society*, **2003**, 125, 10506-7	16.4	58
71	Radical initiation in the class I ribonucleotide reductase: long-range proton-coupled electron transfer?. *Chemical Reviews*, **2003**, 103, 2167-201	68.1	707

70	Polyhydroxyalkanoate (PHA) hemeostasis: the role of PHA synthase. *Natural Product Reports*, **2003**, 20, 445-57	15.1	124
69	Generation of the R2 subunit of ribonucleotide reductase by intein chemistry: insertion of 3-nitrotyrosine at residue 356 as a probe of the radical initiation process. *Biochemistry*, **2003**, 42, 14541-52	3.2	71
68	Radicals with a controlled lifestyle. *Chemical Communications*, **2003**, 2511-3	5.8	57
67	Pre-steady-state and steady-state kinetic analysis of E. coli class I ribonucleotide reductase. *Biochemistry*, **2003**, 42, 10071-83	3.2	112
66	Ralstonia eutropha H16 encodes two and possibly three intracellular Poly[D-(-)-3-hydroxybutyrate] depolymerase genes. *Journal of Bacteriology*, **2003**, 185, 3788-94	3.5	92
65	The crystal structure of class II ribonucleotide reductase reveals how an allosterically regulated monomer mimics a dimer. *Nature Structural Biology*, **2002**, 9, 293-300		164
64	The Ralstonia eutropha PhaR protein couples synthesis of the PhaP phasin to the presence of polyhydroxybutyrate in cells and promotes polyhydroxybutyrate production. *Journal of Bacteriology*, **2002**, 184, 59-66	3.5	127
63	Solution structure of the hydroperoxide of Co(III) phleomycin complexed with d(CCAGGCCTGG)2: evidence for binding by partial intercalation. *Nucleic Acids Research*, **2002**, 30, 4881-91	20.1	18
62	Nanosecond generation of tyrosyl radicals via laser-initiated decaging of oxalate-modified amino acids. *Journal of Organic Chemistry*, **2002**, 67, 6820-2	4.2	6
61	The evolution of ribonucleotide reduction revisited. *Trends in Biochemical Sciences*, **2001**, 26, 93-9	10.3	72
60	New insight into the role of the PhaP phasin of Ralstonia eutropha in promoting synthesis of polyhydroxybutyrate. *Journal of Bacteriology*, **2001**, 183, 2394-7	3.5	115
59	Mechanistic studies on class I polyhydroxybutyrate (PHB) synthase from Ralstonia eutropha: class I and III synthases share a similar catalytic mechanism. *Biochemistry*, **2001**, 40, 1011-9	3.2	81
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