Andrew T Smith

List of Publications by Year
in descending order

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65 papers	4,682 citations	136950 32 h-index	118850 62 g-index
69 all docs	69 docs citations	69 times ranked	3781 citing authors

#	Article	IF	Citations
1	The catalytic pathway of horseradish peroxidase at high resolution. Nature, 2002, 417, 463-468.	27.8	829
2	Crystal structure of horseradish peroxidase C at 2.15 Ã... resolution. Nature Structural Biology, 1997, 4, 1032-1038.	9.7	642
3	Two Substrate Interaction Sites in Lignin Peroxidase Revealed by Site-Directed Mutagenesis. Biochemistry, 1998, 37, 15097-15105.	2.5	241
4	Structural Interactions between Horseradish Peroxidase C and the Substrate Benzhydroxamic Acid Determined by X-ray Crystallographyâ€,â€¡. Biochemistry, 1998, 37, 8054-8060.	2.5	223
5	The Structures of the Horseradish Peroxidase C-Ferulic Acid Complex and the Ternary Complex with Cyanide Suggest How Peroxidases Oxidize Small Phenolic Substrates. Journal of Biological Chemistry, 1999, 274, 35005-35011.	3.4	197
6	Role of Arginine 38 in Horseradish Peroxidase. Journal of Biological Chemistry, 1996, 271, 4023-4030.	3.4	180
7	Substrate binding and catalysis in heme peroxidases. Current Opinion in Chemical Biology, 1998, 2, 269-278.	6.1	165
8	Horseradish peroxidase. Advances in Inorganic Chemistry, 2000, , 107-162.	1.0	149
9	Mutation of Distal Residues of Horseradish Peroxidase:â€‰ Influence on Substrate Binding and Cavity Properties. Biochemistry, 1997, 36, 1532-1543.	2.5	125
10	Characterisation of a haem active-site mutant of horseradish peroxidase, Phe41 Val, with altered reactivity towards hydrogen peroxide and reducing substrates. FEBS Journal, 1992, 207, 507-519.	0.2	106
11	Characterization of Recombinant Horseradish Peroxidase C and three Site-Directed mutants, F41V, F41W, and R38K by Resonance Raman Spectroscopy. Biochemistry, 1994, 33, 7398-7407.	2.5	106
12	Expression of lignin peroxidase H8 in Escherichia coli: folding and activation of the recombinant enzyme with Ca2+ and haem. Biochemical Journal, 1996, 315, 15-19.	3.7	105
13	Crystal structures of pristine and oxidatively processed lignin peroxidase expressed in Escherichia coli and of the W171F variant that eliminates the redox active tryptophan 171. Implications for the reaction mechanism. Journal of Molecular Biology, 2001, 305, 851-861.	4.2	103
14	Enhanced Biological Straw Saccharification Through Coculturing of Lignocellulose-Degrading Microorganisms. Applied Biochemistry and Biotechnology, 2015, 175, 3709-3728.	2.9	84
15	Autocatalytic Formation of a Hydroxy Group at CÎ² of Trp171 in Lignin Peroxidaseâ€. Biochemistry, 1998, 37, 8832-8838.	2.5	82
16	Reversible Dissociation of Thiolate Ligands from Molybdenum in an Enzyme of the Dimethyl Sulfoxide Reductase Family,. Biochemistry, 2000, 39, 11258-11269.	2.5	81
17	pH Dependence and Structural Interpretation of the Reactions of Coprinus cinereus Peroxidase with Hydrogen Peroxide, Ferulic Acid, and 2,2â€˜-Azinobis(3-ethylbenzthiazoline-6-sulfonic acid). Biochemistry, 1997, 36, 9453-9463.	2.5	78
18	Spectroscopic evidence for an engineered, catalytically active Trp radical that creates the unique reactivity of lignin peroxidase. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16084-16089.	7.1	73

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19	Reactions of the Class II Peroxidases, Lignin Peroxidase andArthromyces ramosus Peroxidase, with Hydrogen Peroxide. Journal of Biological Chemistry, 2002, 277, 26879-26885.	3.4	71
20	Recombinant horseradish peroxidase isoenzyme C: the effect of distal haem cavity mutations (His42â†'Leu) Tj ETQq0 0 0 rgBT /Overlock Chemistry, 1996, 1, 136-142.	2.6	70
21	A Comparative Study of the Inactivation of Wild-Type, Recombinant and Two Mutant Horseradish Peroxidase Isoenzymes C by Hydrogen Peroxide and m-chloroperoxybenzoic Acid. FEBS Journal, 1995, 234, 506-512.	0.2	68
22	Site-Directed Mutagenesis of the Catalytic Tryptophan Environment in Pleurotus eryngii Versatile Peroxidase[,]. Biochemistry, 2008, 47, 1685-1695.	2.5	65
23	Evidence from Spin-Trapping for a Transient Radical on Tryptophan Residue 171 of Lignin Peroxidase. Archives of Biochemistry and Biophysics, 1999, 370, 86-92.	3.0	64
24	Reactions of Dimethylsulfoxide Reductase fromRhodobacter capsulatuswith Dimethyl Sulfide and with Dimethyl Sulfoxide:Â Complexities Revealed by Conventional and Stopped-Flow Spectrophotometryâ€. Biochemistry, 1999, 38, 8501-8511.	2.5	48
25	Identification of a Critical Phenylalanine Residue in Horseradish Peroxidase, Phe179, by Site-Directed Mutagenesis and1H-NMR:Â Implications for Complex Formation with Aromatic Donor Moleculesâ€. Biochemistry, 1997, 36, 14751-14761.	2.5	45
26	Structural studies by proton-NMR spectroscopy of plant horseradish peroxidase C, the wild-type recombinant protein from Escherichia coli and two protein variants, Phe41 Val and Arg38 Lys. FEBS Journal, 1992, 207, 521-531.	0.2	42
27	Reactions of Dimethylsulfoxide Reductase in the Presence of Dimethyl Sulfide and the Structure of the Dimethyl Sulfide-Modified Enzymeâ€,â€¡. Biochemistry, 2001, 40, 9810-9820.	2.5	39
28	Solution Characterisation by NMR Spectroscopy of Two Horseradish Peroxidase Isoenzyme C Mutants with Alanine Replacing Either Phe142 or Phe143. FEBS Journal, 1995, 233, 650-658.	0.2	36
29	Effects of phthalic anhydride modification on horseradish peroxidase stability and activity. Biotechnology and Bioengineering, 2003, 81, 233-240.	3.3	36
30	Discovery and characterisation of circular bacteriocin plantacyclin B21AG from Lactiplantibacillus plantarum B21. Heliyon, 2020, 6, e04715.	3.2	35
31	Selfâ€Assembly of Amyloid Fibrils That Display Active Enzymes. ChemCatChem, 2014, 6, 1961-1968.	3.7	34
32	pH-dependent Properties of a Mutant Horseradish Peroxidase Isoenzyme C in which Arg38 has been Replaced with Lysine. FEBS Journal, 1994, 224, 1029-1037.	0.2	33
33	Probing the Aromatic-Donor-Binding Site of Horseradish Peroxidase Using Site-Directed Mutagenesis and the Suicide Substrate Phenylhydrazine. FEBS Journal, 1996, 236, 714-722.	0.2	32
34	Effect of Calcium, Other Ions, and pH on the Reactions of Barley Peroxidase with Hydrogen Peroxide and Fluoride. Journal of Biological Chemistry, 1998, 273, 2232-2240.	3.4	32
35	Effect of Distal Cavity Mutations on the Binding and Activation of Oxygen by Ferrous Horseradish Peroxidase. Journal of Biological Chemistry, 1997, 272, 389-395.	3.4	31
36	Complete Genome Sequence of Lactobacillus plantarum Strain B21, a Bacteriocin-Producing Strain Isolated from Vietnamese Fermented Sausage Nem Chua. Genome Announcements, 2015, 3, .	0.8	27

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37	Laser Photolysis Behavior of Ferrous Horseradish Peroxidase with Carbon Monoxide and Cyanide: Effects of Mutations in the Distal Heme Pocket. Biochemistry, 1995, 34, 14687-14692.	2.5	23
38	Chemical, Spectroscopic and Structural Investigation of the Substrate-Binding Site in Ascorbate Peroxidase. FEBS Journal, 1997, 248, 347-354.	0.2	23
39	Kinetics and Interactions of Molybdenum and Ironâ^'Sulfur Centers in Bacterial Enzymes of the Xanthine Oxidase Family:â€‰ Mechanistic Implications. Biochemistry, 1999, 38, 14077-14087.	2.5	23
40	Refinement of 3D models of horseradish peroxidase isoenzyme C: Predictions of 2D NMR assignments and substrate binding sites. Proteins: Structure, Function and Bioinformatics, 1996, 26, 204-216.	2.6	22
41	Bioinformatic prospecting and phylogenetic analysis reveals 94 undescribed circular bacteriocins and key motifs. BMC Microbiology, 2020, 20, 77.	3.3	20
42	Haem-linked interactions in horseradish peroxidase revealed by spectroscopic analysis of the Phe-221â†'Met mutant. Biochemical Journal, 2001, 353, 181-191.	3.7	16
43	Spectroscopic characterization of mutations at the Phe41 position in the distal haem pocket of horseradish peroxidase C: structural and functional consequences. Biochemical Journal, 2002, 363, 571-579.	3.7	14
44	Structural analysis of the two horseradish peroxidase catalytic residue variants H42E and R38S/H42E: implications for the catalytic cycle. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 1803-1812.	2.5	13
45	Spectroscopic and kinetic properties of the horseradish peroxidase mutant T171S. Evidence for selective effects on the reduced state of the enzyme. FEBS Journal, 2005, 272, 5514-5521.	4.7	13
46	An effective microplate method (Biolog MT2) for screening native lignocellulosic-straw-degrading bacteria. Annals of Microbiology, 2015, 65, 2053-2064.	2.6	13
47	Macrolactam analogues of macrolide natural products. Organic and Biomolecular Chemistry, 2016, 14, 11301-11316.	2.8	11
48	Expression of Active Horseradish Peroxidase in Saccharomyces cerevisiae. Biochemical Society Transactions, 1992, 20, 111S-111S.	3.4	10
49	Mutation of residues critical for benzohydroxamic acid binding to horseradish peroxidase isoenzyme C. Biopolymers, 2001, 62, 261-267.	2.4	10
50	Expression of Drosophila melanogaster xanthine dehydrogenase in Aspergillus nidulans and some properties of the recombinant enzyme. Biochemical Journal, 2002, 362, 223-229.	3.7	10
51	Mechanistic insight into the initiation step of the reaction of Burkholderia pseudomallei catalase-peroxidase with peroxyacetic acid. Journal of Biological Inorganic Chemistry, 2009, 14, 801-811.	2.6	10
52	Crystal structure and site-directed mutagenesis of circular bacteriocin plantacyclin B21AG reveals cationic and aromatic residues important for antimicrobial activity. Scientific Reports, 2020, 10, 17398.	3.3	10
53	Spectroscopic characterization of mutations at the Phe41 position in the distal haem pocket of horseradish peroxidase C: structural and functional consequences. Biochemical Journal, 2002, 363, 571.	3.7	8
54	Cloning and functional expression of a food-grade circular bacteriocin, plantacyclin B21AG, in probiotic Lactobacillus plantarum WCFS1. PLoS ONE, 2020, 15, e0232806.	2.5	8

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55	Expression of Drosophila melanogaster xanthine dehydrogenase in Aspergillus nidulans and some properties of the recombinant enzyme. Biochemical Journal, 2002, 362, 223.	3.7	8
56	Investigation of native and mutant plant peroxidases by NMR spectroscopy. Biochemical Society Transactions, 1992, 20, 114S-114S.	3.4	7
57	Haem-linked interactions in horseradish peroxidase revealed by spectroscopic analysis of the Phe-221â†'Met mutant. Biochemical Journal, 2001, 353, 181.	3.7	6
58	Draft Genome Sequence of Lactobacillus plantarum Strain A6, a Strong Acid Producer Isolated from a Vietnamese Fermented Sausage (Nem Chua). Genome Announcements, 2017, 5, .	0.8	5
59	Expression of wild-type and mutated Drosophila melanogaster xanthine dehydrogenases in Aspergillus nidulans. Biochemical Society Transactions, 1997, 25, 520S-520S.	3.4	4
60	Homology Modeling of Horseradish Peroxidase. , 1995, , 75-93.		4
61	Stopped-flow studies on dimethylsulphoxide reductase from Rhodobacter capsulatus: kinetic competence of the dimethylsulphide-reduced intermediate. Biochemical Society Transactions, 1998, 26, S211-S211.	3.4	3
62	Broad spectrum antimicrobial activities from spore-forming bacteria isolated from the Vietnam Sea. PeerJ, 2020, 8, e10117.	2.0	3
63	Refinement of 3D models of horseradish peroxidase isoenzyme C: Predictions of 2D NMR assignments and substrate binding sites. Proteins: Structure, Function and Bioinformatics, 1996, 26, 204-216.	2.6	2
64	Resonance Raman Characterisation of the His42Leu Mutant of Horseradish Peroxidase. , 1995, , 131-132.		0
65	Role of the distal phenylalanine 41 on the properties of horseradish peroxidase C. , 1999, , 149-150.		0