

Thomas L Poulos

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63
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267
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17,338
ext. citations

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#	Paper	IF	Citations
258	High-resolution crystal structure of cytochrome P450cam. <i>Journal of Molecular Biology</i> , 1987 , 195, 687-700		1277
257	Heme enzyme structure and function. <i>Chemical Reviews</i> , 2014 , 114, 3919-62	66.4	756
256	Crystal structure of constitutive endothelial nitric oxide synthase: a paradigm for pterin function involving a novel metal center. <i>Cell</i> , 1998 , 95, 939-50	54.5	590
255	Crystal structure of horseradish peroxidase C at 2.15 Å resolution. <i>Nature Structural Biology</i> , 1997 , 4, 1032-8		562
254	Crystal structure of substrate-free <i>Pseudomonas putida</i> cytochrome P-450. <i>Biochemistry</i> , 1986 , 25, 5314-22		562
253	Engineered ascorbate peroxidase as a genetically encoded reporter for electron microscopy. <i>Nature Biotechnology</i> , 2012 , 30, 1143-8	43.2	441
252	The crystal structure of chloroperoxidase: a heme peroxidase--cytochrome P450 functional hybrid. <i>Structure</i> , 1995 , 3, 1367-77	5	397
251	The structure of the cytochrome p450BM-3 haem domain complexed with the fatty acid substrate, palmitoleic acid. <i>Nature Structural Biology</i> , 1997 , 4, 140-6		396
250	Structure of cytochrome P450eryF involved in erythromycin biosynthesis. <i>Nature Structural and Molecular Biology</i> , 1995 , 2, 144-53	17.2	339
249	Crystal structure of human heme oxygenase-1. <i>Nature Structural Biology</i> , 1999 , 6, 860-7		252
248	Crystal structure of recombinant pea cytosolic ascorbate peroxidase. <i>Biochemistry</i> , 1995 , 34, 4331-41	3.1	250
247	The crystal structure of peanut peroxidase. <i>Structure</i> , 1996 , 4, 311-21	5	248
246	Structure-function studies on nitric oxide synthases. <i>Journal of Inorganic Biochemistry</i> , 2005 , 99, 293-305		225
245	Understanding the role of the essential Asp251 in cytochrome p450cam using site-directed mutagenesis, crystallography, and kinetic solvent isotope effect. <i>Biochemistry</i> , 1998 , 37, 9211-9	3.1	214
244	Crystal structure of the cytochrome P-450CAM active site mutant Thr252Ala. <i>Biochemistry</i> , 1991 , 30, 11420-9	3.1	209
243	The role of the proximal ligand in heme enzymes. <i>Journal of Biological Inorganic Chemistry</i> , 1996 , 1, 356-359		208
242	Structure of the CO sensing transcription activator CooA. <i>Nature Structural Biology</i> , 2000 , 7, 876-80		193

241	Crystal structure of the carbon monoxide-substrate-cytochrome P-450CAM ternary complex. <i>Biochemistry</i> , 1989 , 28, 7586-92	3.1	191
240	A metal-mediated hydride shift mechanism for xylose isomerase based on the 1.6 Å <i>Streptomyces rubiginosus</i> structures with xylitol and D-xylose. <i>Proteins: Structure, Function and Bioinformatics</i> , 1991 , 9, 153-73	4	175
239	Evolutionary history of a specialized p450 propane monooxygenase. <i>Journal of Molecular Biology</i> , 2008 , 383, 1069-80	6.3	167
238	Identification of a porphyrin pi cation radical in ascorbate peroxidase compound I. <i>Biochemistry</i> , 1995 , 34, 4342-5	3.1	162
237	Structure and mechanism of the complex between cytochrome P4503A4 and ritonavir. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 18422-7	11.1	156
236	Crystallographic study on the dioxygen complex of wild-type and mutant cytochrome P450cam. Implications for the dioxygen activation mechanism. <i>Journal of Biological Chemistry</i> , 2005 , 280, 31659-63 ⁵		153
235	Crystal structures of zinc-free and -bound heme domain of human inducible nitric-oxide synthase. Implications for dimer stability and comparison with endothelial nitric-oxide synthase. <i>Journal of Biological Chemistry</i> , 1999 , 274, 21276-84	5	153
234	Crystal structure of a thermophilic cytochrome P450 from the archaeon <i>Sulfolobus solfataricus</i> . <i>Journal of Biological Chemistry</i> , 2000 , 275, 31086-92	5	152
233	Cytochrome P450cam: crystallography, oxygen activation, and electron transfer. <i>FASEB Journal</i> , 1992 , 6, 674-9	0.9	148
232	Proteases of enhanced stability: characterization of a thermostable variant of subtilisin. <i>Proteins: Structure, Function and Bioinformatics</i> , 1986 , 1, 326-34	4	137
231	Structural basis for effector control and redox partner recognition in cytochrome P450. <i>Science</i> , 2013 , 340, 1227-30	32.2	134
230	Stereochemistry of the chloroperoxidase active site: crystallographic and molecular-modeling studies. <i>Chemistry and Biology</i> , 1998 , 5, 461-73		134
229	High-resolution crystal structures and spectroscopy of native and compound I cytochrome c peroxidase. <i>Biochemistry</i> , 2003 , 42, 5600-8	3.1	125
228	Crystal structure of heme oxygenase from the gram-negative pathogen <i>Neisseria meningitidis</i> and a comparison with mammalian heme oxygenase-1. <i>Biochemistry</i> , 2001 , 40, 11552-8	3.1	126
227	The novel binding mode of N-alkyl-N'-hydroxyguanidine to neuronal nitric oxide synthase provides mechanistic insights into NO biosynthesis. <i>Biochemistry</i> , 2002 , 41, 13868-75	3.1	119
226	Aspartate residue 7 in amyloid beta-protein is critical for classical complement pathway activation: implications for Alzheimer's disease pathogenesis. <i>Nature Medicine</i> , 1997 , 3, 77-9	49.3	108
225	Structural basis for novel delta-regioselective heme oxygenation in the opportunistic pathogen <i>Pseudomonas aeruginosa</i> . <i>Biochemistry</i> , 2004 , 43, 5239-45	3.1	101
224	Soluble guanylate cyclase. <i>Current Opinion in Structural Biology</i> , 2006 , 16, 736-43	7.9	100

223	Structural insights into substrate and inhibitor binding sites in human indoleamine 2,3-dioxygenase 1. <i>Nature Communications</i> , 2017 , 8, 1693	16.9	89
222	Structural and mechanistic insights into the interaction of cytochrome P4503A4 with bromoergocryptine, a type I ligand. <i>Journal of Biological Chemistry</i> , 2012 , 287, 3510-7	5	89
221	Thirty years of heme peroxidase structural biology. <i>Archives of Biochemistry and Biophysics</i> , 2010 , 500, 3-12	3.9	88
220	Comparison of the heme-free and -bound crystal structures of human heme oxygenase-1. <i>Journal of Biological Chemistry</i> , 2003 , 278, 7834-43	5	88
219	Minimal pharmacophoric elements and fragment hopping, an approach directed at molecular diversity and isozyme selectivity. Design of selective neuronal nitric oxide synthase inhibitors. <i>Journal of the American Chemical Society</i> , 2008 , 130, 3900-14	16	85
218	Photoreduction of the active site of the metalloprotein putidaredoxin by synchrotron radiation. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2007 , 63, 951-60		85
217	Cytochrome P450 flexibility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 13121-2	11.1	83
216	An engineered cation site in cytochrome c peroxidase alters the reactivity of the redox active tryptophan. <i>Biochemistry</i> , 1996 , 35, 6107-15	3.1	82
215	Crystal structure of putidaredoxin, the [2Fe-2S] component of the P450cam monooxygenase system from <i>Pseudomonas putida</i> . <i>Journal of Molecular Biology</i> , 2003 , 333, 377-92	6.3	80
214	Disruption of an active site hydrogen bond converts human heme oxygenase-1 into a peroxidase. <i>Journal of Biological Chemistry</i> , 2001 , 276, 10612-9	5	79
213	Discovery of highly potent and selective inhibitors of neuronal nitric oxide synthase by fragment hopping. <i>Journal of Medicinal Chemistry</i> , 2009 , 52, 779-97	7.9	76
212	Crystallographic studies on endothelial nitric oxide synthase complexed with nitric oxide and mechanism-based inhibitors. <i>Biochemistry</i> , 2001 , 40, 5399-406	3.1	74
211	Crystal structures of the ferrous dioxygen complex of wild-type cytochrome P450eryF and its mutants, A245S and A245T: investigation of the proton transfer system in P450eryF. <i>Journal of Biological Chemistry</i> , 2005 , 280, 22102-7	5	73
210	New understandings of thermostable and peizostable enzymes. <i>Current Opinion in Biotechnology</i> , 2003 , 14, 360-5	11.1	73
209	Crystal structure of nitric oxide synthase bound to nitro indazole reveals a novel inactivation mechanism. <i>Biochemistry</i> , 2001 , 40, 13448-55	3.1	73
208	Crystal structures of the ferric, ferrous, and ferrous-NO forms of the Asp140Ala mutant of human heme oxygenase-1: catalytic implications. <i>Journal of Molecular Biology</i> , 2003 , 330, 527-38	6.3	72
207	Structural basis for dipeptide amide isoform-selective inhibition of neuronal nitric oxide synthase. <i>Nature Structural and Molecular Biology</i> , 2004 , 11, 54-9	17.2	72
206	Crystal structure of <i>Nitrosomonas europaea</i> cytochrome c peroxidase and the structural basis for ligand switching in bacterial di-heme peroxidases. <i>Biochemistry</i> , 2001 , 40, 13483-90	3.1	71

205	Functional implications of interleukin-1 beta based on the three-dimensional structure. <i>Proteins: Structure, Function and Bioinformatics</i> , 1992 , 12, 10-23	4	71
204	Crystallographic and single-crystal spectral analysis of the peroxidase ferryl intermediate. <i>Biochemistry</i> , 2010 , 49, 2984-6	3.1	69
203	Crystal structures of epothilone D-bound, epothilone B-bound, and substrate-free forms of cytochrome P450epoK. <i>Journal of Biological Chemistry</i> , 2003 , 278, 44886-93	5	70
202	Selective neuronal nitric oxide synthase inhibitors and the prevention of cerebral palsy. <i>Annals of Neurology</i> , 2009 , 65, 209-17	9.2	69
201	Identification of two electron-transfer sites in ascorbate peroxidase using chemical modification, enzyme kinetics, and crystallography. <i>Biochemistry</i> , 1998 , 37, 17610-7	3.1	69
200	Preliminary characterization and crystal structure of a thermostable cytochrome P450 from <i>Thermus thermophilus</i> . <i>Journal of Biological Chemistry</i> , 2003 , 278, 608-16	5	68
199	Structural biology of heme monooxygenases. <i>Biochemical and Biophysical Research Communications</i> , 2005 , 338, 337-45	3.3	66
198	Crystal structure of putidaredoxin reductase from <i>Pseudomonas putida</i> , the final structural component of the cytochrome P450cam monooxygenase. <i>Journal of Molecular Biology</i> , 2004 , 336, 889-902	6.3	66
197	Crystal structures of substrate binding site mutants of manganese peroxidase. <i>Journal of Biological Chemistry</i> , 1997 , 272, 17574-80	5	65
196	Computer modeling of selective regions in the active site of nitric oxide synthases: implication for the design of isoform-selective inhibitors. <i>Journal of Medicinal Chemistry</i> , 2003 , 46, 5700-11	7.9	65
195	Holo- and apo-bound structures of bacterial periplasmic heme-binding proteins. <i>Journal of Biological Chemistry</i> , 2007 , 282, 35796-802	5	60
194	Putidaredoxin-to-cytochrome P450cam electron transfer: differences between the two reductive steps required for catalysis. <i>Biochemistry</i> , 2006 , 45, 11934-44	3.1	61
193	Substrate recognition sites in 14 α -sterol demethylase from comparative analysis of amino acid sequences and X-ray structure of <i>Mycobacterium tuberculosis</i> CYP51. <i>Journal of Inorganic Biochemistry</i> , 2001 , 87, 227-35	4	61
192	Substrate-assisted catalysis in cytochrome P450eryF. <i>Nature Structural Biology</i> , 1996 , 3, 632-7		60
191	Structure-Based Inhibitor Design for Evaluation of a CYP3A4 Pharmacophore Model. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 4210-20	7.9	59
190	Crystal Structure of Cytochrome P450cam Complexed with Its Catalytic Product, 5-exo-Hydroxycamphor. <i>Journal of the American Chemical Society</i> , 1995 , 117, 6297-6299	16	57
189	Electrostatic control of the tryptophan radical in cytochrome c peroxidase. <i>Biochemistry</i> , 2004 , 43, 8826-34		56
188	Structural basis for regiospecific midazolam oxidation by human cytochrome P450 3A4. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 486-491	11.1	55

187	Crystal structure of the pristine peroxidase ferryl center and its relevance to proton-coupled electron transfer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 1226-31	11.1	53
186	Ultrahigh (0.93Å) resolution structure of manganese peroxidase from <i>Phanerochaete chrysosporium</i> : implications for the catalytic mechanism. <i>Journal of Inorganic Biochemistry</i> , 2010 , 104, 683-90	4	54
185	The Janus nature of heme. <i>Natural Product Reports</i> , 2007 , 24, 504-10	14.4	54
184	Modeling of mammalian P450s on basis of P450cam X-ray structure. <i>Methods in Enzymology</i> , 1991 , 206, 11-30	1.6	52
183	Crystal structure and characterization of a cytochrome c peroxidase-cytochrome c site-specific cross-link. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 5940-5	11.1	51
182	Structural studies of constitutive nitric oxide synthases with diatomic ligands bound. <i>Journal of Biological Inorganic Chemistry</i> , 2006 , 11, 753-68	3.6	50
181	Pyridine-substituted desoxyritonavir is a more potent inhibitor of cytochrome P450 3A4 than ritonavir. <i>Journal of Medicinal Chemistry</i> , 2013 , 56, 3733-41	7.9	49
180	Structures of Cytochrome P450 Enzymes 2005 , 87-114		46
179	Crystal structure of P450cin in a complex with its substrate, 1,8-cineole, a close structural homologue to D-camphor, the substrate for P450cam. <i>Biochemistry</i> , 2004 , 43, 9487-94	3.1	48
178	Structural variation in heme enzymes: a comparative analysis of peroxidase and P450 crystal structures. <i>Structure</i> , 1994 , 2, 461-4	5	48
177	Potent, highly selective, and orally bioavailable gem-difluorinated monocationic inhibitors of neuronal nitric oxide synthase. <i>Journal of the American Chemical Society</i> , 2010 , 132, 14229-38	16	47
176	Structural and functional diversity in heme monooxygenases. <i>Drug Metabolism and Disposition</i> , 2005 , 33, 10-8	3.7	47
175	Crystal structure of the cytochrome p450cam mutant that exhibits the same spectral perturbations induced by putidaredoxin binding. <i>Journal of Biological Chemistry</i> , 2004 , 279, 42844-9	5	47
174	Unexpected binding modes of nitric oxide synthase inhibitors effective in the prevention of a cerebral palsy phenotype in an animal model. <i>Journal of the American Chemical Society</i> , 2010 , 132, 5437-42	16	46
173	Structural biology of redox partner interactions in P450cam monooxygenase: a fresh look at an old system. <i>Archives of Biochemistry and Biophysics</i> , 2011 , 507, 66-74	3.9	46
172	Crystallization of recombinant human heme oxygenase-1. <i>Protein Science</i> , 1998 , 7, 1836-8	6.1	45
171	Crystal structures of the NO- and CO-bound heme oxygenase from <i>Neisseriae meningitidis</i> . Implications for O ₂ activation. <i>Journal of Biological Chemistry</i> , 2003 , 278, 34654-9	5	44
170	Crystal structure of human heme oxygenase-1 in a complex with biliverdin. <i>Biochemistry</i> , 2004 , 43, 3793-801	30.1	43

169	Probing the cytochrome c peroxidase-cytochrome c electron transfer reaction using site specific cross-linking. <i>Biochemistry</i> , 1996 , 35, 4837-45	3.1	44
168	Cytochrome P450: molecular architecture, mechanism, and prospects for rational inhibitor design. <i>Pharmaceutical Research</i> , 1988 , 5, 67-75	4.4	45
167	Heme-mediated oxygen activation in biology: cytochrome c oxidase and nitric oxide synthase. <i>Current Opinion in Chemical Biology</i> , 1999 , 3, 131-7	9.4	43
166	Preliminary crystallographic analysis of manganese peroxidase from <i>Phanerochaete chrysosporium</i> . <i>Journal of Molecular Biology</i> , 1994 , 238, 845-8	6.3	43
165	Interaction of human cytochrome P4503A4 with ritonavir analogs. <i>Archives of Biochemistry and Biophysics</i> , 2012 , 520, 108-16	3.9	41
164	Replacement of the distal glycine 139 transforms human heme oxygenase-1 into a peroxidase. <i>Journal of Biological Chemistry</i> , 2000 , 275, 34501-7	5	42
163	Crystal structure and preliminary functional analysis of the cytochrome c peroxidase His175Gln proximal ligand mutant. <i>Journal of the American Chemical Society</i> , 1991 , 113, 7755-7757	16	42
162	Targeting nitric oxide signaling with nNOS inhibitors as a novel strategy for the therapy and prevention of human melanoma. <i>Antioxidants and Redox Signaling</i> , 2013 , 19, 433-47	8	41
161	The role of quaternary interactions on the stability and activity of ascorbate peroxidase. <i>Protein Science</i> , 1998 , 7, 2089-98	6.1	41
160	Exploration of the active site of neuronal nitric oxide synthase by the design and synthesis of pyrrolidinomethyl 2-aminopyridine derivatives. <i>Journal of Medicinal Chemistry</i> , 2010 , 53, 7804-24	7.9	40
159	Crystallization of cytochromes P450 and substrate-enzyme interactions. <i>Current Topics in Medicinal Chemistry</i> , 2004 , 4, 1789-802	2.9	40
158	Structural and biological studies on bacterial nitric oxide synthase inhibitors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 18127-31	11.1	37
157	The putidaredoxin reductase-putidaredoxin electron transfer complex: theoretical and experimental studies. <i>Journal of Biological Chemistry</i> , 2005 , 280, 16135-42	5	37
156	Role of electrostatics and salt bridges in stabilizing the compound I radical in ascorbate peroxidase. <i>Biochemistry</i> , 2005 , 44, 14062-8	3.1	36
155	The effects of an engineered cation site on the structure, activity, and EPR properties of cytochrome c peroxidase. <i>Biochemistry</i> , 1999 , 38, 5538-45	3.1	37
154	The FMN to heme electron transfer in cytochrome P450BM-3. Effect of chemical modification of cysteines engineered at the FMN-heme domain interaction site. <i>Journal of Biological Chemistry</i> , 1999 , 274, 36097-106	5	37
153	Role of the linker region connecting the reductase and heme domains in cytochrome P450BM-3. <i>Biochemistry</i> , 1995 , 34, 11221-6	3.1	37
152	Laser flash induced electron transfer in P450cam monooxygenase: putidaredoxin reductase-putidaredoxin interaction. <i>Biochemistry</i> , 2001 , 40, 10592-600	3.1	36

151	Crystal structures of ferrous and ferrous-NO forms of verdoheme in a complex with human heme oxygenase-1: catalytic implications for heme cleavage. <i>Journal of Inorganic Biochemistry</i> , 2004 , 98, 1686-95	4.5	36
150	Anion-Dependent Stimulation of CYP3A4 Monooxygenase. <i>Biochemistry</i> , 2015 , 54, 4083-96	3.1	35
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148	Effect of Redox Partner Binding on Cytochrome P450 Conformational Dynamics. <i>Journal of the American Chemical Society</i> , 2017 , 139, 13193-13199	16	34
147	A novel heme and peroxide-dependent tryptophan-tyrosine cross-link in a mutant of cytochrome c peroxidase. <i>Journal of Molecular Biology</i> , 2003 , 328, 157-66	6.3	35
146	The domain architecture of cytochrome P450BM-3. <i>Journal of Biological Chemistry</i> , 1997 , 272, 7915-21	5	34
145	Preliminary crystallographic analysis of an enzyme involved in erythromycin biosynthesis: cytochrome P450eryF. <i>Proteins: Structure, Function and Bioinformatics</i> , 1994 , 20, 197-201	4	34
144	Conformational selectivity in cytochrome P450 redox partner interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 8723-8	11.1	33
143	Potent and selective double-headed thiophene-2-carboximidamide inhibitors of neuronal nitric oxide synthase for the treatment of melanoma. <i>Journal of Medicinal Chemistry</i> , 2014 , 57, 686-700	7.9	33
142	Role of zinc in isoform-selective inhibitor binding to neuronal nitric oxide synthase. <i>Biochemistry</i> , 2010 , 49, 10803-10	3.1	32
141	Symmetric double-headed aminopyridines, a novel strategy for potent and membrane-permeable inhibitors of neuronal nitric oxide synthase. <i>Journal of Medicinal Chemistry</i> , 2011 , 54, 2039-48	7.9	33
140	Structural basis for isoform-selective inhibition in nitric oxide synthase. <i>Accounts of Chemical Research</i> , 2013 , 46, 390-8	23.6	32
139	Simplified 2-aminoquinoline-based scaffold for potent and selective neuronal nitric oxide synthase inhibition. <i>Journal of Medicinal Chemistry</i> , 2014 , 57, 1513-30	7.9	31
138	The critical role of substrate-protein hydrogen bonding in the control of regioselective hydroxylation in p450cin. <i>Journal of Biological Chemistry</i> , 2008 , 283, 10804-12	5	31
137	Nitric oxide synthase and structure-based inhibitor design. <i>Nitric Oxide - Biology and Chemistry</i> , 2017 , 63, 68-77	4.9	29
136	Electron transfer between the FMN and heme domains of cytochrome P450BM-3. Effects of substrate and CO. <i>Journal of Biological Chemistry</i> , 1997 , 272, 7922-6	5	30
135	Resonance Raman spectroscopy shows different temperature-dependent coordination equilibria for native horseradish and cytochrome c peroxidase. <i>FEBS Letters</i> , 1985 , 190, 221-6	3.6	30
134	Exploring the electron transfer properties of neuronal nitric-oxide synthase by reversal of the FMN redox potential. <i>Journal of Biological Chemistry</i> , 2008 , 283, 34762-72	5	29

133	Structure-based hypothesis on the activation of the CO-sensing transcription factor CoxA. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2007 , 63, 282-7		29
132	Intermediates in P450 catalysis. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2005 , 363, 793-806; discussion 1035-40	2.9	29
131	The homologous tryptophan critical for cytochrome c peroxidase function is not essential for ascorbate peroxidase activity. <i>Journal of Biological Inorganic Chemistry</i> , 1996 , 1, 61-66	3.6	29
130	Structures of human constitutive nitric oxide synthases. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2014 , 70, 2667-74		28
129	Calmodulin activates neuronal nitric oxide synthase by enabling transitions between conformational states. <i>FEBS Letters</i> , 2013 , 587, 44-7	3.6	28
128	Intramolecular hydrogen bonding: a potential strategy for more bioavailable inhibitors of neuronal nitric oxide synthase. <i>Bioorganic and Medicinal Chemistry</i> , 2012 , 20, 2435-43	3.2	29
127	Structure-based design and synthesis of N(omega)-nitro-L-arginine-containing peptidomimetics as selective inhibitors of neuronal nitric oxide synthase. Displacement of the heme structural water. <i>Journal of Medicinal Chemistry</i> , 2007 , 50, 2089-99	7.9	28
126	Structures of the neuronal and endothelial nitric oxide synthase heme domain with D-nitroarginine-containing dipeptide inhibitors bound. <i>Biochemistry</i> , 2004 , 43, 5181-7	3.1	28
125	A study of the K(+)-site mutant of ascorbate peroxidase: mutations of protein residues on the proximal side of the heme cause changes in iron ligation on the distal side. <i>Journal of Biological Inorganic Chemistry</i> , 1999 , 4, 64-72	3.6	28
124	Inhibition Mechanisms of Human Indoleamine 2,3 Dioxygenase 1. <i>Journal of the American Chemical Society</i> , 2018 , 140, 8518-8525	16	28
123	Electron transfer between cytochrome P450cin and its FMN-containing redox partner, cindoxin. <i>Journal of Biological Chemistry</i> , 2007 , 282, 27006-27011	5	27
122	Structural characterization and kinetics of nitric-oxide synthase inhibition by novel N5-(iminoalkyl)- and N5-(iminoalkenyl)-ornithines. <i>Journal of Biological Chemistry</i> , 2003 , 278, 46789-97	5	27
121	Mapping the active site polarity in structures of endothelial nitric oxide synthase heme domain complexed with isothioureas. <i>Journal of Inorganic Biochemistry</i> , 2000 , 81, 133-9	4	27
120	Structure-guided design of selective inhibitors of neuronal nitric oxide synthase. <i>Journal of Medicinal Chemistry</i> , 2013 , 56, 3024-32	7.9	25
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118	Probing the structure of the linker connecting the reductase and heme domains of cytochrome P450BM-3 using site-directed mutagenesis. <i>Protein Science</i> , 1996 , 5, 1389-93	6.1	25
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116	Structural basis for pterin antagonism in nitric-oxide synthase. Development of novel 4-oxo-pteridine antagonists of (6R)-5,6,7,8-tetrahydrobiopterin. <i>Journal of Biological Chemistry</i> , 2001 , 276, 49133-41	5	24

115	Conversion of an engineered potassium-binding site into a calcium-selective site in cytochrome c peroxidase. <i>Journal of Biological Chemistry</i> , 1999 , 274, 37827-33	5	24
114	Novel 2,4-disubstituted pyrimidines as potent, selective, and cell-permeable inhibitors of neuronal nitric oxide synthase. <i>Journal of Medicinal Chemistry</i> , 2015 , 58, 1067-88	7.9	22
113	Using molecular dynamics to probe the structural basis for enhanced stability in thermal stable cytochromes P450. <i>Biochemistry</i> , 2010 , 49, 6680-6	3.1	23
112	Crystal structure of the putidaredoxin reductase x putidaredoxin electron transfer complex. <i>Journal of Biological Chemistry</i> , 2010 , 285, 13616-20	5	23
111	Implications for isoform-selective inhibitor design derived from the binding mode of bulky isothioureas to the heme domain of endothelial nitric-oxide synthase. <i>Journal of Biological Chemistry</i> , 2001 , 276, 26486-91	5	23
110	Electron transfer in the ruthenated heme domain of cytochrome P450BM-3. <i>Israel Journal of Chemistry</i> , 2000 , 40, 47-53	3.3	23
109	Engineering proteins, subcloning and hyperexpressing oxidoreductase genes. <i>Protein Engineering, Design and Selection</i> , 1991 , 4, 701-8	1.8	23
108	On the occurrence of cytochrome P450 in viruses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 12343-12352	11.1	22
107	Putidaredoxin reductase, a new function for an old protein. <i>Journal of Biological Chemistry</i> , 2002 , 277, 25831-9	5	22
106	Substrate-Dependent Allosteric Regulation in Cytochrome P450cam (CYP101A1). <i>Journal of the American Chemical Society</i> , 2018 , 140, 16222-16228	16	21
105	Pulsed electron paramagnetic resonance study of domain docking in neuronal nitric oxide synthase: the calmodulin and output state perspective. <i>Journal of Physical Chemistry A</i> , 2014 , 118, 6864-72	2.7	21
104	Selective monocationic inhibitors of neuronal nitric oxide synthase. Binding mode insights from molecular dynamics simulations. <i>Journal of the American Chemical Society</i> , 2012 , 134, 11559-72	16	20
103	Nitrile in the Hole: Discovery of a Small Auxiliary Pocket in Neuronal Nitric Oxide Synthase Leading to the Development of Potent and Selective 2-Aminoquinoline Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2017 , 60, 3958-3978	7.9	20
102	Electrostatic Control of Isoform Selective Inhibitor Binding in Nitric Oxide Synthase. <i>Biochemistry</i> , 2016 , 55, 3702-7	3.1	19
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