Stefan Hofbauer

List of Publications by Year
in descending order

53	1,207	361413	414414
papers	citations	20 h-index	32 g-index

55	55	55	1094
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Independent evolution of four heme peroxidase superfamilies. Archives of Biochemistry and Biophysics, 2015, 574, 108-119.	3.0	184
2	Inactivation of human myeloperoxidase by hydrogen peroxide. Archives of Biochemistry and Biophysics, 2013, 539, 51-62.	3.0	56
3	Chlorite dismutases â€“ a heme enzyme family for use in bioremediation and generation of molecular oxygen. Biotechnology Journal, 2014, 9, 461-473.	3.5	55
4	Transiently Produced Hypochlorite Is Responsible for the Irreversible Inhibition of Chlorite Dismutase. Biochemistry, 2014, 53, 3145-3157.	2.5	46
5	Structure and heme-binding properties of HemQ (chlorite dismutase-like protein) from Listeria monocytogenes. Archives of Biochemistry and Biophysics, 2015, 574, 36-48.	3.0	44
6	Roles of distal aspartate and arginine of B-class dye-decolorizing peroxidase in heterolytic hydrogen peroxide cleavage. Journal of Biological Chemistry, 2018, 293, 14823-14838.	3.4	41
7	Structure of human promyeloperoxidase (proMPO) and the role of the propeptide in processing and maturation. Journal of Biological Chemistry, 2017, 292, 8244-8261.	3.4	38
8	Hydrogen peroxideâ€mediated conversion of coproheme to heme b by HemQâ€”lessons from the first crystal structure and kinetic studies. FEBS Journal, 2016, 283, 4386-4401.	4.7	36
9	Pre-steady-state Kinetics Reveal the Substrate Specificity and Mechanism of Halide Oxidation of Truncated Human Peroxidasin 1. Journal of Biological Chemistry, 2017, 292, 4583-4592.	3.4	36
10	X-rayâ€induced photoreduction of heme metal centers rapidly induces active-site perturbations in a protein-independent manner. Journal of Biological Chemistry, 2020, 295, 13488-13501.	3.4	33
11	Manipulating Conserved Heme Cavity Residues of Chlorite Dismutase: Effect on Structure, Redox Chemistry, and Reactivity. Biochemistry, 2014, 53, 77-89.	2.5	32
12	Redox Thermodynamics of High-Spin and Low-Spin Forms of Chlorite Dismutases with Diverse Subunit and Oligomeric Structures. Biochemistry, 2012, 51, 9501-9512.	2.5	30
13	Coproheme decarboxylases - Phylogenetic prediction versus biochemical experiments. Archives of Biochemistry and Biophysics, 2018, 640, 27-36.	3.0	30
14	Insights into the Active Site of Coproheme Decarboxylase from Listeria monocytogenes. Biochemistry, 2018, 57, 2044-2057.	2.5	28
15	Redox Cofactor Rotates during Its Stepwise Decarboxylation: Molecular Mechanism of Conversion of Coproheme to Heme b. ACS Catalysis, 2019, 9, 6766-6782.	11.2	28
16	Mechanism of chlorite degradation to chloride and dioxygen by the enzyme chlorite dismutase. Archives of Biochemistry and Biophysics, 2015, 574, 18-26.	3.0	26
17	Molecular Mechanism of Enzymatic Chlorite Detoxification: Insights from Structural and Kinetic Studies. ACS Catalysis, 2017, 7, 7962-7976.	11.2	26
18	Mechanism of reaction of chlorite with mammalian heme peroxidases. Journal of Inorganic Biochemistry, 2014, 135, 10-19.	3.5	25

#	Article	IF	Citations
19	Chemistry and Molecular Dynamics Simulations of Heme b-HemQ and Coproheme-HemQ. Biochemistry, 2016, 55, 5398-5412.	2.5	24
20	Clickable 4â€Oxoâ€Î²â€lactamâ€Based Selective Probing for Human Neutrophil Elastase Related Proteomes. ChemMedChem, 2016, 11, 2037-2042.	3.2	24
21	Understanding molecular enzymology of porphyrin-binding Î±Â+ÂÎ² barrel proteins - One fold, multiple functions. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2021, 1869, 140536.	2.3	24
22	Dimeric chlorite dismutase from the nitrogenâ€fixing cyanobacterium <scp>C</scp>yanothece sp. <scp>PCC</scp>7425. Molecular Microbiology, 2015, 96, 1053-1068.	2.5	22
23	From chlorite dismutase towards HemQâ€“the role of the proximal H-bonding network in haeme binding. Bioscience Reports, 2016, 36, .	2.4	22
24	Posttranslational modification of heme in peroxidases â€“ Impact on structure and catalysis. Archives of Biochemistry and Biophysics, 2018, 643, 14-23.	3.0	22
25	Crystal structures and calorimetry reveal catalytically relevant binding mode of coproporphyrin and coproheme in coproporphyrin ferrochelatase. FEBS Journal, 2020, 287, 2779-2796.	4.7	22
26	The hydrogen bonding network of coproheme in coproheme decarboxylase from Listeria monocytogenes: Effect on structure and catalysis. Journal of Inorganic Biochemistry, 2019, 195, 61-70.	3.5	19
27	Actinobacterial Coproheme Decarboxylases Use Histidine as a Distal Base to Promote Compound I Formation. ACS Catalysis, 2020, 10, 5405-5418.	11.2	19
28	Impact of subunit and oligomeric structure on the thermal and conformational stability of chlorite dismutases. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2012, 1824, 1031-1038.	2.3	18
29	Redox thermodynamics of B-class dye-decolorizing peroxidases. Journal of Inorganic Biochemistry, 2019, 199, 110761.	3.5	18
30	A Stable Bacterial Peroxidase with Novel Halogenating Activity and an Autocatalytically Linked Heme Prosthetic Group. Journal of Biological Chemistry, 2013, 288, 27181-27199.	3.4	17
31	Investigation of Ion Binding in Chlorite Dismutases by Means of Molecular Dynamics Simulations. Biochemistry, 2014, 53, 4869-4879.	2.5	17
32	The leucine-rich repeat domain of human peroxidasin 1 promotes binding to laminin in basement membranes. Archives of Biochemistry and Biophysics, 2020, 689, 108443.	3.0	13
33	Substrate specificity and complex stability of coproporphyrin ferrochelatase is governed by hydrogenâ€bonding interactions of the four propionate groups. FEBS Journal, 2022, 289, 1680-1699.	4.7	13
34	Biochemical characterization of the major N-acetylmuramidase from Lactobacillus buchneri. Microbiology (United Kingdom), 2014, 160, 1807-1819.	1.8	12
35	Reaction intermediate rotation during the decarboxylation of coproheme to heme b in C.Âdiphtheriae. Biophysical Journal, 2021, 120, 3600-3614.	0.5	12
36	Myoglobinopathy is an adult-onset autosomal dominant myopathy with characteristic sarcoplasmic inclusions. Nature Communications, 2019, 10, 1396.	12.8	11

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37	Monomeric and homotrimeric solution structures of truncated human peroxidasin 1 variants. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2020, 1868, 140249.	2.3	11
38	Posttranslational Modification of Heme b in a Bacterial Peroxidase: The Role of Heme to Protein Ester Bonds in Ligand Binding and Catalysis. Biochemistry, 2017, 56, 4525-4538.	2.5	10
39	Reaction of human peroxidasin 1 compound I and compound II with one-electron donors. Archives of Biochemistry and Biophysics, 2020, 681, 108267.	3.0	10
40	Agaricus meleagris pyranose dehydrogenase: Influence of covalent FAD linkage on catalysis and stability. Archives of Biochemistry and Biophysics, 2014, 558, 111-119.	3.0	9
41	An active site at work â€“ the role of key residues in C. diphteriae coproheme decarboxylase. Journal of Inorganic Biochemistry, 2022, 229, 111718.	3.5	9
42	Stabilization of porcine pancreatic elastase crystals by glutaraldehyde cross-linking. Acta Crystallographica Section F, Structural Biology Communications, 2015, 71, 1346-1351.	0.8	7
43	Introduction of germline residues improves the stability of anti-HIV mAb 2G12-IgM. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 1536-1544.	2.3	7
44	Arresting the Catalytic Arginine in Chlorite Dismutases: Impact on Heme Coordination, Thermal Stability, and Catalysis. Biochemistry, 2021, 60, 621-634.	2.5	4
45	Spectroscopic evidence of the effect of hydrogen peroxide excess on the coproheme decarboxylase from actinobacterial <scp> Corynebacterium diphtheriae </scp>. Journal of Raman Spectroscopy, 0, , .	2.5	4
46	Eukaryotic Catalase-Peroxidase: The Role of the Trp-Tyr-Met Adduct in Protein Stability, Substrate Accessibility, and Catalysis of Hydrogen Peroxide Dismutation. Biochemistry, 2015, 54, 5425-5438.	2.5	3
47	Impact of the dynamics of the catalytic arginine on nitrite and chlorite binding by dimeric chlorite dismutase. Journal of Inorganic Biochemistry, 2022, 227, 111689.	3.5	3
48	Initial Steps to Engineer Coproheme Decarboxylase to Obtain Stereospecific Monovinyl, Monopropionyl Deuterohemes. Frontiers in Bioengineering and Biotechnology, 2021, 9, 807678.	4.1	3
49	Chlorite dismutases and dye-decolorizing peroxidases â€“ similarities and differences within a structural superfamily of heme proteins. New Biotechnology, 2014, 31, S7.	4.4	1
50	Evolution, Structure and Biochemistry of Human Peroxidases. , 2021, , 3-20.		1
51	Pseudoperoxidase activity, conformational stability and aggregation propensity of the His98Tyr myoglobin variant: Implications for the onset of myoglobinopathy. FEBS Journal, 2021, , .	4.7	1
52	Dye decolorizing peroxidases â€“ A new heme-peroxidase family with ancient roots. New Biotechnology, 2016, 33, S4.	4.4	0
53	Glycosylation site Asn168 is important for slow in vivo clearance of recombinant human diamine oxidase heparin-binding motif mutants. Glycobiology, 2022, , .	2.5	0