

Angela Wilks

List of Publications by Year in descending order

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77
papers

4,496
citations

81839

39
h-index

106281

65
g-index

148
all docs

148
docs citations

148
times ranked

2734
citing authors

#	ARTICLE	IF	CITATIONS
1	Crystal structure of human heme oxygenase-1. <i>Nature Structural Biology</i> , 1999, 6, 860-867.	9.7	282
2	Homologues of Neisserial Heme Oxygenase in Gram-Negative Bacteria: Degradation of Heme by the Product of the pigA Gene of <i>Pseudomonas aeruginosa</i> . <i>Journal of Bacteriology</i> , 2001, 183, 6394-6403.	1.0	221
3	Expression and Characterization of a Heme Oxygenase (Hmu O) from <i>Corynebacterium diphtheriae</i> . <i>Journal of Biological Chemistry</i> , 1998, 273, 837-841.	1.6	192
4	Degradation of Heme in Gram-Negative Bacteria: the Product of the hemO Gene of Neisseriae Is a Heme Oxygenase. <i>Journal of Bacteriology</i> , 2000, 182, 6783-6790.	1.0	184
5	Heme Oxygenase: Evolution, Structure, and Mechanism. <i>Antioxidants and Redox Signaling</i> , 2002, 4, 603-614.	2.5	167
6	Adaptation of Iron Homeostasis Pathways by a <i>Pseudomonas aeruginosa</i> Pyoverdine Mutant in the Cystic Fibrosis Lung. <i>Journal of Bacteriology</i> , 2014, 196, 2265-2276.	1.0	145
7	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, 11552-11558.	1.2	136
8	Structural Basis for Novel β -Regioselective Heme Oxygenation in the Opportunistic Pathogen <i>Pseudomonas aeruginosa</i> . <i>Biochemistry</i> , 2004, 43, 5239-5245.	1.2	129
9	Dual-seq transcriptomics reveals the battle for iron during <i>Pseudomonas aeruginosa</i> acute murine pneumonia. <i>Scientific Reports</i> , 2016, 6, 39172.	1.6	126
10	Heme and virulence: how bacterial pathogens regulate, transport and utilize heme. <i>Natural Product Reports</i> , 2007, 24, 511.	5.2	124
11	Identification of Histidine 25 as the Heme Ligand in Human Liver Heme Oxygenase. <i>Biochemistry</i> , 1994, 33, 13734-13740.	1.2	119
12	Expression and characterization of truncated human heme oxygenase (hHO-1) and a fusion protein of hHO-1 with human cytochrome P450 reductase. <i>Biochemistry</i> , 1995, 34, 4421-4427.	1.2	118
13	Replacement of the Proximal Histidine Iron Ligand by a Cysteine or Tyrosine Converts Heme Oxygenase to an Oxidase. <i>Biochemistry</i> , 1999, 38, 3733-3743.	1.2	110
14	Resonance Raman and EPR spectroscopic studies on heme-heme oxygenase complexes. <i>Biochemistry</i> , 1993, 32, 14151-14157.	1.2	107
15	Extracellular Heme Uptake and the Challenge of Bacterial Cell Membranes. <i>Annual Review of Biochemistry</i> , 2017, 86, 799-823.	5.0	99
16	Characterization of the Periplasmic Heme-Binding Protein ShuT from the Heme Uptake System of <i>Shigella dysenteriae</i> . <i>Biochemistry</i> , 2005, 44, 13179-13191.	1.2	98
17	Oxidation of Heme to β - and β -Biliverdin by <i>Pseudomonas aeruginosa</i> Heme Oxygenase as a Consequence of an Unusual Seating of the Heme. <i>Journal of the American Chemical Society</i> , 2002, 124, 14879-14892.	6.6	97
18	Heme oxygenation and the widening paradigm of heme degradation. <i>Archives of Biochemistry and Biophysics</i> , 2014, 544, 87-95.	1.4	89

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19	Heme oxygenase structure and mechanism. <i>Advances in Inorganic Chemistry</i> , 2000, 51, 359-407.	0.4	88
20	HutZ Is Required for Efficient Heme Utilization in <i>Vibrio cholerae</i> . <i>Journal of Bacteriology</i> , 2004, 186, 4142-4151.	1.0	79
21	The <i>prfF</i> -Encoded Small Regulatory RNAs Are Required for Iron Homeostasis and Virulence of <i>Pseudomonas aeruginosa</i> . <i>Infection and Immunity</i> , 2015, 83, 863-875.	1.0	79
22	The Cytoplasmic Heme-binding Protein (PhuS) from the Heme Uptake System of <i>Pseudomonas aeruginosa</i> Is an Intracellular Heme-trafficking Protein to the δ^+ -Regioselective Heme Oxygenase. <i>Journal of Biological Chemistry</i> , 2006, 281, 13652-13662.	1.6	76
23	Holo- and Apo-bound Structures of Bacterial Periplasmic Heme-binding Proteins. <i>Journal of Biological Chemistry</i> , 2007, 282, 35796-35802.	1.6	69
24	Heme Utilization by Pathogenic Bacteria: Not All Pathways Lead to Biliverdin. <i>Accounts of Chemical Research</i> , 2014, 47, 2291-2298.	7.6	67
25	Heme Oxygenase His25Ala Mutant: Replacement of the Proximal Histidine Iron Ligand by Exogenous Bases Restores Catalytic Activity. <i>Journal of the American Chemical Society</i> , 1995, 117, 2925-2926.	6.6	64
26	Crystal Structures of the NO- and CO-bound Heme Oxygenase from <i>Neisseria meningitidis</i> . <i>Journal of Biological Chemistry</i> , 2003, 278, 34654-34659.	1.6	64
27	Differential Contributions of the Outer Membrane Receptors PhuR and HasR to Heme Acquisition in <i>Pseudomonas aeruginosa</i> . <i>Journal of Biological Chemistry</i> , 2015, 290, 7756-7766.	1.6	64
28	Proton NMR Investigation of Substrate-Bound Heme Oxygenase: Evidence for Electronic and Steric Contributions to Stereoselective Heme Cleavage. <i>Biochemistry</i> , 1994, 33, 6631-6641.	1.2	63
29	The Hydroxide Complex of <i>Pseudomonas aeruginosa</i> Heme Oxygenase as a Model of the Low-Spin Iron(III) Hydroperoxide Intermediate in Heme Catabolism: ^{13}C NMR Spectroscopic Studies Suggest the Active Participation of the Heme in Macrocycle Hydroxylation. <i>Journal of the American Chemical Society</i> , 2003, 125, 11842-11852.	6.6	58
30	Proteomic Analysis of the <i>Pseudomonas aeruginosa</i> Iron Starvation Response Reveals PrrF Small Regulatory RNA-Dependent Iron Regulation of Twitching Motility, Amino Acid Metabolism, and Zinc Homeostasis Proteins. <i>Journal of Bacteriology</i> , 2019, 201, .	1.0	54
31	Azide-Inhibited Bacterial Heme Oxygenases Exhibit an $S = 3/2$ (d_{xz}, d_{yz}) $^3(d_{xy})^1(d_{z^2})^1$ Spin State: Mechanistic Implications for Heme Oxidation. <i>Journal of the American Chemical Society</i> , 2005, 127, 9794-9807.	6.6	52
32	The <i>P. aeruginosa</i> Heme Binding Protein PhuS Is a Heme Oxygenase Titratable Regulator of Heme Uptake. <i>ACS Chemical Biology</i> , 2013, 8, 1794-1802.	1.6	51
33	The Mechanism of Heme Transfer from the Cytoplasmic Heme Binding Protein PhuS to the δ^+ -Regioselective Heme Oxygenase of <i>Pseudomonas aeruginosa</i> . <i>Biochemistry</i> , 2006, 45, 11642-11649.	1.2	50
34	Crystallization of recombinant human heme oxygenase. <i>Protein Science</i> , 1998, 7, 1836-1838.	3.1	48
35	Solution ^1H NMR Investigation of the Molecular and Electronic Structure of the Active Site of Substrate-Bound Human Heme Oxygenase: the Nature of the Distal Hydrogen Bond Donor to Bound Ligands. <i>Journal of the American Chemical Society</i> , 1998, 120, 8875-8884.	6.6	48
36	The Role of the Cytoplasmic Heme-binding Protein (PhuS) of <i>Pseudomonas aeruginosa</i> in Intracellular Heme Trafficking and Iron Homeostasis. <i>Journal of Biological Chemistry</i> , 2009, 284, 56-66.	1.6	47

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37	Induced fit on heme binding to the <i>Pseudomonas aeruginosa</i> cytoplasmic protein (PhuS) drives interaction with heme oxygenase (HemO). Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5639-5644.	3.3	46
38	Characterization of the Outer Membrane Receptor ShuA from the Heme Uptake System of <i>Shigella dysenteriae</i> . Journal of Biological Chemistry, 2007, 282, 15126-15136.	1.6	45
39	PAMDB: a comprehensive <i>Pseudomonas aeruginosa</i> metabolome database. Nucleic Acids Research, 2018, 46, D575-D580.	6.5	45
40	Metabolic Flux of Extracellular Heme Uptake in <i>Pseudomonas aeruginosa</i> Is Driven by the Iron-regulated Heme Oxygenase (HemO). Journal of Biological Chemistry, 2012, 287, 18342-18350.	1.6	42
41	A rapid seamless method for gene knockout in <i>Pseudomonas aeruginosa</i> . BMC Microbiology, 2017, 17, 199.	1.3	39
42	Inhibition of the Bacterial Heme Oxygenases from <i>Pseudomonas aeruginosa</i> and <i>Neisseria meningitidis</i> : Novel Antimicrobial Targets. Journal of Medicinal Chemistry, 2007, 50, 3804-3813.	2.9	38
43	Identification of the Proximal Ligand His-20 in Heme Oxygenase (Hmu O) from <i>Corynebacterium diphtheriae</i> . Journal of Biological Chemistry, 2000, 275, 11686-11692.	1.6	37
44	The ShuS Protein of <i>Shigella dysenteriae</i> Is a Heme-Sequestering Protein That Also Binds DNA. Archives of Biochemistry and Biophysics, 2001, 387, 137-142.	1.4	36
45	Iminoguanidines as Allosteric Inhibitors of the Iron-Regulated Heme Oxygenase (HemO) of <i>Pseudomonas aeruginosa</i> . Journal of Medicinal Chemistry, 2016, 59, 6929-6942.	2.9	33
46	Metabolite-driven Regulation of Heme Uptake by the Biliverdin IX α -Selective Heme Oxygenase (HemO) of <i>Pseudomonas aeruginosa</i> . Journal of Biological Chemistry, 2016, 291, 20503-20515.	1.6	32
47	Identification of Two Heme-Binding Sites in the Cytoplasmic Heme-Trafficking Protein PhuS from <i>Pseudomonas aeruginosa</i> and Their Relevance to Function. Biochemistry, 2007, 46, 14391-14402.	1.2	30
48	Functional Characterization of the <i>Shigella dysenteriae</i> Heme ABC Transporter. Biochemistry, 2008, 47, 7977-7979.	1.2	30
49	Gallium(III)-Salophen as a Dual Inhibitor of <i>Pseudomonas aeruginosa</i> Heme Sensing and Iron Acquisition. ACS Infectious Diseases, 2020, 6, 2073-2085.	1.8	29
50	Small Molecule Antivirulents Targeting the Iron-Regulated Heme Oxygenase (HemO) of <i>P. aeruginosa</i> . Journal of Medicinal Chemistry, 2013, 56, 2097-2109.	2.9	27
51	The Hydrogen-Bonding Network in Heme Oxygenase Also Functions as a Modulator of Enzyme Dynamics: Chaotic Motions upon Disrupting the H-Bond Network in Heme Oxygenase from <i>Pseudomonas aeruginosa</i> . Journal of the American Chemical Society, 2007, 129, 11730-11742.	6.6	26
52	Spectroscopic Determination of Distinct Heme Ligands in Outer-Membrane Receptors PhuR and HasR of <i>Pseudomonas aeruginosa</i> . Biochemistry, 2015, 54, 2601-2612.	1.2	26
53	Heme uptake and utilization by hypervirulent <i>Acinetobacter baumannii</i> LAC-4 is dependent on a canonical heme oxygenase (abHemO). Archives of Biochemistry and Biophysics, 2019, 672, 108066.	1.4	25
54	Post-transcriptional regulation of the <i>Pseudomonas aeruginosa</i> heme assimilation system (Has) fine-tunes extracellular heme sensing. Journal of Biological Chemistry, 2019, 294, 2771-5555.	1.6	24

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55	Extracellular Heme Uptake and the Challenges of Bacterial Cell Membranes. <i>Current Topics in Membranes</i> , 2012, 69, 359-392.	0.5	22
56	Backbone NMR Assignments and H/D Exchange Studies on the Ferric Azide- and Cyanide-Inhibited Forms of <i>Pseudomonas aeruginosa</i> Heme Oxygenase. <i>Biochemistry</i> , 2006, 45, 4578-4592.	1.2	21
57	The Ferrous Verdoheme-Heme Oxygenase Complex is Six-Coordinate and Low-Spin. <i>Journal of the American Chemical Society</i> , 2005, 127, 17582-17583.	6.6	20
58	Heme Oxidation in a Chimeric Protein of the $\hat{\iota}$ -Selective <i>Neisseriae meningitidis</i> Heme Oxygenase with the Distal Helix of the $\hat{\iota}$ -Selective <i>Pseudomonas aeruginosa</i> . <i>Biochemistry</i> , 2005, 44, 13713-13723.	1.2	19
59	Ligand-induced allostery in the interaction of the <i>Pseudomonas aeruginosa</i> heme binding protein with heme oxygenase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 3421-3426.	3.3	18
60	Heme Inhibits the DNA Binding Properties of the Cytoplasmic Heme Binding Protein of <i>Shigella dysenteriae</i> (ShuS). <i>Biochemistry</i> , 2007, 46, 2994-3000.	1.2	14
61	Crystal structure of the <i>Pseudomonas aeruginosa</i> cytoplasmic heme binding protein, Apo-PhuS. <i>Journal of Inorganic Biochemistry</i> , 2013, 128, 131-136.	1.5	14
62	Contributions of the heme coordinating ligands of the <i>Pseudomonas aeruginosa</i> outer membrane receptor HasR to extracellular heme sensing and transport. <i>Journal of Biological Chemistry</i> , 2020, 295, 10456-10467.	1.6	14
63	The heme-binding protein PhuS transcriptionally regulates the <i>Pseudomonas aeruginosa</i> tandem sRNA <i>prfF1,F2</i> locus. <i>Journal of Biological Chemistry</i> , 2021, 296, 100275.	1.6	13
64	Structure-based design and biological evaluation of inhibitors of the <i>pseudomonas aeruginosa</i> heme oxygenase (pa-HemO). <i>Bioorganic and Medicinal Chemistry Letters</i> , 2018, 28, 1024-1029.	1.0	9
65	Metallotherapeutics development in the age of iron-clad bacteria. <i>Metallomics</i> , 2020, 12, 1863-1877.	1.0	9
66	72 Mechanisms of Heme Uptake and Utilization in Bacterial Pathogens. <i>Handbook of Porphyrin Science</i> , 2011, , 357-398.	0.3	7
67	Modeling the native ensemble of PhuS using enhanced sampling MD and HDX-ensemble reweighting. <i>Biophysical Journal</i> , 2021, 120, 5141-5157.	0.2	7
68	The Asp99-Arg188 salt bridge of the <i>Pseudomonas aeruginosa</i> HemO is critical in allowing conformational flexibility during catalysis. <i>Journal of Biological Inorganic Chemistry</i> , 2018, 23, 1057-1070.	1.1	6
69	Extracellular haem utilization by the opportunistic pathogen <i>Pseudomonas aeruginosa</i> and its role in virulence and pathogenesis. <i>Advances in Microbial Physiology</i> , 2021, 79, 89-132.	1.0	6
70	Repurposing Acitretin as an Antipseudomonal Agent Targeting the <i>Pseudomonas aeruginosa</i> Iron-Regulated Heme Oxygenase. <i>Biochemistry</i> , 2021, 60, 689-698.	1.2	5
71	Axial Heme Coordination by the Tyr-His Motif in the Extracellular Hemophore HasA Is Critical for the Release of Heme to the HasR Receptor of <i>Pseudomonas aeruginosa</i> . <i>Biochemistry</i> , 2021, 60, 2549-2559.	1.2	5
72	Recombinant Production of Biliverdin IX ² and $\hat{\iota}$ Isomers in the T7 Promoter Compatible <i>Escherichia coli</i> Nissle. <i>Frontiers in Microbiology</i> , 2021, 12, 787609.	1.5	4

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73	Catalytic turnover dependent modification of the <i>Pseudomonas aeruginosa</i> heme oxygenase (pa-HO) by 5,6-O-isopropylidene-2-O-allyl-ascorbic acid. <i>Journal of Inorganic Biochemistry</i> , 2008, 102, 251-259.	1.5	3
74	Bacterial Heme Oxygenases. , 2014, , 86-95.		2
75	Understanding RNA Binding by the Nonclassical Zinc Finger Protein CPSF30, a Key Factor in Polyadenylation during Pre-mRNA Processing. <i>Biochemistry</i> , 2021, 60, 780-790.	1.2	2
76	NMR assignments of cd-HO, a 24 kDa heme oxygenase from <i>Corynebacterium diphtheria</i> . <i>Biomolecular NMR Assignments</i> , 2007, 1, 55-56.	0.4	0
77	Extracellular Heme Uptake and Metabolism in Bacterial Pathogenesis. <i>Handbook of Porphyrin Science</i> , 2013, , 267-315.	0.3	0