Angela Wilks

List of Publications by Year in Descending Order

77 papers	3,772 citations	37 h-index	60 g-index
148 ext. papers	4,266 ext. citations	6.2 avg, IF	5.48 L-index

#	Paper	IF	Citations
77	Modeling the native ensemble of PhuS using enhanced sampling MD and HDX-ensemble reweighting. *Biophysical Journal*, **2021**, 120, 5141-5157	2.9	3
76	Extracellular haem utilization by the opportunistic pathogen Pseudomonas aeruginosa and its role in virulence and pathogenesis. *Advances in Microbial Physiology*, **2021**, 79, 89-132	4.4	2
75	Axial Heme Coordination by the Tyr-His Motif in the Extracellular Hemophore HasAp Is Critical for the Release of Heme to the HasR Receptor of. *Biochemistry*, **2021**, 60, 2549-2559	3.2	1
74	Repurposing Acitretin as an Antipseudomonal Agent Targeting the Iron-Regulated Heme Oxygenase. *Biochemistry*, **2021**, 60, 689-698	3.2	4
73	Understanding RNA Binding by the Nonclassical Zinc Finger Protein CPSF30, a Key Factor in Polyadenylation during Pre-mRNA Processing. *Biochemistry*, **2021**, 60, 780-790	3.2	1
72	The heme-binding protein PhuS transcriptionally regulates the Pseudomonas aeruginosa tandem sRNA prrF1,F2 locus. *Journal of Biological Chemistry*, **2021**, 296, 100275	5.4	5
71	Recombinant Production of Biliverdin IX□and □somers in the T7 Promoter Compatible Nissle.. *Frontiers in Microbiology*, **2021**, 12, 787609	5.7	0
70	Contributions of the heme coordinating ligands of the outer membrane receptor HasR to extracellular heme sensing and transport. *Journal of Biological Chemistry*, **2020**, 295, 10456-10467	5.4	7
69	Gallium(III)-Salophen as a Dual Inhibitor of Heme Sensing and Iron Acquisition. *ACS Infectious Diseases*, **2020**, 6, 2073-2085	5.5	15
68	Metallotherapeutics development in the age of iron-clad bacteria. *Metallomics*, **2020**, 12, 1863-1877	4.5	3
67	Proteomic Analysis of the Pseudomonas aeruginosa Iron Starvation Response Reveals PrrF Small Regulatory RNA-Dependent Iron Regulation of Twitching Motility, Amino Acid Metabolism, and Zinc Homeostasis Proteins. *Journal of Bacteriology*, **2019**, 201,	3.5	31
66	Heme uptake and utilization by hypervirulent Acinetobacter baumannii LAC-4 is dependent on a canonical heme oxygenase (abHemO). *Archives of Biochemistry and Biophysics*, **2019**, 672, 108066	4.1	15
65	Post-transcriptional regulation of the heme assimilation system (Has) fine-tunes extracellular heme sensing. *Journal of Biological Chemistry*, **2019**, 294, 2771-2785	5.4	14
64	Structure-based design and biological evaluation of inhibitors of the pseudomonas aeruginosa heme oxygenase (pa-HemO). *Bioorganic and Medicinal Chemistry Letters*, **2018**, 28, 1024-1029	2.9	9
63	PAMDB: a comprehensive Pseudomonas aeruginosa metabolome database. *Nucleic Acids Research*, **2018**, 46, D575-D580	20.1	25
62	The Asp99-Arg188 salt bridge of the Pseudomonas aeruginosa HemO is critical in allowing conformational flexibility during catalysis. *Journal of Biological Inorganic Chemistry*, **2018**, 23, 1057-1070	3.7	5
61	Extracellular Heme Uptake and the Challenge of Bacterial Cell Membranes. *Annual Review of Biochemistry*, **2017**, 86, 799-823	29.1	60

60	Ligand-induced allostery in the interaction of the heme binding protein with heme oxygenase. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 3421-3426	11.5	14
59	A rapid seamless method for gene knockout in Pseudomonas aeruginosa. *BMC Microbiology*, **2017**, 17, 199	4.5	14
58	Iminoguanidines as Allosteric Inhibitors of the Iron-Regulated Heme Oxygenase (HemO) of Pseudomonas aeruginosa. *Journal of Medicinal Chemistry*, **2016**, 59, 6929-42	8.3	26
57	Dual-seq transcriptomics reveals the battle for iron during Pseudomonas aeruginosa acute murine pneumonia. *Scientific Reports*, **2016**, 6, 39172	4.9	84
56	Metabolite-driven Regulation of Heme Uptake by the Biliverdin IXβ/δ-selective Heme Oxygenase (HemO) of Pseudomonas aeruginosa. *Journal of Biological Chemistry*, **2016**, 291, 20503-15	5.4	26
55	Differential contributions of the outer membrane receptors PhuR and HasR to heme acquisition in Pseudomonas aeruginosa. *Journal of Biological Chemistry*, **2015**, 290, 7756-66	5.4	40
54	Spectroscopic Determination of Distinct Heme Ligands in Outer-Membrane Receptors PhuR and HasR of Pseudomonas aeruginosa. *Biochemistry*, **2015**, 54, 2601-12	3.2	20
53	The prrF-encoded small regulatory RNAs are required for iron homeostasis and virulence of Pseudomonas aeruginosa. *Infection and Immunity*, **2015**, 83, 863-75	3.7	52
52	Heme oxygenation and the widening paradigm of heme degradation. *Archives of Biochemistry and Biophysics*, **2014**, 544, 87-95	4.1	61
51	Heme utilization by pathogenic bacteria: not all pathways lead to biliverdin. *Accounts of Chemical Research*, **2014**, 47, 2291-8	24.3	51
50	Adaptation of iron homeostasis pathways by a Pseudomonas aeruginosa pyoverdine mutant in the cystic fibrosis lung. *Journal of Bacteriology*, **2014**, 196, 2265-76	3.5	87
49	Bacterial Heme Oxygenases **2014**, 86-95		2
48	Crystal structure of the Pseudomonas aeruginosa cytoplasmic heme binding protein, Apo-PhuS. *Journal of Inorganic Biochemistry*, **2013**, 128, 131-6	4.2	11
47	Small molecule antivirulents targeting the iron-regulated heme oxygenase (HemO) of P. aeruginosa. *Journal of Medicinal Chemistry*, **2013**, 56, 2097-109	8.3	23
46	The P. aeruginosa heme binding protein PhuS is a heme oxygenase titratable regulator of heme uptake. *ACS Chemical Biology*, **2013**, 8, 1794-802	4.9	41
45	Extracellular Heme Uptake and Metabolism in Bacterial Pathogenesis. *Handbook of Porphyrin Science*, **2013**, 267-315	0.3	
44	Extracellular heme uptake and the challenges of bacterial cell membranes. *Current Topics in Membranes*, **2012**, 69, 359-92	2.2	22
43	Induced fit on heme binding to the Pseudomonas aeruginosa cytoplasmic protein (PhuS) drives interaction with heme oxygenase (HemO). *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 5639-44	11.5	39

42	Metabolic flux of extracellular heme uptake in Pseudomonas aeruginosa is driven by the iron-regulated heme oxygenase (HemO). *Journal of Biological Chemistry*, **2012**, 287, 18342-50	5.4	37
41	72 Mechanisms of Heme Uptake and Utilization in Bacterial Pathogens. *Handbook of Porphyrin Science*, **2011**, 357-398	0.3	7
40	The role of the cytoplasmic heme-binding protein (PhuS) of Pseudomonas aeruginosa in intracellular heme trafficking and iron homeostasis. *Journal of Biological Chemistry*, **2009**, 284, 56-66	5.4	41
39	Functional characterization of the Shigella dysenteriae heme ABC transporter. *Biochemistry*, **2008**, 47, 7977-9	3.2	30
38	Catalytic turnover dependent modification of the Pseudomonas aeruginosa heme oxygenase (pa-HO) by 5,6-O-isopropyledine-2-O-allyl-ascorbic acid. *Journal of Inorganic Biochemistry*, **2008**, 102, 251-9	4.2	3
37	Identification of two heme-binding sites in the cytoplasmic heme-trafficking protein PhuS from Pseudomonas aeruginosa and their relevance to function. *Biochemistry*, **2007**, 46, 14391-402	3.2	30
36	Heme and virulence: how bacterial pathogens regulate, transport and utilize heme. *Natural Product Reports*, **2007**, 24, 511-22	15.1	114
35	Holo- and apo-bound structures of bacterial periplasmic heme-binding proteins. *Journal of Biological Chemistry*, **2007**, 282, 35796-802	5.4	61
34	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 Pseudomonas aeruginosa. *Journal of the American Chemical Society*, **2007**, 129, 11730-42	16.4	25
33	Heme inhibits the DNA binding properties of the cytoplasmic heme binding protein of Shigella dysenteriae (ShuS). *Biochemistry*, **2007**, 46, 2994-3000	3.2	11
32	Inhibition of the bacterial heme oxygenases from Pseudomonas aeruginosa and Neisseria meningitidis: novel antimicrobial targets. *Journal of Medicinal Chemistry*, **2007**, 50, 3804-13	8.3	34
31	NMR assignments of cd-HO, a 24 kDa heme oxygenase from Corynebacterium diphtheria. *Biomolecular NMR Assignments*, **2007**, 1, 55-6	0.7	
30	Characterization of the outer membrane receptor ShuA from the heme uptake system of Shigella dysenteriae. Substrate specificity and identification of the heme protein ligands. *Journal of Biological Chemistry*, **2007**, 282, 15126-36	5.4	39
29	The cytoplasmic heme-binding protein (PhuS) from the heme uptake system of Pseudomonas aeruginosa is an intracellular heme-trafficking protein to the delta-regioselective heme oxygenase. *Journal of Biological Chemistry*, **2006**, 281, 13652-13662	5.4	69
28	The mechanism of heme transfer from the cytoplasmic heme binding protein PhuS to the delta-regioselective heme oxygenase of Pseudomonas aeruginosa. *Biochemistry*, **2006**, 45, 11642-9	3.2	42
27	Backbone NMR assignments and H/D exchange studies on the ferric azide- and cyanide-inhibited forms of Pseudomonas aeruginosa heme oxygenase. *Biochemistry*, **2006**, 45, 4578-92	3.2	21
26	Azide-inhibited bacterial heme oxygenases exhibit an S = 3/2 (dxz,dyz)3(dxy)1(dz2)1 spin state: mechanistic implications for heme oxidation. *Journal of the American Chemical Society*, **2005**, 127, 9794-807	16.4	48
25	Heme oxidation in a chimeric protein of the alpha-selective Neisseriae meningitidis heme oxygenase with the distal helix of the delta-selective Pseudomonas aeruginosa. *Biochemistry*, **2005**, 44, 13713-23	3.2	18

24	Characterization of the periplasmic heme-binding protein shut from the heme uptake system of Shigella dysenteriae. *Biochemistry*, **2005**, 44, 13179-91	3.2	91
23	The ferrous verdoheme-heme oxygenase complex is six-coordinate and low-spin. *Journal of the American Chemical Society*, **2005**, 127, 17582-3	16.4	18
22	Structural basis for novel delta-regioselective heme oxygenation in the opportunistic pathogen Pseudomonas aeruginosa. *Biochemistry*, **2004**, 43, 5239-45	3.2	102
21	HutZ is required for efficient heme utilization in Vibrio cholerae. *Journal of Bacteriology*, **2004**, 186, 4142-51	3.5	74
20	Crystal structures of the NO- and CO-bound heme oxygenase from Neisseriae meningitidis. Implications for O2 activation. *Journal of Biological Chemistry*, **2003**, 278, 34654-9	5.4	45
19	The hydroxide complex of Pseudomonas aeruginosa heme oxygenase as a model of the low-spin iron(III) hydroperoxide intermediate in heme catabolism: 13C NMR spectroscopic studies suggest the active participation of the heme in macrocycle hydroxylation. *Journal of the American Chemical*	16.4	56
18	Oxidation of heme to beta- and delta-biliverdin by Pseudomonas aeruginosa heme oxygenase as a consequence of an unusual seating of the heme. *Journal of the American Chemical Society*, **2002**, 124, 14879-92	16.4	88
17	Heme oxygenase: evolution, structure, and mechanism. *Antioxidants and Redox Signaling*, **2002**, 4, 603-14	8.4	148
16	Homologues of neisserial heme oxygenase in gram-negative bacteria: degradation of heme by the product of the pigA gene of Pseudomonas aeruginosa. *Journal of Bacteriology*, **2001**, 183, 6394-403	3.5	202
15	The ShuS protein of Shigella dysenteriae is a heme-sequestering protein that also binds DNA. *Archives of Biochemistry and Biophysics*, **2001**, 387, 137-42	4.1	34
14	Crystal structure of heme oxygenase from the gram-negative pathogen Neisseria meningitidis and a comparison with mammalian heme oxygenase-1. *Biochemistry*, **2001**, 40, 11552-8	3.2	127
13	Identification of the proximal ligand His-20 in heme oxygenase (Hmu O) from Corynebacterium diphtheriae. Oxidative cleavage of the heme macrocycle does not require the proximal histidine. *Journal of Biological Chemistry*, **2000**, 275, 11686-92	5.4	33
12	Heme oxygenase structure and mechanism. *Advances in Inorganic Chemistry*, **2000**, 51, 359-407	2.1	76
11	Degradation of heme in gram-negative bacteria: the product of the hemO gene of Neisseriae is a heme oxygenase. *Journal of Bacteriology*, **2000**, 182, 6783-90	3.5	174
10	Crystal structure of human heme oxygenase-1. *Nature Structural Biology*, **1999**, 6, 860-7		254
9	Replacement of the proximal histidine iron ligand by a cysteine or tyrosine converts heme oxygenase to an oxidase. *Biochemistry*, **1999**, 38, 3733-43	3.2	98
8	Crystallization of recombinant human heme oxygenase-1. *Protein Science*, **1998**, 7, 1836-8	6.3	46
7	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. *Journal of the American Chemical Society*, **1998**, 120, 8875-8884	16.4	45

6	Expression and characterization of a heme oxygenase (Hmu O) from Corynebacterium diphtheriae. Iron acquisition requires oxidative cleavage of the heme macrocycle. *Journal of Biological Chemistry* , **1998**, 273, 837-41	5.4	176
5	Expression and characterization of truncated human heme oxygenase (hHO-1) and a fusion protein of hHO-1 with human cytochrome P450 reductase. *Biochemistry*, **1995**, 34, 4421-7	3.2	111
4	Heme Oxygenase His25Ala Mutant: Replacement of the Proximal Histidine Iron Ligand by Exogenous Bases Restores Catalytic Activity. *Journal of the American Chemical Society*, **1995**, 117, 2925-2926	16.4	59
3	Identification of histidine 25 as the heme ligand in human liver heme oxygenase. *Biochemistry*, **1994** , 33, 13734-40	3.2	112
2	Proton NMR investigation of substrate-bound heme oxygenase: evidence for electronic and steric contributions to stereoselective heme cleavage. *Biochemistry*, **1994**, 33, 6631-41	3.2	59
1	Resonance Raman and EPR spectroscopic studies on heme-heme oxygenase complexes. *Biochemistry*, **1993**, 32, 14151-7	3.2	101