

# Michael A Marletta

## List of Publications by Year in descending order

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152  
papers

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162  
docs citations

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times ranked

11322  
citing authors

#	ARTICLE	IF	CITATIONS
1	Macrophage oxidation of L-arginine to nitrite and nitrate: nitric oxide is an intermediate. <i>Biochemistry</i> , 1988, 27, 8706-8711.	1.2	1,597
2	Guanylate cyclase and the $\text{NO/cGMP}$ signaling pathway. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1999, 1411, 334-350.	0.5	859
3	Nitric oxide synthase: Aspects concerning structure and catalysis. <i>Cell</i> , 1994, 78, 927-930.	13.5	847
4	Nitric oxide synthase is a cytochrome P-450 type hemoprotein. <i>Biochemistry</i> , 1992, 31, 6627-6631.	1.2	660
5	Soluble Guanylate Cyclase from Bovine Lung: Activation with Nitric Oxide and Carbon Monoxide and Spectral Characterization of the Ferrous and Ferric States. <i>Biochemistry</i> , 1994, 33, 5636-5640.	1.2	660
6	Cellobiose Dehydrogenase and a Copper-Dependent Polysaccharide Monooxygenase Potentiate Cellulose Degradation by <i>Neurospora crassa</i> . <i>ACS Chemical Biology</i> , 2011, 6, 1399-1406.	1.6	568
7	Oxygen sensation and social feeding mediated by a <i>C. elegans</i> guanylate cyclase homologue. <i>Nature</i> , 2004, 430, 317-322.	13.7	529
8	Oxidative Cleavage of Cellulose by Fungal Copper-Dependent Polysaccharide Monooxygenases. <i>Journal of the American Chemical Society</i> , 2012, 134, 890-892.	6.6	412
9	Structure and Regulation of Soluble Guanylate Cyclase. <i>Annual Review of Biochemistry</i> , 2012, 81, 533-559.	5.0	388
10	Nitric oxide: biosynthesis and biological significance. <i>Trends in Biochemical Sciences</i> , 1989, 14, 488-492.	3.7	366
11	Spectral and Kinetic Studies on the Activation of Soluble Guanylate Cyclase by Nitric Oxide. <i>Biochemistry</i> , 1996, 35, 1093-1099.	1.2	320
12	Systems analysis of plant cell wall degradation by the model filamentous fungus <i>Neurospora crassa</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 22157-22162.	3.3	310
13	Crystal structure of an oxygen-binding heme domain related to soluble guanylate cyclases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 12854-12859.	3.3	265
14	Thioredoxin catalyzes the S-nitrosation of the caspase-3 active site cysteine. <i>J Biol Chem</i> , 2005, 280, 154-158.		258
15	Structural Basis for Substrate Targeting and Catalysis by Fungal Polysaccharide Monooxygenases. <i>Structure</i> , 2012, 20, 1051-1061.	1.6	257
16	Neurons Detect Increases and Decreases in Oxygen Levels Using Distinct Guanylate Cyclases. <i>Neuron</i> , 2009, 61, 865-879.	3.8	253
17	Cellulose Degradation by Polysaccharide Monooxygenases. <i>Annual Review of Biochemistry</i> , 2015, 84, 923-946.	5.0	246
18	Toward $\sim$ Omic Scale Metabolite Profiling: A Dual Separation- $\text{MS}^2$ Mass Spectrometry Approach for Coverage of Lipid and Central Carbon Metabolism. <i>Analytical Chemistry</i> , 2013, 85, 6876-6884.	3.2	242

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19	Mammalian synthesis of nitrite, nitrate, nitric oxide, and N-nitrosating agents. <i>Chemical Research in Toxicology</i> , 1988, 1, 249-257.	1.7	238
20	Formation of a Pterin Radical in the Reaction of the Heme Domain of Inducible Nitric Oxide Synthase with Oxygen. <i>Biochemistry</i> , 1999, 38, 15689-15696.	1.2	229
21	Mechanisms of S-nitrosothiol formation and selectivity in nitric oxide signaling. <i>Current Opinion in Chemical Biology</i> , 2012, 16, 498-506.	2.8	228
22	A family of starch-active polysaccharide monooxygenases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 13822-13827.	3.3	222
23	Catalysis by nitric oxide synthase. <i>Current Opinion in Chemical Biology</i> , 1998, 2, 656-663.	2.8	221
24	Inhibition of Soluble Guanylate Cyclase by ODQ. <i>Biochemistry</i> , 2000, 39, 10848-10854.	1.2	208
25	Nitric oxide signaling: no longer simply on or off. <i>Trends in Biochemical Sciences</i> , 2006, 31, 231-239.	3.7	205
26	Determinants of Regioselective Hydroxylation in the Fungal Polysaccharide Monooxygenases. <i>Journal of the American Chemical Society</i> , 2014, 136, 562-565.	6.6	198
27	NG-Methyl-L-arginine functions as an alternate substrate and mechanism-based inhibitor of nitric oxide synthase. <i>Biochemistry</i> , 1993, 32, 9677-9685.	1.2	189
28	Binding of Nitric Oxide and Carbon Monoxide to Soluble Guanylate Cyclase As Observed with Resonance Raman Spectroscopy. <i>Biochemistry</i> , 1996, 35, 1540-1547.	1.2	189
29	Reactions Catalyzed by Tetrahydrobiopterin-Free Nitric Oxide Synthase. <i>Biochemistry</i> , 1998, 37, 15503-15512.	1.2	181
30	Identification of Histidine 105 in the $\beta$ 1 Subunit of Soluble Guanylate Cyclase as the Heme Proximal Ligand. <i>Biochemistry</i> , 1998, 37, 4502-4509.	1.2	177
31	A molecular basis for NO selectivity in soluble guanylate cyclase. <i>Nature Chemical Biology</i> , 2005, 1, 53-59.	3.9	177
32	Spectroscopic Characterization of the Soluble Guanylate Cyclase-like Heme Domains from <i>Vibrio cholerae</i> and <i>Thermoanaerobacter tengcongensis</i> . <i>Biochemistry</i> , 2004, 43, 10203-10211.	1.2	176
33	Hydrogen Peroxide-Supported Oxidation of NG-Hydroxy-L-Arginine by Nitric Oxide Synthase. <i>Biochemistry</i> , 1995, 34, 1930-1941.	1.2	172
34	Nitric Oxide Modulates Bacterial Biofilm Formation through a Multicomponent Cyclic-di-GMP Signaling Network. <i>Molecular Cell</i> , 2012, 46, 449-460.	4.5	156
35	Reactivity of O <sub>2</sub> versus H <sub>2</sub> O <sub>2</sub> with polysaccharide monooxygenases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 4915-4920.	3.3	144
36	Thioredoxin is required for S-nitrosation of procaspase-3 and the inhibition of apoptosis in Jurkat cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 11609-11614.	3.3	143

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37	Tonic and acute nitric oxide signaling through soluble guanylate cyclase is mediated by nonheme nitric oxide, ATP, and GTP. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 13064-13069.	3.3	140
38	Revisiting the kinetics of nitric oxide (NO) binding to soluble guanylate cyclase: The simple NO-binding model is incorrect. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 12097-12101.	3.3	128
39	Spectral Characterization and Effect on Catalytic Activity of Nitric Oxide Complexes of Inducible Nitric Oxide Synthase. <i>Biochemistry</i> , 1995, 34, 5627-5634.	1.2	127
40	Localization of the Heme Binding Region in Soluble Guanylate Cyclase. <i>Biochemistry</i> , 1997, 36, 15959-15964.	1.2	127
41	A nitric oxide/cysteine interaction mediates the activation of soluble guanylate cyclase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 21602-21607.	3.3	125
42	Synergistic activation of soluble guanylate cyclase by YC-1 and carbon monoxide: implications for the role of cleavage of the iron-histidine bond during activation by nitric oxide. <i>Chemistry and Biology</i> , 1998, 5, 255-261.	6.2	119
43	Inactivation of macrophage nitric oxide synthase activity by NG-Methyl-L-arginine. <i>Biochemical and Biophysical Research Communications</i> , 1991, 177, 828-833.	1.0	113
44	Ligand specificity of H-NOX domains: from sGC to bacterial NO sensors. <i>Journal of Inorganic Biochemistry</i> , 2005, 99, 892-902.	1.5	108
45	Probing the Function of Heme Distortion in the H-NOX Family. <i>ACS Chemical Biology</i> , 2008, 3, 703-710.	1.6	108
46	H-NOX regulation of c-di-GMP metabolism and biofilm formation in <i>Legionella pneumophila</i> . <i>Molecular Microbiology</i> , 2010, 77, 930-942.	1.2	108
47	Biochemistry of Soluble Guanylate Cyclase. <i>Handbook of Experimental Pharmacology</i> , 2009, , 17-31.	0.9	106
48	Regeneration of the Ferrous Heme of Soluble Guanylate Cyclase from the Nitric Oxide Complex: Acceleration by Thiols and Oxyhemoglobin. <i>Biochemistry</i> , 1998, 37, 16898-16907.	1.2	105
49	Subcellular Targeting and Differential S-Nitrosylation of Endothelial Nitric-oxide Synthase. <i>Journal of Biological Chemistry</i> , 2006, 281, 151-157.	1.6	103
50	H-NOX-mediated nitric oxide sensing modulates symbiotic colonization by <i>Vibrio fischeri</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 8375-8380.	3.3	100
51	Quantitative Proteomic Approach for Cellulose Degradation by <i>Neurospora crassa</i> . <i>Journal of Proteome Research</i> , 2011, 10, 4177-4185.	1.8	99
52	The crystal structure of the catalytic domain of a eukaryotic guanylate cyclase. <i>BMC Structural Biology</i> , 2008, 8, 42.	2.3	97
53	Ligand discrimination in soluble guanylate cyclase and the H-NOX family of heme sensor proteins. <i>Current Opinion in Chemical Biology</i> , 2005, 9, 441-446.	2.8	96
54	Nitric oxide-sensing H-NOX proteins govern bacterial communal behavior. <i>Trends in Biochemical Sciences</i> , 2013, 38, 566-575.	3.7	96

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55	Mechanistic probes of N-hydroxylation of L-arginine by the inducible nitric oxide synthase from murine macrophages. <i>Biochemistry</i> , 1992, 31, 6822-6828.	1.2	95
56	Interaction of Soluble Guanylate Cyclase with YC-1: Kinetic and Resonance Raman Studies. <i>Biochemistry</i> , 2000, 39, 4191-4198.	1.2	95
57	Modulating Heme Redox Potential through Protein-Induced Porphyrin Distortion. <i>Journal of the American Chemical Society</i> , 2010, 132, 12794-12795.	6.6	93
58	Molecular architecture of mammalian nitric oxide synthases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E3614-23.	3.3	91
59	The Role of the Secondary Coordination Sphere in a Fungal Polysaccharide Monooxygenase. <i>ACS Chemical Biology</i> , 2017, 12, 1095-1103.	1.6	89
60	Structural insights into the role of iron-histidine bond cleavage in nitric oxide-induced activation of H-NOX gas sensor proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E4156-64.	3.3	87
61	Expression and Characterization of the Catalytic Domains of Soluble Guanylate Cyclase: Interaction with the Heme Domain. <i>Biochemistry</i> , 2005, 44, 4083-4090.	1.2	83
62	<i>Shewanella oneidensis</i> MR-1 H-NOX Regulation of a Histidine Kinase by Nitric Oxide. <i>Biochemistry</i> , 2007, 46, 13677-13683.	1.2	83
63	The Ferrous Heme of Soluble Guanylate Cyclase: Formation of Hexacoordinate Complexes with Carbon Monoxide and Nitrosomethane. <i>Biochemistry</i> , 1995, 34, 16397-16403.	1.2	75
64	Reactions Catalyzed by the Heme Domain of Inducible Nitric Oxide Synthase: Evidence for the Involvement of Tetrahydrobiopterin in Electron Transfer. <i>Biochemistry</i> , 2002, 41, 3439-3456.	1.2	75
65	Cellular Applications of a Sensitive and Selective Fiber-Optic Nitric Oxide Biosensor Based on a Dye-Labeled Heme Domain of Soluble Guanylate Cyclase. <i>Analytical Chemistry</i> , 1999, 71, 2071-2075.	3.2	73
66	Physiological activation and deactivation of soluble guanylate cyclase. <i>Nitric Oxide - Biology and Chemistry</i> , 2018, 77, 65-74.	1.2	72
67	Spectroscopic Characterization of the Heme-Binding Sites in <i>Plasmodium falciparum</i> Histidine-Rich Protein 2. <i>Biochemistry</i> , 1999, 38, 16916-16924.	1.2	70
68	Characterization of Functional Heme Domains from Soluble Guanylate Cyclase. <i>Biochemistry</i> , 2005, 44, 16266-16274.	1.2	70
69	A structural basis for H-NOX signaling in <i>Shewanella oneidensis</i> by trapping a histidine kinase inhibitory conformation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 19753-19760.	3.3	70
70	S-Nitrosation and Regulation of Inducible Nitric Oxide Synthase. <i>Biochemistry</i> , 2005, 44, 4636-4647.	1.2	69
71	Nitric Oxide-Induced Conformational Changes in Soluble Guanylate Cyclase. <i>Structure</i> , 2014, 22, 602-611.	1.6	68
72	Nitric Oxide Binding to Prokaryotic Homologs of the Soluble Guanylate Cyclase H-NOX Domain. <i>Journal of Biological Chemistry</i> , 2006, 281, 21892-21902.	1.6	66

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73	Allosteric activation of the nitric oxide receptor soluble guanylate cyclase mapped by cryo-electron microscopy. <i>ELife</i> , 2019, 8, .	2.8	66
74	The framework of polysaccharide monooxygenase structure and chemistry. <i>Current Opinion in Structural Biology</i> , 2015, 35, 93-99.	2.6	65
75	Structural Changes in the Heme Proximal Pocket Induced by Nitric Oxide Binding to Soluble Guanylate Cyclase. <i>Biochemistry</i> , 1998, 37, 12458-12464.	1.2	64
76	An <i>Escherichia coli</i> expression-based method for heme substitution. <i>Nature Methods</i> , 2007, 4, 43-45.	9.0	64
77	Physiological and Molecular Understanding of Bacterial Polysaccharide Monooxygenases. <i>Microbiology and Molecular Biology Reviews</i> , 2017, 81, .	2.9	63
78	NO formation by a catalytically self-sufficient bacterial nitric oxide synthase from <i>Sorangium cellulosum</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 16221-16226.	3.3	59
79	Distal Pocket Polarity in the Unusual Ligand Binding Site of Soluble Guanylate Cyclase: Implications for the Control of NO Binding. <i>Journal of the American Chemical Society</i> , 1996, 118, 8769-8770.	6.6	58
80	Ru-Porphyrin Protein Scaffolds for Sensing O <sub>2</sub> . <i>Journal of the American Chemical Society</i> , 2010, 132, 5582-5583.	6.6	57
81	Heme-assisted S-Nitrosation Desensitizes Ferric Soluble Guanylate Cyclase to Nitric Oxide. <i>Journal of Biological Chemistry</i> , 2012, 287, 43053-43062.	1.6	57
82	Single-particle EM reveals the higher-order domain architecture of soluble guanylate cyclase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 2960-2965.	3.3	57
83	Spectral and Ligand-Binding Properties of an Unusual Hemoprotein, the Ferric Form of Soluble Guanylate Cyclase. <i>Biochemistry</i> , 1996, 35, 3258-3262.	1.2	56
84	Tunnels modulate ligand flux in a heme nitric oxide/oxygen binding (H-NOX) domain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, E881-9.	3.3	55
85	Higher-order interactions bridge the nitric oxide receptor and catalytic domains of soluble guanylate cyclase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 6777-6782.	3.3	54
86	Ability of Tetrahydrobiopterin Analogues to Support Catalysis by Inducible Nitric Oxide Synthase: Formation of a Pterin Radical Is Required for Enzyme Activity. <i>Biochemistry</i> , 2003, 42, 13287-13303.	1.2	53
87	Dissociation of Nitric Oxide from Soluble Guanylate Cyclase and Heme-Nitric Oxide/Oxygen Binding Domain Constructs. <i>Journal of Biological Chemistry</i> , 2007, 282, 897-907.	1.6	50
88	The case of CO signaling: why the jury is still out. <i>Journal of Clinical Investigation</i> , 2001, 107, 1071-1073.	3.9	49
89	Resonance Raman Characterization of the Heme Domain of Soluble Guanylate Cyclase. <i>Biochemistry</i> , 1998, 37, 16289-16297.	1.2	48
90	Allrecognition upon Fungal Cell-Cell Contact Determines Social Cooperation and Impacts the Acquisition of Multicellularity. <i>Current Biology</i> , 2019, 29, 3006-3017.e3.	1.8	47

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91	Chemoproteomic Strategy to Quantitatively Monitor Transnitrosation Uncovers Functionally Relevant S-Nitrosation Sites on Cathepsin D and HADH2. <i>Cell Chemical Biology</i> , 2016, 23, 727-737.	2.5	41
92	Sensitive and Selective Detection of Nitric Oxide Using an H <sup>+</sup> -NOX Domain. <i>Journal of the American Chemical Society</i> , 2006, 128, 10022-10023.	6.6	39
93	Porphyrin-Substituted H-NOX Proteins as High-Relaxivity MRI Contrast Agents. <i>Inorganic Chemistry</i> , 2013, 52, 2277-2279.	1.9	38
94	Nucleotide Regulation of Soluble Guanylate Cyclase Substrate Specificity. <i>Biochemistry</i> , 2009, 48, 7519-7524.	1.2	37
95	Structural insights into the molecular mechanism of H <sup>+</sup> -NOX activation. <i>Protein Science</i> , 2010, 19, 881-887.	3.1	36
96	Structural and Functional Evidence Indicates Selective Oxygen Signaling in <i>Caldanaerobacter subterraneus</i> H-NOX. <i>ACS Chemical Biology</i> , 2016, 11, 2337-2346.	1.6	36
97	Calcium Binding Sites of Calmodulin and Electron Transfer by Neuronal Nitric Oxide Synthase. <i>Biochemistry</i> , 1997, 36, 12337-12345.	1.2	35
98	Characterization of Two Different Five-Coordinate Soluble Guanylate Cyclase Ferrous <sup>+</sup> -Nitrosyl Complexes. <i>Biochemistry</i> , 2008, 47, 3892-3899.	1.2	33
99	Determinants of Ligand Affinity and Heme Reactivity in H <sup>+</sup> -NOX Domains. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 720-723.	7.2	33
100	Starch-degrading polysaccharide monooxygenases. <i>Cellular and Molecular Life Sciences</i> , 2016, 73, 2809-2819.	2.4	33
101	Nitric Oxide Mediates Biofilm Formation and Symbiosis in <i>Silicibacter</i> sp. Strain TrichCH4B. <i>MBio</i> , 2015, 6, e00206-15.	1.8	32
102	Glycosidic Bond Hydroxylation by Polysaccharide Monooxygenases. <i>Trends in Chemistry</i> , 2019, 1, 198-209.	4.4	32
103	Direct <i>meso</i> -Alkynylation of Metalloporphyrins Through Gold Catalysis for Hemoprotein Engineering. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2611-2614.	7.2	31
104	Substrate selectivity in starch polysaccharide monooxygenases. <i>Journal of Biological Chemistry</i> , 2019, 294, 12157-12166.	1.6	31
105	Ligand Binding and Inhibition of an Oxygen-Sensitive Soluble Guanylate Cyclase, Cyc-88E, from <i>Drosophila</i> . <i>Biochemistry</i> , 2007, 46, 15115-15122.	1.2	29
106	A Random-Sequential Kinetic Mechanism for Polysaccharide Monooxygenases. <i>Biochemistry</i> , 2018, 57, 3191-3199.	1.2	29
107	Butyl Isocyanide as a Probe of the Activation Mechanism of Soluble Guanylate Cyclase. <i>Journal of Biological Chemistry</i> , 2007, 282, 35741-35748.	1.6	28
108	Resonance Raman Spectra of an O <sub>2</sub> -Binding H-NOX Domain Reveal Heme Relaxation upon Mutation. <i>Biochemistry</i> , 2009, 48, 8568-8577.	1.2	28



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109	Use of a semisynthetic epitope to probe histidine kinase activity and regulation. <i>Analytical Biochemistry</i> , 2010, 397, 139-143.	1.1	28
110	Insight into the Rescue of Oxidized Soluble Guanylate Cyclase by the Activator Cinaciguat. <i>ChemBioChem</i> , 2012, 13, 977-981.	1.3	28
111	Probing Soluble Guanylate Cyclase Activation by CO and YC-1 Using Resonance Raman Spectroscopy. <i>Biochemistry</i> , 2010, 49, 3815-3823.	1.2	27
112	A new decoration for nitric oxide synthase – a Zn(Cys) <sub>4</sub> site. <i>Structure</i> , 1999, 7, R73-R79.	1.6	25
113	Phosphorylation-dependent derepression by the response regulator HnoC in the <i>Shewanella oneidensis</i> nitric oxide signaling network. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E4648-57.	3.3	24
114	Soluble Guanylate Cyclase Is Activated Differently by Excess NO and by YC-1: Resonance Raman Spectroscopic Evidence. <i>Biochemistry</i> , 2010, 49, 4864-4871.	1.2	23
115	Regulation of nitric oxide signaling by formation of a distal receptor–ligand complex. <i>Nature Chemical Biology</i> , 2017, 13, 1216-1221.	3.9	23
116	Carbon-13 nuclear magnetic resonance studies of creatine, creatinine and some of their analogs. <i>Magnetic Resonance in Chemistry</i> , 1980, 13, 79-88.	0.7	22
117	The design and synthesis of YC-1 analogues as probes for soluble guanylate cyclase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2006, 16, 618-621.	1.0	22
118	Nitric Oxide-Induced Conformational Changes Govern H-NOX and Histidine Kinase Interaction and Regulation in <i>Shewanella oneidensis</i> . <i>Biochemistry</i> , 2017, 56, 1274-1284.	1.2	22
119	L-Arginine analogs as alternate substrates for nitric oxide synthase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2005, 15, 3934-3941.	1.0	20
120	Structural Perspectives on the Mechanism of Soluble Guanylate Cyclase Activation. <i>International Journal of Molecular Sciences</i> , 2021, 22, 5439.	1.8	20
121	Designer Heme Proteins: Achieving Novel Function with Abiological Heme Analogues. <i>Accounts of Chemical Research</i> , 2021, 54, 4565-4575.	7.6	20
122	Structural Insight into H-NOX Gas Sensing and Cognate Signaling Protein Regulation. <i>ChemBioChem</i> , 2019, 20, 7-19.	1.3	19
123	Characterization of Nitrosoalkane Binding and Activation of Soluble Guanylate Cyclase. <i>Biochemistry</i> , 2005, 44, 16257-16265.	1.2	18
124	Spectroscopic and kinetic studies of Nor1, a cytochrome P450 nitric oxide reductase from the fungal pathogen <i>Histoplasma capsulatum</i> . <i>Archives of Biochemistry and Biophysics</i> , 2008, 480, 132-137.	1.4	18
125	Ceragenins and Antimicrobial Peptides Kill Bacteria through Distinct Mechanisms. <i>MBio</i> , 2022, 13, e0272621.	1.8	18
126	Trace Elements and Nitric Oxide function. <i>Journal of Nutrition</i> , 2003, 133, 1431S-1433S.	1.3	17



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127	Incorporation of Tyrosine and Glutamine Residues into the Soluble Guanylate Cyclase Heme Distal Pocket Alters NO and O <sub>2</sub> Binding. <i>Journal of Biological Chemistry</i> , 2010, 285, 17471-17478.	1.6	17
128	Controlling Conformational Flexibility of an O <sub>2</sub> -Binding H-NOX Domain. <i>Biochemistry</i> , 2011, 50, 6832-6840.	1.2	17
129	Corrole-Substituted Fluorescent Heme Proteins. <i>Inorganic Chemistry</i> , 2021, 60, 2716-2729.	1.9	17
130	Probing Domain Interactions in Soluble Guanylate Cyclase. <i>Biochemistry</i> , 2011, 50, 4281-4290.	1.2	15
131	Conformationally Distinct Five-Coordinate Heme-NO Complexes of Soluble Guanylate Cyclase Elucidated by Multifrequency Electron Paramagnetic Resonance (EPR). <i>Biochemistry</i> , 2012, 51, 8384-8390.	1.2	14
132	Porphyrin $\pi$ -stacking in a heme protein scaffold tunes gas ligand affinity. <i>Journal of Inorganic Biochemistry</i> , 2013, 127, 7-12.	1.5	14
133	Comparative and integrative metabolomics reveal that S-nitrosation inhibits physiologically relevant metabolic enzymes. <i>Journal of Biological Chemistry</i> , 2018, 293, 6282-6296.	1.6	14
134	The Influence of Nitric Oxide on Soluble Guanylate Cyclase Regulation by Nucleotides. <i>Journal of Biological Chemistry</i> , 2015, 290, 15570-15580.	1.6	13
135	Raising Enzymes from the Dead and the Secrets They Can Tell. <i>ACS Chemical Biology</i> , 2006, 1, 73-74.	1.6	12
136	Structural Dynamics in the Guanylate Cyclase Heme Pocket after CO Photolysis. <i>Journal of the American Chemical Society</i> , 1999, 121, 7397-7400.	6.6	11
137	Mapping the H-NOX/HK Binding Interface in <i>Vibrio cholerae</i> by Hydrogen/Deuterium Exchange Mass Spectrometry. <i>Biochemistry</i> , 2018, 57, 1779-1789.	1.2	11
138	Characterization of a Carbon Monoxide-Activated Soluble Guanylate Cyclase from <i>Chlamydomonas reinhardtii</i> . <i>Biochemistry</i> , 2019, 58, 2250-2259.	1.2	11
139	An iron (II) dependent oxygenase performs the last missing step of plant lysine catabolism. <i>Nature Communications</i> , 2020, 11, 2931.	5.8	11
140	Revisiting Nitric Oxide Signaling: Where Was It, and Where Is It Going?. <i>Biochemistry</i> , 2021, 60, 3491-3496.	1.2	11
141	4,4-Difluorinated analogues of l-arginine and NG-hydroxy-l-arginine as mechanistic probes for nitric oxide synthase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009, 19, 1758-1762.	1.0	10
142	Determinants of the Heme-CO Vibrational Modes in the H-NOX Family. <i>Biochemistry</i> , 2011, 50, 6519-6530.	1.2	10
143	Glycosidic Bond Oxidation: The Structure, Function, and Mechanism of Polysaccharide Monooxygenases. , 2020, , 298-331.		9
144	An <i>Escherichia coli</i> Expression-Based Approach for Porphyrin Substitution in Heme Proteins. <i>Methods in Molecular Biology</i> , 2013, 987, 95-106.	0.4	8

#	ARTICLE	IF	CITATIONS
145	Native Alanine Substitution in the Glycine Hinge Modulates Conformational Flexibility of Heme Nitric Oxide/Oxygen (H-NOX) Sensing Proteins. <i>ACS Chemical Biology</i> , 2018, 13, 1631-1639.	1.6	8
146	Nitric oxide signaling controls collective contractions in a colonial choanoflagellate. <i>Current Biology</i> , 2022, 32, 2539-2547.e5.	1.8	8
147	Synthesis and evaluation of a phosphonate analogue of the soluble guanylate cyclase activator YC-1. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007, 17, 4938-4941.	1.0	7
148	A Dual-H-NOX Signaling System in <i>Saccharophagus degradans</i> . <i>Biochemistry</i> , 2018, 57, 6570-6580.	1.2	5
149	Effects of S-nitrosation of nitric oxide synthase. <i>Advances in Experimental Biology</i> , 2007, 1, 151-456.	0.1	4
150	Ratiometric Oxygen Sensing with H-NOX Protein Conjugates. <i>Inorganic Chemistry</i> , 2022, 61, 10521-10532.	1.9	3
151	Corroleâ€“protein interactions in H-NOX and HasA. <i>RSC Chemical Biology</i> , 0, , .	2.0	2
152	From metals to radicals to light to loops: regulating complex reactions. <i>Current Opinion in Structural Biology</i> , 2010, 20, 657-658.	2.6	0