Robert J Maier

List of Publications by Year
in descending order

97 papers	4,113 citations	94433 37 h-index	133252 59 g-index
98 all docs	98 docs citations	98 times ranked	3330 citing authors

#	Article	IF	Citations
1	Copper toxicity towards <i>Campylobacter jejuni</i> is enhanced by the nickel chelator dimethylglyoxime. Metallomics, 2022, 14, .	2.4	0
2	Restoring and Enhancing the Potency of Existing Antibiotics against Drug-Resistant Gram-Negative Bacteria through the Development of Potent Small-Molecule Adjuvants. ACS Infectious Diseases, 2022, 8, 1491-1508.	3.8	10
3	The nickel-chelator dimethylglyoxime inhibits human amyloid beta peptide in vitro aggregation. Scientific Reports, 2021, 11, 6622.	3.3	11
4	A two-hybrid system reveals previously uncharacterized proteinâ€“protein interactions within the Helicobacter pylori NIF ironâ€“sulfur maturation system. Scientific Reports, 2021, 11, 10794.	3.3	6
5	Highly Efficient Antimicrobial Activity of CuxFeyOz Nanoparticles against Important Human Pathogens. Nanomaterials, 2020, 10, 2294.	4.1	6
6	Influence of Protein Glycosylation on Campylobacter fetus Physiology. Frontiers in Microbiology, 2020, 11, 1191.	3.5	7
7	Molecular Hydrogen Metabolism: a Widespread Trait of Pathogenic Bacteria and Protists. Microbiology and Molecular Biology Reviews, 2020, 84, .	6.6	70
8	Nickel chelation therapy as an approach to combat multi-drug resistant enteric pathogens. Scientific Reports, 2019, 9, 13851.	3.3	13
9	Role of Nickel in Microbial Pathogenesis. Inorganics, 2019, 7, 80.	2.7	41
10	In Vitro and In Vivo Inhibition of Helicobacter pylori by Ethanolic Extracts of Lion's Mane Medicinal Mushroom, Hericium erinaceus (Agaricomycetes). International Journal of Medicinal Mushrooms, 2019, 21, 1-11.	1.5	6
11	Ironâ€“sulfur protein maturation in <i>Helicobacter pylori</i>: identifying a Nfuâ€type cluster carrier protein and its ironâ€“sulfur protein targets. Molecular Microbiology, 2018, 108, 379-396.	2.5	16
12	Click, Release, and Fluoresce: A Chemical Strategy for a Cascade Prodrug System for Codelivery of Carbon Monoxide, a Drug Payload, and a Fluorescent Reporter. Organic Letters, 2018, 20, 897-900.	4.6	50
13	Site-directed mutagenesis of Campylobacter concisus respiratory genes provides insight into the pathogenâ€™s growth requirements. Scientific Reports, 2018, 8, 14203.	3.3	19
14	Noncatalytic Antioxidant Role for Helicobacter pylori Urease. Journal of Bacteriology, 2018, 200, .	2.2	27
15	Helicobacter pylori nickel storage proteins: recognition and modulation of diverse metabolic targets. Microbiology (United Kingdom), 2018, 164, 1059-1068.	1.8	14
16	Molecular basis for the functions of a bacterial MutS2 in DNA repair and recombination. DNA Repair, 2017, 57, 161-170.	2.8	10
17	Structure-function analyses of metal-binding sites of HypA reveal residues important for hydrogenase maturation in Helicobacter pylori. PLoS ONE, 2017, 12, e0183260.	2.5	16
18	Atmospheric <scp>H₂</scp> fuels plantâ€“microbe interactions. Environmental Microbiology, 2016, 18, 2289-2291.	3.8	2

#	Article	IF	Citations
19	Hydrogen Metabolism in Helicobacter pylori Plays a Role in Gastric Carcinogenesis through Facilitating CagA Translocation. MBio, 2016, 7, .	4.1	27
20	Helicobacter Catalase Devoid of Catalytic Activity Protects the Bacterium against Oxidative Stress. Journal of Biological Chemistry, 2016, 291, 23366-23373.	3.4	34
21	Carbon Fixation Driven by Molecular Hydrogen Results in Chemolithoautotrophically Enhanced Growth of Helicobacter pylori. Journal of Bacteriology, 2016, 198, 1423-1428.	2.2	23
22	Modification of <i>Helicobacter pylori</i> Peptidoglycan Enhances NOD1 Activation and Promotes Cancer of the Stomach. Cancer Research, 2015, 75, 1749-1759.	0.9	69
23	Host Hydrogen Rather than That Produced by the Pathogen Is Important for Salmonella enterica Serovar Typhimurium Virulence. Infection and Immunity, 2015, 83, 311-316.	2.2	19
24	Bacterial histone-like proteins: roles in stress resistance. Current Genetics, 2015, 61, 489-492.	1.7	16
25	Comparative Roles of the Two Helicobacter pylori Thioredoxins in Preventing Macromolecule Damage. Infection and Immunity, 2015, 83, 2935-2943.	2.2	19
26	Aconitase Functions as a Pleiotropic Posttranscriptional Regulator in Helicobacter pylori. Journal of Bacteriology, 2015, 197, 3076-3086.	2.2	19
27	A Novel DNA-Binding Protein Plays an Important Role in Helicobacter pylori Stress Tolerance and Survival in the Host. Journal of Bacteriology, 2015, 197, 973-982.	2.2	22
28	Twin-Arginine Translocation System in Helicobacter pylori: TatC, but Not TatB, Is Essential for Viability. MBio, 2014, 5, e01016-13.	4.1	19
29	Ammonium Metabolism Enzymes Aid Helicobacter pylori Acid Resistance. Journal of Bacteriology, 2014, 196, 3074-3081.	2.2	41
30	Salmonella Typhimurium Strain ATCC14028 Requires H2-Hydrogenases for Growth in the Gut, but Not at Systemic Sites. PLoS ONE, 2014, 9, e110187.	2.5	20
31	Role of <i>Helicobacter pylori</i> methionine sulfoxide reductase in urease maturation. Biochemical Journal, 2013, 450, 141-148.	3.7	12
32	Alkyl Hydroperoxide Reductase Repair by Helicobacter pylori Methionine Sulfoxide Reductase. Journal of Bacteriology, 2013, 195, 5396-5401.	2.2	19
33	Helicobacter hepaticus NikR controls urease and hydrogenase activities via the NikABDE and HH0418 putative nickel import proteins. Microbiology (United Kingdom), 2013, 159, 136-146.	1.8	22
34	Aconitase-Mediated Posttranscriptional Regulation of Helicobacter pylori Peptidoglycan Deacetylase. Journal of Bacteriology, 2013, 195, 5316-5322.	2.2	19
35	Helicobacter pylori Stores Nickel To Aid Its Host Colonization. Infection and Immunity, 2013, 81, 580-584.	2.2	39
36	A link between gut community metabolism and pathogenesis: molecular hydrogen-stimulated glucarate catabolism aids <i>Salmonella</i> virulence. Open Biology, 2013, 3, 130146.	3.6	19

#	Article	IF	Citations
37	Roles of H2 uptake hydrogenases in Shigella flexneri acid tolerance. Microbiology (United Kingdom), 2012, 158, 2204-2212.	1.8	15
38	Helicobacter pylori Peptidoglycan Modifications Confer Lysozyme Resistance and Contribute to Survival in the Host. MBio, 2012, 3, e00409-12.	4.1	54
39	A histone-like protein of Helicobacter pylori protects DNA from stress damage and aids host colonization. DNA Repair, 2012, 11, 733-740.	2.8	35
40	Efficiency of Purine Utilization by Helicobacter pylori: Roles for Adenosine Deaminase and a NupC Homolog. PLoS ONE, 2012, 7, e38727.	2.5	9
41	Mua (HP0868) Is a Nickel-Binding Protein That Modulates Urease Activity in Helicobacter pylori. MBio, 2011, 2, .	4.1	8
42	The RecRO pathway of DNA recombinational repair in Helicobacter pylori and its role in bacterial survival in the host. DNA Repair, 2011, 10, 373-379.	2.8	31
43	Mua (HP0868) Is a Nickel-Binding Protein That Modulates Urease Activity in Helicobacter pylori. MBio, 2011, 2, e00039-11.	4.1	14
44	Synergistic Roles of Helicobacter pylori Methionine Sulfoxide Reductase and GroEL in Repairing Oxidant-damaged Catalase. Journal of Biological Chemistry, 2011, 286, 19159-19169.	3.4	58
45	Peptidoglycan Deacetylation in <i>Helicobacter pylori</i> Contributes to Bacterial Survival by Mitigating Host Immune Responses. Infection and Immunity, 2010, 78, 4660-4666.	2.2	50
46	The Hyb Hydrogenase Permits Hydrogen-Dependent Respiratory Growth of Salmonella enterica Serovar Typhimurium. MBio, 2010, 1, .	4.1	28
47	Crystal Structures of Apo and Metal-Bound Forms of the UreE Protein from <i>Helicobacter pylori</i>: Role of Multiple Metal Binding Sites,. Biochemistry, 2010, 49, 7080-7088.	2.5	42
48	Oxidative Stress-induced Peptidoglycan Deacetylase in Helicobacter pylori. Journal of Biological Chemistry, 2009, 284, 6790-6800.	3.4	52
49	A RecB-Like Helicase in <i>Helicobacter pylori</i> Is Important for DNA Repair and Host Colonization. Infection and Immunity, 2009, 77, 286-291.	2.2	27
50	Role of the Hya Hydrogenase in Recycling of Anaerobically Produced H ₂ in <i>Salmonella enterica</i> Serovar Typhimurium. Applied and Environmental Microbiology, 2009, 75, 1456-1459.	3.1	46
51	<i>Hydrogen and Nickel Metabolism in</i><scp>Helicobacter</scp><i>Species</i>. Annals of the New York Academy of Sciences, 2008, 1125, 242-251.	3.8	25
52	The NADPH quinone reductase MdaB confers oxidative stress resistance to Helicobacter hepaticus. Microbial Pathogenesis, 2008, 44, 169-174.	2.9	27
53	Critical Role of RecN in Recombinational DNA Repair and Survival of <i>Helicobacter pylori</i>. Infection and Immunity, 2008, 76, 153-160.	2.2	38
54	<i>Salmonella enterica</i> Serovar Typhimurium NiFe Uptake-Type Hydrogenases Are Differentially Expressed In Vivo. Infection and Immunity, 2008, 76, 4445-4454.	2.2	32

#	Article	IF	Citations
55	Roles of His-Rich Hpn and Hpn-Like Proteins in Helicobacter pylori Nickel Physiology. Journal of Bacteriology, 2007, 189, 4120-4126.	2.2	77
56	Differential expression of NiFe uptake-type hydrogenase genes in Salmonella enterica serovar Typhimurium. Microbiology (United Kingdom), 2007, 153, 3508-3516.	1.8	37
57	A Helicobacter hepaticus catalase mutant is hypersensitive to oxidative stress and suffers increased DNA damage. Journal of Medical Microbiology, 2007, 56, 557-562.	1.8	15
58	Peptide Transport in Helicobacter pylori : Roles of Dpp and Opp Systems and Evidence for Additional Peptide Transporters. Journal of Bacteriology, 2007, 189, 3392-3402.	2.2	35
59	In vitro and in vivo characterization of alkyl hydroperoxide reductase mutant strains of Helicobacter hepaticus. Biochimica Et Biophysica Acta - General Subjects, 2007, 1770, 257-265.	2.4	13
60	Role of a MutY DNA glycosylase in combating oxidative DNA damage in Helicobacter pylori. DNA Repair, 2007, 6, 19-26.	2.8	34
61	Nickel-binding and accessory proteins facilitating Ni-enzyme maturation in Helicobacter pylori. BioMetals, 2007, 20, 655-664.	4.1	77
62	Interaction between the Helicobacter pylori accessory proteins HypA and UreE is needed for urease maturation. Microbiology (United Kingdom), 2007, 153, 1474-1482.	1.8	47
63	Nickel enzyme maturation in Helicobacter hepaticus: roles of accessory proteins in hydrogenase and urease activities. Microbiology (United Kingdom), 2007, 153, 3748-3756.	1.8	29
64	Lipid peroxidation as a source of oxidative damage in Helicobacter pylori: Protective roles of peroxiredoxins. Biochimica Et Biophysica Acta - General Subjects, 2006, 1760, 1596-1603.	2.4	38
65	The diverse antioxidant systems of Helicobacter pylori. Molecular Microbiology, 2006, 61, 847-860.	2.5	161
66	Dual Roles of Helicobacter pylori NapA in Inducing and Combating Oxidative Stress. Infection and Immunity, 2006, 74, 6839-6846.	2.2	77
67	Regulation of the Helicobacter pylori Fe-S Cluster Synthesis Protein NifS by Iron, Oxidative Stress Conditions, and Fur. Journal of Bacteriology, 2006, 188, 5325-5330.	2.2	35
68	Methionine Sulfoxide Reductase in Helicobacter pylori : Interaction with Methionine-Rich Proteins and Stress-Induced Expression. Journal of Bacteriology, 2006, 188, 5839-5850.	2.2	62
69	Helicobacter hepaticusDps protein plays an important role in protecting DNA from oxidative damage. Free Radical Research, 2006, 40, 597-605.	3.3	25
70	The Helicobacter pylori MutS protein confers protection from oxidative DNA damage. Molecular Microbiology, 2005, 58, 166-176.	2.5	70
71	Up-expression of NapA and other oxidative stress proteins is a compensatory response to loss of majorHelicobacter pyloristress resistance factors. Free Radical Research, 2005, 39, 1173-1182.	3.3	33
72	Helicobacter hepaticus Hydrogenase Mutants Are Deficient in Hydrogen-Supported Amino Acid Uptake and in Causing Liver Lesions in A/J Mice. Infection and Immunity, 2005, 73, 5311-5318.	2.2	34

#	Article	IF	Citations
73	Oxidative stress defense mechanisms to counter iron-promoted DNA damage in<i>Helicobacter pylori</i>. Free Radical Research, 2005, 39, 1183-1191.	3.3	42
74	Contribution of the Helicobacter pylori Thiol Peroxidase Bacterioferritin Comigratory Protein to Oxidative Stress Resistance and Host Colonization. Infection and Immunity, 2005, 73, 378-384.	2.2	89
75	An NADPH Quinone Reductase of <i>Helicobacter pylori</i> Plays an Important Role in Oxidative Stress Resistance and Host Colonization. Infection and Immunity, 2004, 72, 1391-1396.	2.2	103
76	Role of a Bacterial Organic Hydroperoxide Detoxification System in Preventing Catalase Inactivation. Journal of Biological Chemistry, 2004, 279, 51908-51914.	3.4	44
77	Methionine sulphoxide reductase is an important antioxidant enzyme in the gastric pathogen Helicobacter pylori. Molecular Microbiology, 2004, 53, 1397-1406.	2.5	89
78	Methionine sulphoxide reductase is an important antioxidant enzyme in the gastric pathogen Helicobacter pylori. Molecular Microbiology, 2004, 55, 653-653.	2.5	1
79	Requirement of hydD, hydE, hypC and hypE genes for hydrogenase activity in Helicobacter pylori. Microbial Pathogenesis, 2004, 36, 153-157.	2.9	28
80	Availability and use of molecular hydrogen as an energy substrate for Helicobacter species. Microbes and Infection, 2003, 5, 1159-1163.	1.9	27
81	Roles of conserved nucleotide-binding domains in accessory proteins, HypB and UreG, in the maturation of nickel-enzymes required for efficient Helicobacter pylori colonization. Microbial Pathogenesis, 2003, 35, 229-234.	2.9	61
82	Characterization of Helicobacter pylori Nickel Metabolism Accessory Proteins Needed for Maturation of both Urease and Hydrogenase. Journal of Bacteriology, 2003, 185, 726-734.	2.2	137
83	Hydrogen-Oxidizing Capabilities of Helicobacter hepaticus and In Vivo Availability of the Substrate. Journal of Bacteriology, 2003, 185, 2680-2682.	2.2	31
84	Association of Helicobacter pylori Antioxidant Activities with Host Colonization Proficiency. Infection and Immunity, 2003, 71, 580-583.	2.2	73
85	Dependence of Helicobacter pylori Urease Activity on the Nickel-Sequestering Ability of the UreE Accessory Protein. Journal of Bacteriology, 2003, 185, 4787-4795.	2.2	77
86	Oxidative-Stress Resistance Mutants of Helicobacter pylori. Journal of Bacteriology, 2002, 184, 3186-3193.	2.2	94
87	Molecular Hydrogen as an Energy Source for Helicobacter pylori. Science, 2002, 298, 1788-1790.	12.6	273
88	Requirement of nickel metabolism proteins HypA and HypB for full activity of both hydrogenase and urease in <i>Helicobacter pylori</i>. Molecular Microbiology, 2001, 39, 176-182.	2.5	205
89	Superoxide Dismutase-Deficient Mutants ofHelicobacter pylori Are Hypersensitive to Oxidative Stress and Defective in Host Colonization. Infection and Immunity, 2001, 69, 4034-4040.	2.2	144
90	Dual Roles of Bradyrhizobium japonicum Nickelin Protein in Nickel Storage and GTP-Dependent Ni Mobilization. Journal of Bacteriology, 2000, 182, 1702-1705.	2.2	88

#	Article	IF	Citations
91	Characterization of the NifU and NifS Feâˆ’S Cluster Formation Proteins Essential for Viability inHelicobacter pyloriâ€. Biochemistry, 2000, 39, 16213-16219.	2.5	93
92	The HypB protein from Bradyrhizobium japonicum can store nickel and is required for the nickelâ€dependent transcriptional regulation of hydrogenase. Molecular Microbiology, 1997, 24, 119-128.	2.5	79
93	Bradhyrhizobium japonicum hydrogen-ubiquinone oxidoreductase activity: quinone specificity, inhibition by quinone analogs, and evidence for separate sites of electron acceptor reactivity. Biochimica Et Biophysica Acta - Bioenergetics, 1995, 1229, 334-346.	1.0	15
94	Hydrogen-ubiquinone oxidoreductase activity by theBradyrhizobium japonicummembrane-bound hydrogenase. FEMS Microbiology Letters, 1993, 110, 257-264.	1.8	7
95	Mutant Strain of <i>Bradyrhizobium japonicum</i> with Increased Symbiotic N ₂ Fixation Rates and Altered Mo Metabolism Properties. Applied and Environmental Microbiology, 1990, 56, 2341-2346.	3.1	10
96	Identification of a Locus Upstream from the Hydrogenase Structural Genes That Is Involved in Hydrogenase Expression in <i>Bradyrhizobium japonicum</i>. Applied and Environmental Microbiology, 1989, 55, 3051-3057.	3.1	8
97	Hydrogen Metabolism in Rhizobium: Energetics, Regulation, Enzymology and Genetics. Advances in Microbial Physiology, 1988, 29, 1-52.	2.4	23