Tyler C Helmann

List of Publications by Year
in descending order

229 papers	21,616 citations	6233 80 h-index	11288 136 g-index
274 all docs	274 docs citations	274 times ranked	13549 citing authors

#	Article	IF	Citations
1	STRUCTURE AND FUNCTION OF BACTERIAL SIGMA FACTORS. Annual Review of Biochemistry, 1988, 57, 839-872.	5.0	1,019
2	The extracytoplasmic function (ECF) sigma factors. Advances in Microbial Physiology, 2002, 46, 47-110.	1.0	628
3	Stimulus Perception in Bacterial Signal-Transducing Histidine Kinases. Microbiology and Molecular Biology Reviews, 2006, 70, 910-938.	2.9	592
4	Metal homeostasis and resistance in bacteria. Nature Reviews Microbiology, 2017, 15, 338-350.	13.6	568
5	The PerR transcription factor senses H2O2 by metal-catalysed histidine oxidation. Nature, 2006, 440, 363-367.	13.7	497
6	The sigma70 family of sigma factors. Genome Biology, 2003, 4, 203.	13.9	449
7	Functional specialization within the Fur family of metalloregulators. BioMetals, 2007, 20, 485-499.	1.8	384
8	Bacillus subtiliscontains multiple Fur homologues: identification of the iron uptake (Fur) and peroxide regulon (PerR) repressors. Molecular Microbiology, 1998, 29, 189-198.	1.2	376
9	Compilation and analysis ofBacillus SubtilisÏƒA-dependent promoter sequences: evidence for extended contact between RNA polymerse and upstream promoter DNA. Nucleic Acids Research, 1995, 23, 2351-2360.	6.5	362
10	Thiol-Based Redox Switches and Gene Regulation. Antioxidants and Redox Signaling, 2011, 14, 1049-1063.	2.5	326
11	Cell wall stress responses in Bacillus subtilis: the regulatory network of the bacitracin stimulon. Molecular Microbiology, 2003, 50, 1591-1604.	1.2	290
12	Antibiotic-Inducible Promoter Regulated by the Cell Envelope Stress-Sensing Two-Component System LiaRS of Bacillus subtilis. Antimicrobial Agents and Chemotherapy, 2004, 48, 2888-2896.	1.4	277
13	Regulation of inducible peroxide stress responses. Molecular Microbiology, 2002, 45, 9-15.	1.2	272
14	Manganese homeostasis in Bacillus subtilis is regulated by MntR, a bifunctional regulator related to the diphtheria toxin repressor family of proteins. Molecular Microbiology, 2002, 35, 1454-1468.	1.2	260
15	Recognition of DNA by Fur: a Reinterpretation of the Fur Box Consensus Sequence. Journal of Bacteriology, 2002, 184, 5826-5832.	1.0	240
16	Global analysis of the Bacillus subtilis Fur regulon and the iron starvation stimulon. Molecular Microbiology, 2002, 45, 1613-1629.	1.2	240
17	Bacillithiol is an antioxidant thiol produced in Bacilli. Nature Chemical Biology, 2009, 5, 625-627.	3.9	240
18	Identification of a Zinc-Specific Metalloregulatory Protein, Zur, Controlling Zinc Transport Operons in <i>Bacillus subtilis</i>. Journal of Bacteriology, 1998, 180, 5815-5821.	1.0	237

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19	Global Transcriptional Response of Bacillus subtilis to Heat Shock. Journal of Bacteriology, 2001, 183, 7318-7328.	1.0	233
20	Antibiotics that inhibit cell wall biosynthesis induce expression of the Bacillus subtilisÏƒW and ÏƒM regulons. Molecular Microbiology, 2002, 45, 1267-1276.	1.2	232
21	A complex thiolate switch regulates the Bacillus subtilis organic peroxide sensor OhrR. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8743-8748.	3.3	232
22	Coordinate regulation of Bacillus subtilis peroxide stress genes by hydrogen peroxide and metal ions.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 8190-8194.	3.3	224
23	Identification of the Escherichia coli K-12 Nramp orthologue (MntH) as a selective divalent metal ion transporter. Molecular Microbiology, 2000, 35, 1065-1078.	1.2	217
24	Biosynthesis and functions of bacillithiol, a major low-molecular-weight thiol in Bacilli. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6482-6486.	3.3	214
25	The Global Transcriptional Response of Bacillus subtilis to Peroxide Stress Is Coordinated by Three Transcription Factors. Journal of Bacteriology, 2003, 185, 243-253.	1.0	213
26	The OhrR repressor senses organic hydroperoxides by reversible formation of a cysteine-sulfenic acid derivative. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 6690-6695.	3.3	210
27	Structure of an OhrR-ohrA Operator Complex Reveals the DNA Binding Mechanism of the MarR Family. Molecular Cell, 2005, 20, 131-141.	4.5	210
28	Analysis of the role of <i>Bacillus subtilis</i>Ïƒ^M in Î²â€lactam resistance reveals an essential role for câ€diâ€AMP in peptidoglycan homeostasis. Molecular Microbiology, 2012, 83, 623-639.	1.2	208
29	OhrR Is a Repressor of ohrA , a Key Organic Hydroperoxide Resistance Determinant in Bacillus subtilis. Journal of Bacteriology, 2001, 183, 4134-4141.	1.0	207
30	Role of the Fur Regulon in Iron Transport in Bacillus subtilis. Journal of Bacteriology, 2006, 188, 3664-3673.	1.0	206
31	The <i>Bacillus subtilis</i> iron-sparing response is mediated by a Fur-regulated small RNA and three small, basic proteins. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11927-11932.	3.3	205
32	Roles of metal ions and hydrogen peroxide in modulating the interaction of the Bacillus subtilis PerR peroxide regulon repressor with operator DNA. Molecular Microbiology, 2002, 41, 849-859.	1.2	199
33	Antagonism of Two Plant-Growth Promoting Bacillus velezensis Isolates Against Ralstonia solanacearum and Fusarium oxysporum. Scientific Reports, 2018, 8, 4360.	1.6	198
34	The developmental fate of S. coelicolor hyphae depends upon a gene product homologous with the motility Ïƒ factor of B. subtilis. Cell, 1989, 59, 133-143.	13.5	194
35	Metal ion homeostasis in Bacillus subtilis. Current Opinion in Microbiology, 2005, 8, 188-195.	2.3	194
36	Regulation of LiaRS-Dependent Gene Expression in Bacillus subtilis : Identification of Inhibitor Proteins, Regulator Binding Sites, and Target Genes of a Conserved Cell Envelope Stress-Sensing Two-Component System. Journal of Bacteriology, 2006, 188, 5153-5166.	1.0	189

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37	Regulation of the Bacillus subtilis fur and perR Genes by PerR: Not All Members of the PerR Regulon Are Peroxide Inducible. Journal of Bacteriology, 2002, 184, 3276-3286.	1.0	182
38	Elemental Economy. Advances in Microbial Physiology, 2012, 60, 91-210.	1.0	180
39	Open complex formation by Escherichia coli RNA polymerase: the mechanism of polymerase-induced strand separation of double helical DNA. Molecular Microbiology, 1995, 16, 817-824.	1.2	177
40	Defining the Bacillus subtilis ÏƒW regulon: a comparative analysis of promoter consensus search, run-off transcription/macroarray analysis (ROMA), and transcriptional profiling approaches. Journal of Molecular Biology, 2002, 316, 443-457.	2.0	177
41	Identification of Bacillus subtilis sigmaW-dependent genes that provide intrinsic resistance to antimicrobial compounds produced by Bacilli. Molecular Microbiology, 2006, 60, 765-782.	1.2	170
42	The <i>Bacillus subtilis</i>Ïƒ^M regulon and its contribution to cell envelope stress responses. Molecular Microbiology, 2008, 67, 830-848.	1.2	163
43	Anti-sigma factors. Current Opinion in Microbiology, 1999, 2, 135-141.	2.3	155
44	Genetic and physiological responses of Bacillus subtilis to metal ion stress. Molecular Microbiology, 2005, 57, 27-40.	1.2	155
45	A Promoter Melting Region in the Primary Ïƒ Factor of Bacillus subtilis. Journal of Molecular Biology, 1994, 235, 1470-1488.	2.0	152
46	Bacillus subtilisMrgA is a Dps(PexB) homologue: evidence for metalloregulation of an oxidative-stress gene. Molecular Microbiology, 1995, 18, 295-300.	1.2	152
47	Genetic Analysis of Factors Affecting Susceptibility of <i>Bacillus subtilis</i> to Daptomycin. Antimicrobial Agents and Chemotherapy, 2009, 53, 1598-1609.	1.4	144
48	Proteinâˆ'Nucleic Acid Interactions during Open Complex Formation Investigated by Systematic Alteration of the Protein and DNA Binding Partnersâ€. Biochemistry, 1999, 38, 5959-5967.	1.2	142
49	The A. tumefaciens transcriptional activator OccR causes a bend at a target promoter, which is partially relaxed by a plant tumor metabolite. Cell, 1992, 69, 659-667.	13.5	136
50	FosB, a Cysteine-Dependent Fosfomycin Resistance Protein under the Control of Ï, W , an Extracytoplasmic-Function Ï, Factor in Bacillus subtilis. Journal of Bacteriology, 2001, 183, 2380-2383.	1.0	136
51	The Bacillus subtilis Extracytoplasmic-Function Ïƒ X Factor Regulates Modification of the Cell Envelope and Resistance to Cationic Antimicrobial Peptides. Journal of Bacteriology, 2004, 186, 1136-1146.	1.0	133
52	Response of Bacillus subtilis to Nitric Oxide and the Nitrosating Agent Sodium Nitroprusside. Journal of Bacteriology, 2004, 186, 4655-4664.	1.0	132
53	Peroxide Stress Elicits Adaptive Changes in Bacterial Metal Ion Homeostasis. Antioxidants and Redox Signaling, 2011, 15, 175-189.	2.5	130
54	Specificity of Metal Sensing: Iron and Manganese Homeostasis in Bacillus subtilis. Journal of Biological Chemistry, 2014, 289, 28112-28120.	1.6	122

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55	Identification of target promoters for the Bacillus subtilis extracytoplasmic function sigma factor, sigmaW. Molecular Microbiology, 1999, 31, 361-371.	1.2	121
56	Recognition of DNA by Three Ferric Uptake Regulator (Fur) Homologs in Bacillus subtilis. Journal of Bacteriology, 2003, 185, 6348-6357.	1.0	120
57	A peroxide-induced zinc uptake system plays an important role in protection against oxidative stress in Bacillus subtilis. Molecular Microbiology, 2002, 45, 997-1005.	1.2	119
58	Bacillus subtilis extracytoplasmic function (ECF) sigma factors and defense of the cell envelope. Current Opinion in Microbiology, 2016, 30, 122-132.	2.3	118
59	Contributions of Zur-Controlled Ribosomal Proteins to Growth under Zinc Starvation Conditions. Journal of Bacteriology, 2009, 191, 6116-6122.	1.0	116
60	Origins of metal ion selectivity in the DtxR/MntR family of metalloregulators. Molecular Microbiology, 2003, 48, 495-506.	1.2	115
61	Biochemical Characterization of the Structural Zn2+ Site in the Bacillus subtilis Peroxide Sensor PerR*. Journal of Biological Chemistry, 2006, 281, 23567-23578.	1.6	115
62	A novel DNA modification by sulphur. Molecular Microbiology, 2005, 57, 1428-1438.	1.2	114
63	Regulatory Overlap and Functional Redundancy among<i>Bacillus subtilis</i>Extracytoplasmic Function Ïƒ Factors. Journal of Bacteriology, 2007, 189, 6919-6927.	1.0	112
64	Promoter Recognition by <i>Bacillus subtilis</i> Ï, ^W : Autoregulation and Partial Overlap with the Ï, ^X Regulon. Journal of Bacteriology, 1998, 180, 3765-3770.	1.0	112
65	Pseudomonas syringae pv. tomato DC3000 Type III Secretion Effector Polymutants Reveal an Interplay between HopAD1 and AvrPtoB. Cell Host and Microbe, 2015, 17, 752-762.	5.1	111
66	Functional Analysis of the Bacillus subtilis Zur Regulon. Journal of Bacteriology, 2002, 184, 6508-6514.	1.0	110
67	Reduction in Membrane Phosphatidylglycerol Content Leads to Daptomycin Resistance in Bacillus subtilis. Antimicrobial Agents and Chemotherapy, 2011, 55, 4326-4337.	1.4	110
68	Identification of target promoters for the Bacillus subtilis Ïƒ X factor using a consensus-directed search 1 1Edited by R. Ebright. Journal of Molecular Biology, 1998, 279, 165-173.	2.0	108
69	Regulation of the Bacillus subtilis bcrC Bacitracin Resistance Gene by Two Extracytoplasmic Function Ïƒ Factors. Journal of Bacteriology, 2002, 184, 6123-6129.	1.0	108
70	Mn2+-Sensing Mechanisms of yybP-ykoY Orphan Riboswitches. Molecular Cell, 2015, 57, 1110-1123.	4.5	108
71	Bacillus subtilis Ïƒ ^V Confers Lysozyme Resistance by Activation of Two Cell Wall Modification Pathways, Peptidoglycan O-Acetylation and <scp>d</scp> -Alanylation of Teichoic Acids. Journal of Bacteriology, 2011, 193, 6223-6232.	1.0	102
72	Bacillithiol, a New Player in Bacterial Redox Homeostasis. Antioxidants and Redox Signaling, 2011, 15, 123-133.	2.5	97

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73	Sequential binding and sensing of Zn(II) by Bacillus subtilis Zur. Nucleic Acids Research, 2011, 39, 9130-9138.	6.5	97
74	Bacterial Ohr and OsmC paralogues define two protein families with distinct functions and patterns of expression. Microbiology (United Kingdom), 2001, 147, 1775-1782.	0.7	97
75	CsoR regulates the copper efflux operon copZA in Bacillus subtilis. Microbiology (United Kingdom), 2007, 153, 4123-4128.	0.7	96
76	Donâ€™t let sleeping dogmas lie: new views of peptidoglycan synthesis and its regulation. Molecular Microbiology, 2017, 106, 847-860.	1.2	91
77	The Role of Bacillithiol in Gram-Positive<i>Firmicutes</i>. Antioxidants and Redox Signaling, 2018, 28, 445-462.	2.5	90
78	S-Cysteinylation Is a General Mechanism for Thiol Protection of Bacillus subtilis Proteins after Oxidative Stress. Journal of Biological Chemistry, 2007, 282, 25981-25985.	1.6	89
79	Structure of the manganese-bound manganese transport regulator of Bacillus subtilis. Nature Structural and Molecular Biology, 2003, 10, 652-657.	3.6	88
80	Genomeâ€wide responses to carbonyl electrophiles in <i>Bacillus subtilis</i>: control of the thiolâ€dependent formaldehyde dehydrogenase AdhA and cysteine proteinase YraA by the MerRâ€family regulator YraB (AdhR). Molecular Microbiology, 2009, 71, 876-894.	1.2	87
81	Concentration- and chromosome-organization-dependent regulator unbinding from DNA for transcription regulation in living cells. Nature Communications, 2015, 6, 7445.	5.8	86
82	Peptidoglycan Recognition Proteins Kill Bacteria by Inducing Oxidative, Thiol, and Metal Stress. PLoS Pathogens, 2014, 10, e1004280.	2.1	85
83	RNA Polymerase and Sigma Factors. , 0, , 287-312.		83
84	Sequential induction of Fur-regulated genes in response to iron limitation in <i>Bacillus subtilis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12785-12790.	3.3	82
85	Phenotypic and Transcriptomic Characterization of <i>Bacillus subtilis</i> Mutants with Grossly Altered Membrane Composition. Journal of Bacteriology, 2008, 190, 7797-7807.	1.0	81
86	Interaction of <i>Bacillus subtilis</i> Fur (Ferric Uptake Repressor) with the <i>dhb</i> Operator In Vitro and In Vivo. Journal of Bacteriology, 1999, 181, 4299-4307.	1.0	79
87	The global transcriptional response of Bacillus subtilis to manganese involves the MntR, Fur, TnrA and ÏƒB regulons. Molecular Microbiology, 2003, 49, 1477-1491.	1.2	79
88	Bacillithiol is a major buffer of the labile zinc pool in <scp><i>B</i></scp><i>acillus subtilis</i>. Molecular Microbiology, 2014, 94, 756-770.	1.2	79
89	Genome-wide identification of <i>Pseudomonas syringae</i> genes required for fitness during colonization of the leaf surface and apoplast. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18900-18910.	3.3	77
90	Direct substitution and assisted dissociation pathways for turning off transcription by a MerR-family metalloregulator. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15121-15126.	3.3	73

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91	A Global Investigation of the Bacillus subtilis Iron-Sparing Response Identifies Major Changes in Metabolism. Journal of Bacteriology, 2012, 194, 2594-2605.	1.0	72
92	<scp>PfeT</scp>, a <scp>P</scp>_{1B4}â€type <scp>ATP</scp>ase, effluxes ferrous iron and protects <scp><i>B</i></scp><i>acillus subtilis</i> against iron intoxication. Molecular Microbiology, 2015, 98, 787-803.	1.2	72
93	Lipid-linked cell wall precursors regulate membrane association of bacterial actin MreB. Nature Chemical Biology, 2015, 11, 38-45.	3.9	71
94	Molecular logic of the Zur-regulated zinc deprivation response in Bacillus subtilis. Nature Communications, 2016, 7, 12612.	5.8	71
95	Ferrous iron efflux systems in bacteria. Metallomics, 2017, 9, 840-851.	1.0	68
96	Methylglyoxal resistance in <scp><i>B</i></scp><i>acillus subtilis</i>: contributions of bacillithiolâ€dependent and independent pathways. Molecular Microbiology, 2014, 91, 706-715.	1.2	66
97	<i>Bacillus subtilis</i> MntR coordinates the transcriptional regulation of manganese uptake and efflux systems. Molecular Microbiology, 2017, 103, 253-268.	1.2	65
98	A Ïƒ^Wâ€dependent stress response in <i>Bacillus subtilis</i> that reduces membrane fluidity. Molecular Microbiology, 2011, 81, 69-79.	1.2	64
99	Transcriptional switching by the MerR protein: activation and repression mutants implicate distinct DNA and mercury(II) binding domains. Biochemistry, 1989, 28, 2340-2344.	1.2	63
100	Structural Basis for the Metal-Selective Activation of the Manganese Transport Regulator of Bacillus subtilis,. Biochemistry, 2006, 45, 3493-3505.	1.2	61
101	Zinc-Independent Folate Biosynthesis: Genetic, Biochemical, and Structural Investigations Reveal New Metal Dependence for GTP Cyclohydrolase IB. Journal of Bacteriology, 2009, 191, 6936-6949.	1.0	61
102	Contributions of the Ïƒ<scp>^W</scp>, Ïƒ<scp>^M</scp> and Ïƒ<scp>^X</scp> regulons to the lantibiotic resistome of <i><scp>B</scp>acillus subtilis</i>. Molecular Microbiology, 2013, 90, 502-518.	1.2	59
103	The Î´ Subunit of Bacillus subtilis RNA Polymerase. Journal of Molecular Biology, 1994, 239, 1-14.	2.0	58
104	Structural Analysis of theBacillus subtilisÎ´ Factor: A protein Polyanion which Displaces RNA from RNA Polymerase. Journal of Molecular Biology, 1995, 252, 189-202.	2.0	58
105	Bacillus subtilis CPx-type ATPases: characterization of Cd, Zn, Co and Cu efflux systems. BioMetals, 2003, 16, 497-505.	1.8	58
106	Derepression of the Bacillus subtilis PerR Peroxide Stress Response Leads to Iron Deficiency. Journal of Bacteriology, 2012, 194, 1226-1235.	1.0	58
107	Redox Sensing by Fe²⁺in Bacterial Fur Family Metalloregulators. Antioxidants and Redox Signaling, 2018, 29, 1858-1871.	2.5	58
108	Redox Regulation in <i>Bacillus subtilis</i>: The Bacilliredoxins BrxA(YphP) and BrxB(YqiW) Function in De-Bacillithiolation of <i>S</i>-Bacillithiolated OhrR and MetE. Antioxidants and Redox Signaling, 2014, 21, 357-367.	2.5	57

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109	Mini Review: Bacterial Membrane Composition and Its Modulation in Response to Stress. Frontiers in Molecular Biosciences, 2021, 8, 634438.	1.6	56
110	Mutations in Multidrug Efflux Homologs, Sugar Isomerases, and Antimicrobial Biosynthesis Genes Differentially Elevate Activity of the Ï,X and Ï,W Factors inBacillus subtilis. Journal of Bacteriology, 2000, 182, 5202-5210.	1.0	54
111	DNA-Binding and Oligomerization Studies of the Manganese(II) Metalloregulatory Protein MntR fromBacillus subtilisâ€. Biochemistry, 2003, 42, 12634-12642.	1.2	54
112	The âˆ'10 Region Is a Key Promoter Specificity Determinant for the Bacillus subtilis Extracytoplasmic-Function Ï, Factors Ï, X and Ï, W. Journal of Bacteriology, 2001, 183, 1921-1927.	1.0	53
113	The FsrA sRNA and FbpB Protein Mediate the Iron-Dependent Induction of the Bacillus subtilis LutABC Iron-Sulfur-Containing Oxidases. Journal of Bacteriology, 2012, 194, 2586-2593.	1.0	53
114	Where to begin? Sigma factors and the selectivity of transcription initiation in bacteria. Molecular Microbiology, 2019, 112, 335-347.	1.2	53
115	DNA-melting at the Bacillus subtilis flagellin promoter nucleates near âˆ'10 and expands unidirectionally. Journal of Molecular Biology, 1997, 267, 47-59.	2.0	52
116	Origins of specificity and crossâ€talk in metal ion sensing by <i><scp>B</scp>acillus subtilis</i><scp>Fur</scp>. Molecular Microbiology, 2012, 86, 1144-1155.	1.2	52
117	<i>Bacillus subtilis</i> FolE is sustained by the ZagA zinc metallochaperone and the alarmone ZTP under conditions of zinc deficiency. Molecular Microbiology, 2019, 112, 751-765.	1.2	52
118	An Antibiotic-Inducible Cell Wall-Associated Protein That Protects Bacillus subtilis from Autolysis. Journal of Bacteriology, 2007, 189, 4671-4680.	1.0	50
119	Oxidant-dependent switching between reversible and sacrificial oxidation pathways for Bacillus subtilis OhrR. Molecular Microbiology, 2008, 68, 978-986.	1.2	50
120	Characterization of the Fur Regulon in Pseudomonas syringae pv. tomato DC3000. Journal of Bacteriology, 2011, 193, 4598-4611.	1.0	50
121	Cu(I)-mediated Allosteric Switching in a Copper-sensing Operon Repressor (CsoR). Journal of Biological Chemistry, 2014, 289, 19204-19217.	1.6	50
122	Depletion of Undecaprenyl Pyrophosphate Phosphatases Disrupts Cell Envelope Biogenesis in Bacillus subtilis. Journal of Bacteriology, 2016, 198, 2925-2935.	1.0	50
123	Staphylococcus aureus PerR Is a Hypersensitive Hydrogen Peroxide Sensor using Iron-mediated Histidine Oxidation. Journal of Biological Chemistry, 2015, 290, 20374-20386.	1.6	49
124	The <i><scp>L</scp>isteria monocytogenes</i> Furâ€regulated virulence protein FrvA is an Fe(II) efflux P_{1B4}â€type ATPase. Molecular Microbiology, 2016, 100, 1066-1079.	1.2	48
125	Pathway of promoter melting by Bacillus subtilis RNA polymerase at a stable RNA promoter: Effects of temperature, .delta. protein, and .sigma. factor mutations. Biochemistry, 1995, 34, 8465-8473.	1.2	47
126	Deciphering a Complex Genetic Regulatory Network: The Bacillus Subtilis Ïƒ^W Protein and Intrinsic Resistance to Antimicrobial Compounds. Science Progress, 2006, 89, 243-266.	1.0	47

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127	Crystal Structure of Peroxide Stress Regulator from Streptococcus pyogenes Provides Functional Insights into the Mechanism of Oxidative Stress Sensing. Journal of Biological Chemistry, 2013, 288, 18311-18324.	1.6	47
128	Regulation of the<i>Bacillus subtilis yciC</i>Gene and Insights into the DNA-Binding Specificity of the Zinc-Sensing Metalloregulator Zur. Journal of Bacteriology, 2008, 190, 3482-3488.	1.0	46
129	Transcriptomic and Phenotypic Characterization of a<i>Bacillus subtilis</i>Strain without Extracytoplasmic Function Ïƒ Factors. Journal of Bacteriology, 2010, 192, 5736-5745.	1.0	46
130	Modulation of extracytoplasmic function (ECF) sigma factor promoter selectivity by spacer region sequence. Nucleic Acids Research, 2018, 46, 134-145.	6.5	46
131	The <i>yydFGHIJ</i> Operon of <i>Bacillus subtilis</i> Encodes a Peptide That Induces the LiaRS Two-Component System. Journal of Bacteriology, 2007, 189, 8616-8625.	1.0	45
132	Expression, Abundance, and RNA Polymerase Binding Properties of the Î´ Factor of Bacillus subtilis. Journal of Biological Chemistry, 1999, 274, 15953-15958.	1.6	44
133	Extracytoplasmic Function Ïƒ Factors with Overlapping Promoter Specificity Regulate Sublancin Production in <i>Bacillus subtilis</i>. Journal of Bacteriology, 2009, 191, 4951-4958.	1.0	44
134	Intracellular Zn(II) Intoxication Leads to Dysregulation of the PerR Regulon Resulting in Heme Toxicity in Bacillus subtilis. PLoS Genetics, 2016, 12, e1006515.	1.5	43
135	Regulation of Bacillus subtilis bacillithiol biosynthesis operons by Spx. Microbiology (United) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	0.7	42
136	Accumulation of heptaprenyl diphosphate sensitizes <scp><i>B</i></scp><i>acillus subtilis</i> to bacitracin: implications for the mechanism of resistance mediated by the <scp>BceAB</scp> transporter. Molecular Microbiology, 2014, 93, 37-49.	1.2	42
137	Bacillus subtilis Paraquat Resistance Is Directed by Ïƒ M , an Extracytoplasmic Function Sigma Factor, and Is Conferred by YqjL and BcrC. Journal of Bacteriology, 2005, 187, 2948-2956.	1.0	41
138	Metal-Induced Structural Organization and Stabilization of the Metalloregulatory Protein MntRâ€. Biochemistry, 2005, 44, 3380-3389.	1.2	40
139	Assessing the Impact of Denitrifier-Produced Nitric Oxide on Other Bacteria. Applied and Environmental Microbiology, 2006, 72, 2200-2205.	1.4	40
140	LiaRS-dependent gene expression is embedded in transition state regulation in Bacillus subtilis. Microbiology (United Kingdom), 2007, 153, 2530-2540.	0.7	40
141	A regulatory pathway that selectively up-regulates elongasome function in the absence of class A PBPs. ELife, 2020, 9, .	2.8	40
142	Extracytoplasmic Function Ïƒ Factors Regulate Expression of the <i>Bacillus subtilis yabE</i> Gene via a <i>cis</i> -Acting Antisense RNA. Journal of Bacteriology, 2009, 191, 1101-1105.	1.0	39
143	A metabolic checkpoint protein GlmR is important for diverting carbon into peptidoglycan biosynthesis in Bacillus subtilis. PLoS Genetics, 2018, 14, e1007689.	1.5	39
144	Mutations in Sigma Factor That Affect the Temperature Dependence of Transcription from a Promoter, but Not from a Mismatch Bubble, in Double-Stranded DNA. Biochemistry, 1994, 33, 11501-11506.	1.2	38

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145	Regulation of the Bacillus subtilis Extracytoplasmic Function Protein Ïƒ Y and Its Target Promoters. Journal of Bacteriology, 2003, 185, 4883-4890.	1.0	37
146	Substrate induction of siderophore transport in Bacillus subtilis mediated by a novel one-component regulator. Molecular Microbiology, 2007, 66, 164-173.	1.2	36
147	TheBacillus subtilisFlagellar Regulatory Protein ÏƒD: Overproduction, Domain Analysis and DNA-binding Properties. Journal of Molecular Biology, 1995, 249, 743-753.	2.0	35
148	Glutamate Dehydrogenase Affects Resistance to Cell Wall Antibiotics in Bacillus subtilis. Journal of Bacteriology, 2012, 194, 993-1001.	1.0	35
149	A Critical Role of Zinc Importer AdcABC in Group A Streptococcus-Host Interactions During Infection and Its Implications for Vaccine Development. EBioMedicine, 2017, 21, 131-141.	2.7	35
150	<scp>MntR</scp>(<scp>R</scp>v2788): a transcriptional regulator that controls manganese homeostasis in <scp><i>M</i></scp><i>ycobacterium tuberculosis</i>. Molecular Microbiology, 2015, 98, 1168-1183.	1.2	34
151	Iron Efflux by PmtA Is Critical for Oxidative Stress Resistance and Contributes Significantly to Group A Streptococcus Virulence. Infection and Immunity, 2017, 85, .	1.0	34
152	A Mutation of the RNA Polymerase Î²â€² Subunit (<i>rpoC</i>) Confers Cephalosporin Resistance in Bacillus subtilis. Antimicrobial Agents and Chemotherapy, 2013, 57, 56-65.	1.4	33
153	A previously unidentified Ïƒ factor and two accessory proteins regulate oxalate decarboxylase expression in <i>Bacillus subtilis</i>. Molecular Microbiology, 2008, 69, 954-967.	1.2	32
154	The Bacillus subtilis GntR Family Repressor YtrA Responds to Cell Wall Antibiotics. Journal of Bacteriology, 2011, 193, 5793-5801.	1.0	32
155	Conversion of Bacillus subtilis OhrR from a 1-Cys to a 2-Cys Peroxide Sensor. Journal of Bacteriology, 2008, 190, 5738-5745.	1.0	31
156	Identification of altered function alleles that affect Bacillus subtilis PerR metal ion selectivity. Nucleic Acids Research, 2011, 39, 5036-5044.	6.5	31
157	Roles of the A and C Sites in the Manganese-Specific Activation of MntR. Biochemistry, 2013, 52, 701-713.	1.2	31
158	Metalloregulator CueR biases RNA polymeraseâ€™s kinetic sampling of dead-end or open complex to repress or activate transcription. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13467-13472.	3.3	31
159	The Conformations of the Manganese Transport Regulator of Bacillus subtilis in its Metal-free State. Journal of Molecular Biology, 2007, 365, 1257-1265.	2.0	30
160	The YvrI Alternative Ïƒ Factor Is Essential for Acid Stress Induction of Oxalate Decarboxylase in <i>Bacillus subtilis</i>. Journal of Bacteriology, 2009, 191, 931-939.	1.0	29
161	Aspartate deficiency limits peptidoglycan synthesis and sensitizes cells to antibiotics targeting cell wall synthesis in <i>Bacillus subtilis</i>. Molecular Microbiology, 2018, 109, 826-844.	1.2	29
162	A ÏƒD-dependent antisense transcript modulates expression of the cyclic-di-AMP hydrolase GdpP in Bacillus subtilis. Microbiology (United Kingdom), 2012, 158, 2732-2741.	0.7	28

#	Article	IF	Citations
163	OxyR: A Molecular Code for Redox Sensing?. Science Signaling, 2002, 2002, pe46-pe46.	1.6	27
164	Mutations in the Primary Sigma Factor ÂA and Termination Factor Rho That Reduce Susceptibility to Cell Wall Antibiotics. Journal of Bacteriology, 2014, 196, 3700-3711.	1.0	27
165	Induction of the Spx regulon by cell wall stress reveals novel regulatory mechanisms in <i>Bacillus subtilis</i>. Molecular Microbiology, 2018, 107, 659-674.	1.2	27
166	A bacterial checkpoint protein for ribosome assembly moonlights as an essential metabolite-proofreading enzyme. Nature Communications, 2019, 10, 1526.	5.8	27
167	Two MerR homologues that affect copper induction of the Bacillus subtilis copZA operon. Microbiology (United Kingdom), 2003, 149, 3413-3421.	0.7	26
168	<i>Bacillus subtilis</i>TerC Family Proteins Help Prevent Manganese Intoxication. Journal of Bacteriology, 2020, 202, .	1.0	24
169	AbrB is a regulator of the ÃÂƒWregulon inBacillus subtilis. FEMS Microbiology Letters, 2002, 211, 219-223.	0.7	22
170	RNA polymerase: A nexus of gene regulation. Methods, 2009, 47, 1-5.	1.9	22
171	Metal Ion Uptake and Oxidative Stress. , 0, , 405-414.		22
172	RaoN, a small RNA encoded within Salmonella pathogenicity island-11, confers resistance to macrophage-induced stress. Microbiology (United Kingdom), 2013, 159, 1366-1378.	0.7	21
173	Reducing the Level of Undecaprenyl Pyrophosphate Synthase Has Complex Effects on Susceptibility to Cell Wall Antibiotics. Antimicrobial Agents and Chemotherapy, 2013, 57, 4267-4275.	1.4	21
174	Metalloregulators: Arbiters of Metal Sufficiency. , 2007, , 37-71.		20
175	Genome-Wide Characterization of the Fur Regulatory Network Reveals a Link between Catechol Degradation and Bacillibactin Metabolism in Bacillus subtilis. MBio, 2018, 9, .	1.8	20
176	Roles and regulation of Spx family transcription factors in Bacillus subtilis and related species. Advances in Microbial Physiology, 2019, 75, 279-323.	1.0	20
177	Mutational Analysis of Active Site Residues Essential for Sensing of Organic Hydroperoxides by <i>Bacillus subtilis</i> OhrR. Journal of Bacteriology, 2007, 189, 7069-7076.	1.0	19
178	Oxidation of a single active site suffices for the functional inactivation of the dimeric Bacillus subtilis OhrR repressor in vitro. Nucleic Acids Research, 2009, 37, 1174-1181.	6.5	19
179	Direct stimulus perception and transcription activation by a membraneâ€bound DNA binding protein. Molecular Microbiology, 2009, 73, 482-491.	1.2	19
180	Bacillus subtilis Fur represses one of two paralogous haem-degrading monooxygenases. Microbiology (United Kingdom), 2011, 157, 3221-3231.	0.7	18

#	Article	IF	Citations
181	Stabilization of Bacillus subtilis Spx under cell wall stress requires the anti-adaptor protein YirB. PLoS Genetics, 2018, 14, e1007531.	1.5	18
182	Metal sensing and regulation of adaptive responses to manganese limitation by MtsR is critical for group A streptococcus virulence. Nucleic Acids Research, 2019, 47, 7476-7493.	6.5	18
183	Identification of Novel Spx Regulatory Pathways in Bacillus subtilis Uncovers a Close Relationship between the CtsR and Spx Regulons. Journal of Bacteriology, 2019, 201, .	1.0	18
184	Group A Streptococcus AdcR Regulon Participates in Bacterial Defense against Host-Mediated Zinc Sequestration and Contributes to Virulence. Infection and Immunity, 2020, 88, .	1.0	18
185	Dysregulation of Magnesium Transport Protects Bacillus subtilis against Manganese and Cobalt Intoxication. Journal of Bacteriology, 2020, 202, .	1.0	18
186	Interactions between the Promoter Regions of Nitrogenase Structural Genes (nifHDK2) and DNA-Binding Proteins from N 2 - and Ammonium-Grown Cells of the Archaeon Methanosarcina barkeri 227. Journal of Bacteriology, 1998, 180, 2723-2728.	1.0	18
187	Purification of Bacillus subtilis RNA Polymerase and Associated Factors. Methods in Enzymology, 2003, 370, 10-24.	0.4	17
188	A Central Role for Magnesium Homeostasis during Adaptation to Osmotic Stress. MBio, 2022, 13, e0009222.	1.8	17
189	Adenines at -11, -9 and -8 play a key role in the binding of Bacillus subtilis Esigma(A) RNA polymerase to -10 region single-stranded DNA. Nucleic Acids Research, 1999, 27, 4541-4546.	6.5	16
190	Environmental Sensing and the Role of Extracytoplasmic Function Sigma Factors. , 2008, , 233-261.		16
191	Transcription activation by the siderophore sensor Btr is mediated by ligand-dependent stimulation of promoter clearance. Nucleic Acids Research, 2012, 40, 3585-3595.	6.5	15
192	How antibiotics kill bacteria: new models needed?. Nature Medicine, 2013, 19, 544-545.	15.2	15
193	Resource sharing between central metabolism and cell envelope synthesis. Current Opinion in Microbiology, 2021, 60, 34-43.	2.3	15
194	Lack of formylated methionyl-tRNA has pleiotropic effects on Bacillus subtilis. Microbiology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.7	15
195	Measuring Metals with RNA. Molecular Cell, 2007, 27, 859-860.	4.5	14
196	A two-subunit bacterial Ïƒ-factor activates transcription in <i>Bacillus subtilis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 21323-21328.	3.3	14
197	Mutations of the Bacillus subtilis YidC1 (SpoIIIJ) insertase alleviate stress associated with ÏƒM-dependent membrane protein overproduction. PLoS Genetics, 2019, 15, e1008263.	1.5	13
198	Deciphering the essentiality and function of the antiâ€Ïƒ^M factors in <i>Bacillus subtilis</i>. Molecular Microbiology, 2019, 112, 482-497.	1.2	13

#	Article	IF	Citations
199	Bacillus subtilis Fur Is a Transcriptional Activator for the PerR-Repressed <i>pfeT</i> Gene, Encoding an Iron Efflux Pump. Journal of Bacteriology, 2020, 202, .	1.0	13
200	Manganese impairs the QoxABCD terminal oxidase leading to respirationâ€associated toxicity. Molecular Microbiology, 2021, 116, 729-742.	1.2	13
201	In Vitro Mutagenesis of <i>Bacillus subtilis</i> by Using a Modified Tn <i>7</i> Transposon with an Outward-Facing Inducible Promoter. Applied and Environmental Microbiology, 2008, 74, 3419-3425.	1.4	12
202	Bacillus subtilis PgcA moonlights as a phosphoglucosamine mutase in support of peptidoglycan synthesis. PLoS Genetics, 2019, 15, e1008434.	1.5	11
203	Distinctiveness of genes contributing to growth of Pseudomonas syringae in diverse host plant species. PLoS ONE, 2020, 15, e0239998.	1.1	11
204	Biphasic unbinding of a metalloregulator from DNA for transcription (de)repression in Live Bacteria. Nucleic Acids Research, 2020, 48, 2199-2208.	6.5	11
205	The Bacillus subtilis monothiol bacilliredoxin BrxC (YtxJ) and the Bdr (YpdA) disulfide reductase reduce S-bacillithiolated proteins. Redox Biology, 2021, 42, 101935.	3.9	11
206	Fluoro-Phenyl-Styrene-Sulfonamide, a Novel Inhibitor of Ïƒ^BActivity, Prevents the Activation of Ïƒ^Bby Environmental and Energy Stresses in Bacillus subtilis. Journal of Bacteriology, 2013, 195, 2509-2517.	1.0	10
207	Genome-Wide Transposon Screen of a <i>Pseudomonas syringae mexB</i> Mutant Reveals the Substrates of Efflux Transporters. MBio, 2019, 10, .	1.8	9
208	A Simplified Method for CRISPR-Cas9 Engineering of Bacillus subtilis. Microbiology Spectrum, 2021, 9, e0075421.	1.2	9
209	Sensing Nickel. Chemistry and Biology, 2002, 9, 1055-1057.	6.2	8
210	DNA-Binding Properties of the <i>Bacillus subtilis</i> and <i>Aeribacillus pallidus</i> AC6 Ïƒ^D Proteins. Journal of Bacteriology, 2011, 193, 575-579.	1.0	7
211	Regulation by Alternative Sigma Factors. , 0, , 31-43.		7
212	Metal Cation Regulation in Gram-Positive Bacteria. , 1998, , 45-76.		7
213	Genome-Wide Identification of Tomato Xylem Sap Fitness Factors for Three Plant-Pathogenic <i>Ralstonia</i> Species. MSystems, 2021, 6, e0122921.	1.7	7
214	ROMA: An in vitro approach to defining target genes for transcription regulators. Methods, 2009, 47, 73-77.	1.9	6
215	Complete Genome Sequence Resource for the Necrotrophic Plant-Pathogenic Bacterium <i>Dickeya dianthicola</i> 67-19 Isolated From New Guinea Impatiens. Plant Disease, 2021, 105, 1174-1176.	0.7	6
216	Gene Expression and Its Regulation. , 0, , 47-84.		2

#	Article	IF	Citations
217	Prokaryotic Redox Switches. , 2013, , 233-276.		2
218	Complete Genome Sequence of a Gram-Positive Bacterium, Leifsonia sp. Strain PS1209, a Potato Endophyte. Microbiology Resource Announcements, 2020, 9, .	0.3	2
219	Complete Genome Sequence Resource for the Necrotrophic Plant-Pathogenic Bacterium Pectobacterium carotovorum WPP14. Plant Disease, 2021, 105, 196-198.	0.7	2
220	Complete Genome Sequence Resources for the Onion Pathogen, <i>Pantoea ananatis</i> OC5a. Phytopathology, 2021, 111, 1885-1888.	1.1	2
221	Chemical proteomics reveals a second family of cyclic-di-AMP hydrolases. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1921-1922.	3.3	1
222	Essentials of Molecular Biology.David Freifelder , George M. Malacinski. Quarterly Review of Biology, 1993, 68, 578-579.	0.0	0
223	New dimensions at <i>Molecular Microbiology</i>: 3D graphics and the Wiley Online Library. Molecular Microbiology, 2011, 81, 295-296.	1.2	0
224	Single-Molecule Analysis Suggests Two Novel Pathways for Turning Off Transcription by a MerR-Family Metalloregulator. Biophysical Journal, 2013, 104, 176a.	0.2	0
225	Molecular scribes in the spotlight: Methods for illuminating Bacterial and Archaeal transcription. Methods, 2015, 86, 1-3.	1.9	0
226	Editorial: An Inaugural Series of Thematic MicroReviews from the BLAST Meeting. Molecular Microbiology, 2017, 103, 195-196.	1.2	0
227	Transcription | Sigma Factors. , 2021, , 379-382.		0
228	Sigma Factors. , 2004, , 41-44.		0
229	What is Life?. Lynn Margulis , Dorion Sagan. Quarterly Review of Biology, 1997, 72, 62-63.	0.0	0