Patricia J Kiley

List of Publications by Year in Descending Order

82 papers	5,055 citations	37 h-index	71 g-index
91 ext. papers	5,654 ext. citations	6.9 avg, IF	5.52 L-index

#	Paper	IF	Citations
82	Creation of Markerless Genome Modifications in a Nonmodel Bacterium by Fluorescence-Aided Recombineering.. *Methods in Molecular Biology*, **2022**, 2479, 53-70	1.4	
81	Minor Alterations in Core Promoter Element Positioning Reveal Functional Plasticity of a Bacterial Transcription Factor. *MBio*, **2021**, e0275321	7.8	0
80	Genome Scale Analysis Reveals IscR Directly and Indirectly Regulates Virulence Factor Genes in Pathogenic. *MBio*, **2021**, 12, e0063321	7.8	0
79	Improving Mobilization of Foreign DNA into Zymomonas mobilis Strain ZM4 by Removal of Multiple Restriction Systems. *Applied and Environmental Microbiology*, **2021**, 87, e0080821	4.8	0
78	Tailoring a Global Iron Regulon to a Uropathogen. *MBio*, **2020**, 11,	7.8	11
77	Elevated Expression of a Functional Suf Pathway in Escherichia coli BL21(DE3) Enhances Recombinant Production of an Iron-Sulfur Cluster-Containing Protein. *Journal of Bacteriology*, **2020**, 202,	3.5	10
76	Model-driven analysis of mutant fitness experiments improves genome-scale metabolic models of Zymomonas mobilis ZM4. *PLoS Computational Biology*, **2020**, 16, e1008137	5	4
75	Identification and Unusual Properties of the Master Regulator FNR in the Extreme Acidophile. *Frontiers in Microbiology*, **2019**, 10, 1642	5.7	7
74	Systems Metabolic Engineering of Escherichia coli Improves Coconversion of Lignocellulose-Derived Sugars. *Biotechnology Journal*, **2019**, 14, e1800441	5.6	3
73	A Markerless Method for Genome Engineering in ZM4. *Frontiers in Microbiology*, **2019**, 10, 2216	5.7	9
72	Phage integration alters the respiratory strategy of its host. *ELife*, **2019**, 8,	8.9	11
71	Iron availability and oxygen tension regulate the Yersinia Ysc type III secretion system to enable disseminated infection. *PLoS Pathogens*, **2019**, 15, e1008001	7.6	5
70	Iron availability and oxygen tension regulate the Yersinia Ysc type III secretion system to enable disseminated infection **2019**, 15, e1008001		
69	Iron availability and oxygen tension regulate the Yersinia Ysc type III secretion system to enable disseminated infection **2019**, 15, e1008001		
68	Iron availability and oxygen tension regulate the Yersinia Ysc type III secretion system to enable disseminated infection **2019**, 15, e1008001		
67	Iron availability and oxygen tension regulate the Yersinia Ysc type III secretion system to enable disseminated infection **2019**, 15, e1008001		
66	Regulated Stochasticity in a Bacterial Signaling Network Permits Tolerance to a Rapid Environmental Change. *Cell*, **2018**, 173, 196-207.e14	56.2	32

65	Control of Heme Uptake Genes in in Response to Iron Sources. *Frontiers in Cellular and Infection Microbiology*, **2018**, 8, 47	5.9	13
64	Reassessing the Structure and Function Relationship of the O Sensing Transcription Factor FNR. *Antioxidants and Redox Signaling*, **2018**, 29, 1830-1840	8.4	24
63	O availability impacts iron homeostasis in. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 12261-12266	11.5	35
62	How Is Fe-S Cluster Formation Regulated?. *Annual Review of Microbiology*, **2015**, 69, 505-26	17.5	41
61	Design principles of a conditional futile cycle exploited for regulation. *Molecular BioSystems*, **2015**, 11, 1841-9		8
60	Fe-S proteins that regulate gene expression. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2015**, 1853, 1284-93	4.9	66
59	Defining bacterial regulons using ChIP-seq. *Methods*, **2015**, 86, 80-8	4.6	17
58	Impact of Anaerobiosis on Expression of the Iron-Responsive Fur and RyhB Regulons. *MBio*, **2015**, 6, e01947-15	7.87	37
57	Correcting direct effects of ethanol on translation and transcription machinery confers ethanol tolerance in bacteria. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E2576-85	11.5	96
56	Global Responses of Bacteria to Oxygen Deprivation **2014**, 175-189		3
55	Coordinate regulation of the Suf and Isc Fe-S cluster biogenesis pathways by IscR is essential for viability of Escherichia coli. *Journal of Bacteriology*, **2014**, 196, 4315-23	3.5	27
54	Aromatic inhibitors derived from ammonia-pretreated lignocellulose hinder bacterial ethanologenesis by activating regulatory circuits controlling inhibitor efflux and detoxification. *Frontiers in Microbiology*, **2014**, 5, 402	5.7	30
53	IscR is essential for yersinia pseudotuberculosis type III secretion and virulence. *PLoS Pathogens*, **2014**, 10, e1004194	7.6	38
52	The influence of repressor DNA binding site architecture on transcriptional control. *MBio*, **2014**, 5, e01684-14	7.8	15
51	Regulation of iron-sulphur cluster homeostasis through transcriptional control of the Isc pathway by [2Fe-2S]-IscR in Escherichia coli. *Molecular Microbiology*, **2013**, 87, 478-92	4.1	91
50	Studies of IscR reveal a unique mechanism for metal-dependent regulation of DNA binding specificity. *Nature Structural and Molecular Biology*, **2013**, 20, 740-7	17.6	80
49	dPeak: high resolution identification of transcription factor binding sites from PET and SET ChIP-Seq data. *PLoS Computational Biology*, **2013**, 9, e1003246	5	12
48	Genome-scale analysis of escherichia coli FNR reveals complex features of transcription factor binding. *PLoS Genetics*, **2013**, 9, e1003565	6	120

47	The bacterial response regulator ArcA uses a diverse binding site architecture to regulate carbon oxidation globally. *PLoS Genetics*, **2013**, 9, e1003839	6	92
46	Transcriptome changes associated with anaerobic growth in Yersinia intermedia (ATCC29909). *PLoS ONE*, **2013**, 8, e76567	3.7	6
45	Characterization of the [2Fe-2S] cluster of Escherichia coli transcription factor IscR. *Biochemistry*, **2012**, 51, 4453-62	3.2	71
44	Evolution of the metabolic and regulatory networks associated with oxygen availability in two phytopathogenic enterobacteria. *BMC Genomics*, **2012**, 13, 110	4.5	30
43	Complex physiology and compound stress responses during fermentation of alkali-pretreated corn stover hydrolysate by an Escherichia coli ethanologen. *Applied and Environmental Microbiology*, **2012**, 78, 3442-57	4.8	47
42	A shared mechanism of SoxR activation by redox-cycling compounds. *Molecular Microbiology*, **2011**, 79, 1119-22	4.1	25
41	Iron-containing transcription factors and their roles as sensors. *Current Opinion in Chemical Biology*, **2011**, 15, 335-41	9.7	79
40	Global approaches for finding small RNA and small open reading frame functions. *Journal of Bacteriology*, **2010**, 192, 26-8	3.5	4
39	Reconstruction of the core and extended regulons of global transcription factors. *PLoS Genetics*, **2010**, 6, e1001027	6	54
38	Sequence-specific binding to a subset of IscR-regulated promoters does not require IscR Fe-S cluster ligation. *Journal of Molecular Biology*, **2009**, 387, 28-41	6.5	93
37	Techniques to isolate O2-sensitive proteins: [4Fe-4S]-FNR as an example. *Methods in Enzymology*, **2009**, 463, 787-805	1.7	15
36	The impact of O(2) on the Fe-S cluster biogenesis requirements of Escherichia coli FNR. *Journal of Molecular Biology*, **2008**, 384, 798-811	6.5	50
35	Bridges and chasms: summary of the IMAGE 2 meeting in Montreal, Canada, 30 April to 3 May 2007. *Journal of Bacteriology*, **2008**, 190, 792-7	3.5	1
34	Dissecting the role of the N-terminal region of the Escherichia coli global transcription factor FNR. *Journal of Bacteriology*, **2008**, 190, 8230-3	3.5	6
33	Two-pronged survival strategy for the major cystic fibrosis pathogen, Pseudomonas aeruginosa, lacking the capacity to degrade nitric oxide during anaerobic respiration. *EMBO Journal*, **2007**, 26, 3662-72	13	58
32	Contributions of [4Fe-4S]-FNR and integration host factor to fnr transcriptional regulation. *Journal of Bacteriology*, **2007**, 189, 3036-43	3.5	28
31	Regulation of FNR dimerization by subunit charge repulsion. *Journal of Biological Chemistry*, **2006**, 281, 33268-75	5.4	35
30	IscR-dependent gene expression links iron-sulphur cluster assembly to the control of O2-regulated genes in Escherichia coli. *Molecular Microbiology*, **2006**, 60, 1058-75	4.1	222

29	ClpXP-dependent proteolysis of FNR upon loss of its O2-sensing [4Fe-4S] cluster. *Journal of Molecular Biology*, **2005**, 354, 220-32	6.5	56
28	Genome-wide expression analysis indicates that FNR of Escherichia coli K-12 regulates a large number of genes of unknown function. *Journal of Bacteriology*, **2005**, 187, 1135-60	3.5	215
27	Additional determinants within Escherichia coli FNR activating region 1 and RNA polymerase alpha subunit required for transcription activation. *Journal of Bacteriology*, **2005**, 187, 1724-31	3.5	12
26	Kinetic analysis of the oxidative conversion of the [4Fe-4S]2+ cluster of FNR to a [2Fe-2S]2+ Cluster. *Journal of Bacteriology*, **2004**, 186, 8018-25	3.5	85
25	Exploiting thiol modifications. *PLoS Biology*, **2004**, 2, e400	9.7	74
24	Superoxide destroys the [2Fe-2S]2+ cluster of FNR from Escherichia coli. *Biochemistry*, **2004**, 43, 791-8	3.2	62
23	The role of Fe-S proteins in sensing and regulation in bacteria. *Current Opinion in Microbiology*, **2003**, 6, 181-5	7.9	286
22	Techniques for studying the oxygen-sensitive transcription factor FNR from Escherichia coli. *Methods in Enzymology*, **2003**, 370, 300-12	1.7	20
21	Characterization of activating region 3 from Escherichia coli FNR. *Journal of Molecular Biology*, **2002**, 315, 275-83	6.5	24
20	IscR, an Fe-S cluster-containing transcription factor, represses expression of Escherichia coli genes encoding Fe-S cluster assembly proteins. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 14895-900	11.5	324
19	Characterization of the dimerization domain in the FNR transcription factor. *Journal of Biological Chemistry*, **2001**, 276, 45744-50	5.4	60
18	FNR-dependent activation of the class II dmsA and narG promoters of Escherichia coli requires FNR-activating regions 1 and 3. *Molecular Microbiology*, **2000**, 38, 817-27	4.1	37
17	Substitution of leucine 28 with histidine in the Escherichia coli transcription factor FNR results in increased stability of the [4Fe-4S](2+) cluster to oxygen. *Journal of Biological Chemistry*, **2000**, 275, 6234-40	5.4	67
16	The cysteine desulfurase, IscS, has a major role in in vivo Fe-S cluster formation in Escherichia coli. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 9009-14	11.5	252
15	Fe-S proteins in sensing and regulatory functions. *Current Opinion in Chemical Biology*, **1999**, 3, 152-7	9.7	186
14	Oxygen sensing by the global regulator, FNR: the role of the iron-sulfur cluster. *FEMS Microbiology Reviews*, **1998**, 22, 341-52	15.1	253
13	Identification of a contact site for different transcription activators in region 4 of the Escherichia coli RNA polymerase sigma70 subunit. *Journal of Molecular Biology*, **1998**, 284, 1353-65	6.5	146
12	MÖssbauer spectroscopy as a tool for the study of activation/inactivation of the transcription regulator FNR in whole cells of Escherichia coli. *Proceedings of the National Academy of Sciences of the United States of America*, **1998**, 95, 13431-5	11.5	101

11	Fnr, NarP, and NarL regulation of Escherichia coli K-12 napF (periplasmic nitrate reductase) operon transcription in vitro. *Journal of Bacteriology*, **1998**, 180, 4192-8	3.5	60
10	Iron-sulfur cluster disassembly in the FNR protein of Escherichia coli by O2: [4Fe-4S] to [2Fe-2S] conversion with loss of biological activity. *Proceedings of the National Academy of Sciences of the United States of America*, **1997**, 94, 6087-92	11.5	287
9	Redox control of gene expression involving iron-sulfur proteins. Change of oxidation-state or assembly/disassembly of Fe-S clusters?. *FEBS Letters*, **1996**, 382, 218-9; discussion 220-1	3.8	48
8	DNA binding and dimerization of the Fe-S-containing FNR protein from Escherichia coli are regulated by oxygen. *Journal of Biological Chemistry*, **1996**, 271, 2762-8	5.4	254
7	Association of a polynuclear iron-sulfur center with a mutant FNR protein enhances DNA binding. *Proceedings of the National Academy of Sciences of the United States of America*, **1995**, 92, 2499-503	11.5	185
6	In vitro analysis of a constitutively active mutant form of the Escherichia coli global transcription factor FNR. *Journal of Molecular Biology*, **1995**, 245, 351-61	6.5	56
5	The puf operon region of Rhodobacter sphaeroides. *Photosynthesis Research*, **1988**, 19, 39-61	3.7	29
4	The puf operon region of Rhodobacter sphaeroides **1988**, 137-159		
3	On the role of the light-harvesting B880 in the correct insertion of the reaction center of Rhodobacter capsulatus and Rhodobacter sphaeroides. *FEBS Letters*, **1987**, 215, 171-4	3.8	21
2	Characterization of light-harvesting mutants of Rhodopseudomonas sphaeroides. I. Measurement of the efficiency of energy transfer from light-harvesting complexes to the reaction center. *Archives of Biochemistry and Biophysics*, **1985**, 236, 130-9	4.1	82
1	13. Sensing the cellular Fe-S cluster demand: a structural, functional, and phylogenetic overview of Escherichia coli IscR		2