Sean Crosson

List of Publications by Year
in descending order

78 papers	4,761 citations	109321 35 h-index	106344 65 g-index
99 all docs	99 docs citations	99 times ranked	4863 citing authors

#	Article	IF	Citations
1	The DUF1013 protein TrcR tracks with RNA polymerase to control the bacterial cell cycle and protect against antibiotics. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	1
2	Flagellar Perturbations Activate Adhesion through Two Distinct Pathways in Caulobacter crescentus. MBio, 2021, 12, .	4.1	17
3	Quantification ofBrucella abortuspopulation structure in a natural host. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	10
4	Brucella ovis Cysteine Biosynthesis Contributes to Peroxide Stress Survival and Fitness in the Intracellular Niche. Infection and Immunity, 2021, 89, .	2.2	5
5	The ChvG-ChvI and NtrY-NtrX Two-Component Systems Coordinately Regulate Growth of Caulobacter crescentus. Journal of Bacteriology, 2021, 203, e0019921.	2.2	15
6	Early-Life Microbial Restitution Reduces Colitis Risk Promoted by Antibiotic-Induced Gut Dysbiosis in Interleukin 10â€"/â€" Mice. Gastroenterology, 2021, 161, 940-952.e15.	1.3	20
7	Editorial overview: Microbial cell regulation across multiple scales. Current Opinion in Microbiology, 2021, 63, 179-180.	5.1	0
8	Extreme Antagonism Arising from Gene-Environment Interactions. Biophysical Journal, 2020, 119, 2074-2086.	0.5	6
9	Feedback Control of a Two-Component Signaling System by an Fe-S-Binding Receiver Domain. MBio, 2020, 11, .	4.1	14
10	Periplasmic protein EipA determines envelope stress resistance and virulence in Brucella abortus. Molecular Microbiology, 2019, 111, 637-661.	2.5	21
11	Composition of the Holdfast Polysaccharide from Caulobacter crescentus. Journal of Bacteriology, 2019, 201, .	2.2	15
12	Regulation of the Erythrobacter litoralis DSM 8509 general stress response by visible light. Molecular Microbiology, 2019, 112, 442-460.	2.5	7
13	Regulation of bacterial surface attachment by a network of sensory transduction proteins. PLoS Genetics, 2019, 15, e1008022.	3.5	16
14	BrucellaPeriplasmic Protein EipB Is a Molecular Determinant of Cell Envelope Integrity and Virulence. Journal of Bacteriology, 2019, 201, .	2.2	12
15	A Genome-Wide Analysis of Adhesion in Caulobacter crescentus Identifies New Regulatory and Biosynthetic Components for Holdfast Assembly. MBio, 2019, 10, .	4.1	24
16	A Carbonic Anhydrase Pseudogene Sensitizes Select Brucella Lineages to Low CO ₂ Tension. Journal of Bacteriology, 2019, 201, .	2.2	16
17	Genome-scale fitness profile of Caulobacter crescentus grown in natural freshwater. ISME Journal, 2019, 13, 523-536.	9.8	35
18	Bridging the Timescales of Single-Cell and Population Dynamics. Physical Review X, 2018, 8, .	8.9	28

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19	Molecular control of gene expression by Brucella BaaR, an IclR-type transcriptional repressor. Journal of Biological Chemistry, 2018, 293, 7437-7456.	3.4	5
20	Allosteric control of a bacterial stress response system by an antiâ€ïƒ factor. Molecular Microbiology, 2018, 107, 164-179.	2.5	9
21	Gene network analysis identifies a central post-transcriptional regulator of cellular stress survival. ELife, 2018, 7, .	6.0	17
22	Coherent Feedforward Regulation of Gene Expression by Caulobacter Ïƒ ^T and GsrN during Hyperosmotic Stress. Journal of Bacteriology, 2018, 200, .	2.2	4
23	Experimental evolution of diverse Escherichia coli metabolic mutants identifies genetic loci for convergent adaptation of growth rate. PLoS Genetics, 2018, 14, e1007284.	3.5	24
24	Structure and function of HWE/HisKA2-family sensor histidine kinases. Current Opinion in Microbiology, 2017, 36, 47-54.	5.1	26
25	Brucella abortus Induces a Warburg Shift in Host Metabolism That Is Linked to Enhanced Intracellular Survival of the Pathogen. Journal of Bacteriology, 2017, 199, .	2.2	61
26	Conserved ABC Transport System Regulated by the General Stress Response Pathways of Alpha- and Gammaproteobacteria. Journal of Bacteriology, 2017, 199, .	2.2	14
27	Atypical modes of bacterial histidine kinase signaling. Molecular Microbiology, 2017, 103, 197-202.	2.5	28
28	Proper Control of Caulobacter crescentus Cell Surface Adhesion Requires the General Protein Chaperone DnaK. Journal of Bacteriology, 2016, 198, 2631-2642.	2.2	10
29	Activation Mechanism of the Bacteroides fragilis Cysteine Peptidase, Fragipain. Biochemistry, 2016, 55, 4077-4084.	2.5	17
30	Classic Spotlight: Studies of the Stringent Response. Journal of Bacteriology, 2016, 198, 1710-1710.	2.2	0
31	Activation of Bacteroides fragilis toxin by a novel bacterial protease contributes to anaerobic sepsis in mice. Nature Medicine, 2016, 22, 563-567.	30.7	76
32	Next-Generation High-Throughput Functional Annotation of Microbial Genomes. MBio, 2016, 7, .	4.1	19
33	Brucella abortus Î” rpoE1 confers protective immunity against wild type challenge in a mouse model of brucellosis. Vaccine, 2016, 34, 5073-5081.	3.8	8
34	A dual-targeting approach to inhibit Brucella abortus replication in human cells. Scientific Reports, 2016, 6, 35835.	3.3	9
35	Data publication with the structural biology data grid supports live analysis. Nature Communications, 2016, 7, 10882.	12.8	113
36	WrpA Is an Atypical Flavodoxin Family Protein under Regulatory Control of the Brucella abortus General Stress Response System. Journal of Bacteriology, 2016, 198, 1281-1293.	2.2	14

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37	Identification of the PhoB Regulon and Role of PhoU in the Phosphate Starvation Response of Caulobacter crescentus. Journal of Bacteriology, 2016, 198, 187-200.	2.2	65
38	Intergenerational continuity of cell shape dynamics in Caulobacter crescentus. Scientific Reports, 2015, 5, 9155.	3.3	17
39	Structured and Dynamic Disordered Domains Regulate the Activity of a Multifunctional Anti-Ïƒ Factor. MBio, 2015, 6, e00910.	4.1	13
40	Structural asymmetry in a conserved signaling system that regulates division, replication, and virulence of an intracellular pathogen. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3709-18.	7.1	52
41	Virulence Regulation with Venus Flytrap Domains: Structure and Function of the Periplasmic Moiety of the Sensor-Kinase BvgS. PLoS Pathogens, 2015, 11, e1004700.	4.7	51
42	Brucella abortus Cell Cycle and Infection Are Coordinated. Trends in Microbiology, 2015, 23, 812-821.	7.7	41
43	Evolving New Protein-Protein Interaction Specificity through Promiscuous Intermediates. Cell, 2015, 163, 594-606.	28.9	167
44	General Stress Signaling in the Alphaproteobacteria. Annual Review of Genetics, 2015, 49, 603-625.	7.6	63
45	The Coding and Noncoding Architecture of the Caulobacter crescentus Genome. PLoS Genetics, 2014, 10, e1004463.	3.5	136
46	A Cell Cycle and Nutritional Checkpoint Controlling Bacterial Surface Adhesion. PLoS Genetics, 2014, 10, e1004101.	3.5	81
47	The <scp>B</scp>rucella abortus virulence regulator, <scp>LovhK</scp>, is a sensor kinase in the general stress response signalling pathway. Molecular Microbiology, 2014, 94, 913-925.	2.5	48
48	Bacterial lifestyle shapes stringent response activation. Trends in Microbiology, 2013, 21, 174-180.	7.7	210
49	myo -Inositol and <scp>d</scp>-Ribose Ligand Discrimination in an ABC Periplasmic Binding Protein. Journal of Bacteriology, 2013, 195, 2379-2388.	2.2	14
50	The Brucella abortus General Stress Response System Regulates Chronic Mammalian Infection and Is Controlled by Phosphorylation and Proteolysis. Journal of Biological Chemistry, 2013, 288, 13906-13916.	3.4	65
51	Chromosome replication and segregation govern the biogenesis and inheritance of inorganic polyphosphate granules. Molecular Biology of the Cell, 2013, 24, 3177-3186.	2.1	37
52	The LovK-LovR Two-Component System Is a Regulator of the General Stress Pathway in Caulobacter crescentus. Journal of Bacteriology, 2012, 194, 3038-3049.	2.2	76
53	Cell biology of micro-organisms and the evolution of the eukaryotic cell. Molecular Biology of the Cell, 2012, 23, 974-974.	2.1	0
54	Molecular Structure and Function of the Novel BrnT/BrnA Toxin-Antitoxin System of Brucella abortus. Journal of Biological Chemistry, 2012, 287, 12098-12110.	3.4	75

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55	ppGpp and Polyphosphate Modulate Cell Cycle Progression in Caulobacter crescentus. Journal of Bacteriology, 2012, 194, 28-35.	2.2	84
56	Structural basis of a protein partner switch that regulates the general stress response of Î±-proteobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1415-23.	7.1	42
57	Function, structure and mechanism of bacterial photosensory LOV proteins. Nature Reviews Microbiology, 2011, 9, 713-723.	28.6	217
58	Ligand-Binding PAS Domains in a Genomic, Cellular, and Structural Context. Annual Review of Microbiology, 2011, 65, 261-286.	7.3	369
59	The complex logic of stringent response regulation in Caulobacter crescentus: starvation signalling in an oligotrophic environment. Molecular Microbiology, 2011, 80, 695-714.	2.5	79
60	Interaction specificity, toxicity and regulation of a paralogous set of ParE/RelEâ€family toxinâ€“antitoxin systems. Molecular Microbiology, 2010, 77, 236-251.	2.5	93
61	A structural model of antiâ€antiâ€f inhibition by a twoâ€component receiver domain: the PhyR stress response regulator. Molecular Microbiology, 2010, 78, 290-304.	2.5	52
62	The Genetic Basis of Laboratory Adaptation in Caulobacter crescentus. Journal of Bacteriology, 2010, 192, 3678-3688.	2.2	166
63	An Analysis of the Solution Structure and Signaling Mechanism of LovK, a Sensor Histidine Kinase Integrating Light and Redox Signals. Biochemistry, 2010, 49, 6761-6770.	2.5	70
64	A Conserved Mode of Protein Recognition and Binding in a ParDâ^'ParE Toxinâ^'Antitoxin Complex. Biochemistry, 2010, 49, 2205-2215.	2.5	76
65	Electronic and Protein Structural Dynamics of a Photosensory Histidine Kinase. Biochemistry, 2010, 49, 4752-4759.	2.5	20
66	The Photobiology of Microbial Pathogenesis. PLoS Pathogens, 2009, 5, e1000470.	4.7	48
67	Tightly Regulated and Heritable Division Control in Single Bacterial Cells. Biophysical Journal, 2008, 95, 2063-2072.	0.5	56
68	Photoregulation in prokaryotes. Current Opinion in Microbiology, 2008, 11, 168-178.	5.1	93
69	Genetic and Computational Identification of a Conserved Bacterial Metabolic Module. PLoS Genetics, 2008, 4, e1000310.	3.5	26
70	A photosensory two-component system regulates bacterial cell attachment. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18241-18246.	7.1	164
71	A Bacterial Pathogen Sees the Light. Science, 2007, 317, 1041-1042.	12.6	8
72	LOV-Domain Structure, Dynamics, and Diversity. , 2005, , 323-336.		4

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73	Conserved modular design of an oxygen sensory/signaling network with species-specific output. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 8018-8023.	7.1	80
74	A Genetic Oscillator and the Regulation of Cell Cycle Progression inCaulobacter crescentus. Cell Cycle, 2004, 3, 1252-1254.	2.6	8
75	The LOV2 Domain of Phototropin:Â A Reversible Photochromic Switch. Journal of the American Chemical Society, 2004, 126, 4512-4513.	13.7	102
76	The LOV Domain Family:â€‰ Photoresponsive Signaling Modules Coupled to Diverse Output Domains. Biochemistry, 2003, 42, 2-10.	2.5	387
77	Primary Reactions of the LOV2 Domain of Phototropin, a Plant Blue-Light Photoreceptor. Biochemistry, 2003, 42, 3385-3392.	2.5	214
78	Photoexcited Structure of a Plant Photoreceptor Domain Reveals a Light-Driven Molecular Switch. Plant Cell, 2002, 14, 1067-1075.	6.6	358