Ann M Stock

List of Publications by Year
in descending order

80 papers	11,442 citations	71102 41 h-index	82547 72 g-index
85 all docs	85 docs citations	85 times ranked	8636 citing authors

#	Article	IF	Citations
1	A balancing act in transcription regulation by response regulators: titration of transcription factor activity by decoy DNA binding sites. Nucleic Acids Research, 2021, 49, 11537-11549.	14.5	11
2	Thiol-based functional mimicry of phosphorylation of the two-component system response regulator ArcA promotes pathogenesis in enteric pathogens. Cell Reports, 2021, 37, 110147.	6.4	11
3	Structural asymmetry does not indicate hemiphosphorylation in the bacterial histidine kinase CpxA. Journal of Biological Chemistry, 2020, 295, 8106-8117.	3.4	4
4	Cytokinin Sensing in Bacteria. Biomolecules, 2020, 10, 186.	4.0	4
5	Two-component systems. Current Biology, 2019, 29, R724-R725.	3.9	46
6	Structural Basis of Response Regulator Function. Annual Review of Microbiology, 2019, 73, 175-197.	7.3	118
7	Drug-like Fragments Inhibit agr-Mediated Virulence Expression in Staphylococcus aureus. Scientific Reports, 2019, 9, 6786.	3.3	24
8	The PLOS Biology XV Collection: 15 Years of Exceptional Science Highlighted across 12 Months. PLoS Biology, 2019, 17, e3000180.	5.6	1
9	What do archaeal and eukaryotic histidine kinases sense?. F1000Research, 2019, 8, 2145.	1.6	10
10	Overcoming the Cost of Positive Autoregulation by Accelerating the Response with a Coupled Negative Feedback. Cell Reports, 2018, 24, 3061-3071.e6.	6.4	24
11	Quantitative Analysis of Intracellular Response Regulator Phosphatase Activity of Histidine Kinases. Methods in Enzymology, 2018, 607, 301-319.	1.0	11
12	Quantitative Kinetic Analyses of Shutting Off a Two-Component System. MBio, 2017, 8, .	4.1	27
13	Classic Spotlight: Selected Highlights from the First 100 Years of the <i>Journal of Bacteriology</i>. Journal of Bacteriology, 2017, 199, .	2.2	0
14	Two-Component Signal Transduction: a Special Issue in the <i>Journal of Bacteriology</i>. Journal of Bacteriology, 2017, 199, .	2.2	0
15	Call for Original Research Papers for a Special Collection in <i>Journal of Bacteriology</i> : Two-Component Signal Transduction. Journal of Bacteriology, 2017, 199, .	2.2	0
16	Counterbalancing Regulation in Response Memory of a Positively Autoregulated Two-Component System. Journal of Bacteriology, 2017, 199, .	2.2	7
17	Classic Spotlight: a Window on Multicellular Development. Journal of Bacteriology, 2016, 198, 602-602.	2.2	0
18	Classic Spotlight: Crowd Sourcing Provided Penicillium Strains for the War Effort. Journal of Bacteriology, 2016, 198, 877-877.	2.2	2

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19	Classic Spotlight: Managing Stress. Journal of Bacteriology, 2016, 198, 2549-2549.	2.2	0
20	Temporal Hierarchy of Gene Expression Mediated by Transcription Factor Binding Affinity and Activation Dynamics. MBio, 2015, 6, e00686-15.	4.1	40
21	Structural basis for drug-induced allosteric changes to human Î²-cardiac myosin motor activity. Nature Communications, 2015, 6, 7974.	12.8	94
22	Comprehensive Analysis of OmpR Phosphorylation, Dimerization, and DNA Binding Supports a Canonical Model for Activation. Journal of Molecular Biology, 2013, 425, 1612-1626.	4.2	45
23	Evolutionary Tuning of Protein Expression Levels of a Positively Autoregulated Two-Component System. PLoS Genetics, 2013, 9, e1003927.	3.5	32
24	Phosphorylation-dependent conformational changes and domain rearrangements in <i>Staphylococcus aureus</i> VraR activation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8525-8530.	7.1	83
25	Probing kinase and phosphatase activities of two-component systems in vivo with concentration-dependent phosphorylation profiling. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 672-677.	7.1	67
26	Identification of a Hydrophobic Cleft in the LytTR Domain of AgrA as a Locus for Small Molecule Interactions That Inhibit DNA Binding. Biochemistry, 2012, 51, 10035-10043.	2.5	53
27	Inhibition of Bacterial Virulence: Drugâ€Like Molecules Targeting the <i>Salmonella enterica</i> PhoP Response Regulator. Chemical Biology and Drug Design, 2012, 79, 1007-1017.	3.2	49
28	Regulation of Response Regulator Autophosphorylation through Interdomain Contacts. Journal of Biological Chemistry, 2010, 285, 32325-32335.	3.4	62
29	Molecular strategies for phosphorylation-mediated regulation of response regulator activity. Current Opinion in Microbiology, 2010, 13, 160-167.	5.1	149
30	Biological Insights from Structures of Two-Component Proteins. Annual Review of Microbiology, 2009, 63, 133-154.	7.3	675
31	Probing the Roles of the Two Different Dimers Mediated by the Receiver Domain of the Response Regulator PhoB. Journal of Molecular Biology, 2009, 389, 349-364.	4.2	39
32	Physical Models of transcription factors activated via histidine kinase twoâ€component signal transduction signaling pathways. FASEB Journal, 2009, 23, 495.18.	0.5	0
33	Universally applicable methods for monitoring response regulator aspartate phosphorylation both in vitro and in vivo using Phos-tag-based reagents. Analytical Biochemistry, 2008, 376, 73-82.	2.4	130
34	Systemâ€level mapping of <i>Escherichia coli</i> response regulator dimerization with FRET hybrids. Molecular Microbiology, 2008, 69, 1358-1372.	2.5	50
35	Structure of the Staphylococcus aureus AgrA LytTR Domain Bound to DNA Reveals a Beta Fold with an Unusual Mode of Binding. Structure, 2008, 16, 727-735.	3.3	117
36	Interaction of CheY with the C-Terminal Peptide of CheZ. Journal of Bacteriology, 2008, 190, 1419-1428.	2.2	13

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37	Crystal Structures of the Receiver Domain of the Response Regulator PhoP from Escherichia coli in the Absence and Presence of the Phosphoryl Analog Beryllofluoride. Journal of Bacteriology, 2007, 189, 5987-5995.	2.2	74
38	Domain Orientation in the Inactive Response RegulatorMycobacterium tuberculosisMtrA Provides a Barrier to Activationâ€,â€¡. Biochemistry, 2007, 46, 6733-6743.	2.5	76
39	Characterization of theThermotoga maritimachemotaxis methylation system that lacks pentapeptide-dependent methyltransferase CheR:MCP tethering. Molecular Microbiology, 2007, 63, 363-378.	2.5	18
40	Bacterial response regulators: versatile regulatory strategies from common domains. Trends in Biochemical Sciences, 2007, 32, 225-234.	7.5	286
41	Crystal Structures of Beryllium Fluoride-free and Beryllium Fluoride-bound CheY in Complex with the Conserved C-terminal Peptide of CheZ Reveal Dual Binding Modes Specific to CheY Conformation. Journal of Molecular Biology, 2006, 359, 624-645.	4.2	45
42	Identification of Methylation Sites in Thermotoga maritima Chemotaxis Receptors. Journal of Bacteriology, 2006, 188, 4093-4100.	2.2	20
43	A New Perspective on Response Regulator Activation. Journal of Bacteriology, 2006, 188, 7328-7330.	2.2	57
44	A common dimerization interface in bacterial response regulators KdpE and TorR. Protein Science, 2005, 14, 3077-3088.	7.6	80
45	Mechanism of Activation for Transcription Factor PhoB Suggested by Different Modes of Dimerization in the Inactive and Active States. Structure, 2005, 13, 1353-1363.	3.3	119
46	Structural Analysis and Solution Studies of the Activated Regulatory Domain of the Response Regulator ArcA: A Symmetric Dimer Mediated by the Î±4-Î²5-Î±5 Face. Journal of Molecular Biology, 2005, 349, 11-26.	4.2	114
47	Discrimination between Different Methylation States of Chemotaxis Receptor Tar by Receptor Methyltransferase CheR. Biochemistry, 2004, 43, 953-961.	2.5	21
48	Structural Analysis of the Domain Interface in DrrB, a Response Regulator of the OmpR/PhoB Subfamily. Journal of Bacteriology, 2003, 185, 4186-4194.	2.2	97
49	Response Regulator Proteins and Their Interactions with Histidine Protein Kinases. , 2003, , 237-271.		9
50	Molecular Information Processing: Lessons from Bacterial Chemotaxis. Journal of Biological Chemistry, 2002, 277, 9625-9628.	3.4	197
51	Kinetic Basis for the Stimulatory Effect of Phosphorylation on the Methylesterase Activity of CheBâ€. Biochemistry, 2002, 41, 6752-6760.	2.5	25
52	Evidence of Intradomain and Interdomain Flexibility in an OmpR/PhoB Homolog from Thermotoga maritima. Structure, 2002, 10, 153-164.	3.3	100
53	Domain Arrangement of Der, a Switch Protein Containing Two GTPase Domains. Structure, 2002, 10, 1649-1658.	3.3	64
54	Phosphorylation causes subtle changes in solvent accessibility at the interdomain interface of methylesterase CheB 1 1Edited by P. E. Wright. Journal of Molecular Biology, 2001, 307, 967-976.	4.2	60

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55	Synthesis and Biochemical Characterization of a Phosphorylated Analogue of the Response Regulator CheBâ€. Biochemistry, 2001, 40, 12896-12903.	2.5	11
56	Histidine kinases and response regulator proteins in two-component signaling systems. Trends in Biochemical Sciences, 2001, 26, 369-376.	7.5	841
57	Synthesis of [32P]Phosphoramidate for Use as a Low Molecular Weight Phosphodonor Reagent. Analytical Biochemistry, 2000, 283, 222-227.	2.4	18
58	A tale of two components: a novel kinase and a regulatory switch. Nature Structural Biology, 2000, 7, 626-633.	9.7	190
59	Evidence for phosphorylationâ€dependent conformational changes in methylesterase CheB. Protein Science, 2000, 9, 898-906.	7.6	15
60	Two-Component Signal Transduction. Annual Review of Biochemistry, 2000, 69, 183-215.	11.1	2,860
61	The Catalytic Pathway of Cytochrome P450cam at Atomic Resolution. Science, 2000, 287, 1615-1622.	12.6	1,298
62	Relating dynamics to function. Nature, 1999, 400, 221-222.	27.8	19
63	High energy exchange: proteins that make or break phosphoramidate bonds. Structure, 1999, 7, R47-R53.	3.3	18
64	Orientation of OmpR monomers within an OmpR:DNA complex determined by DNA affinity cleaving 1 1Edited by K. Yamamoto. Journal of Molecular Biology, 1999, 285, 555-566.	4.2	49
65	PROTEIN METHYLTRANSFERASES INVOLVED IN SIGNAL TRANSDUCTION. , 1999, , 149-183.		2
66	Chemotaxis receptor recognition by protein methyltransferase CheR. Nature Structural Biology, 1998, 5, 446-450.	9.7	88
67	Stabilization of the Phospho-aspartyl Residue in a Two-Component Signal Transduction System inThermotogamaritimaâ€. Biochemistry, 1998, 37, 14575-14584.	2.5	20
68	Activation of Methylesterase CheB:Â Evidence of a Dual Role for the Regulatory Domainâ€. Biochemistry, 1998, 37, 14038-14047.	2.5	66
69	Structural relationships in the OmpR family of winged-helix transcription factors 1 1Edited by M. Gottesman. Journal of Molecular Biology, 1997, 269, 301-312.	4.2	260
70	The DNA-binding domain of OmpR: crystal structures of a winged helix transcription factor. Structure, 1997, 5, 109-124.	3.3	237
71	Crystal structure of the chemotaxis receptor methyltransferase CheR suggests a conserved structural motif for binding S-adenosylmethionine. Structure, 1997, 5, 545-558.	3.3	138
72	Crystallization, Xâ€ray studies, and siteâ€directed cysteine mutagenesis of the DNAâ€binding domain of OmpR. Protein Science, 1996, 5, 1429-1433.	7.6	15

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73	Purification, crystallization, and preliminary X-ray diffraction analyses of the bacterial chemotaxis receptor modifying enzymes. Proteins: Structure, Function and Bioinformatics, 1995, 21, 345-350.	2.6	11
74	Structure of the magnesium-bound form of CheY and mechanism of phosphoryl transfer in bacterial chemotaxis. Biochemistry, 1993, 32, 13375-13380.	2.5	229
75	Signal transduction in bacteria. Nature, 1990, 344, 395-400.	27.8	697
76	Divalent metal ion binding to the CheY protein and its significance to phosphotransfer in bacterial chemotaxis. Biochemistry, 1990, 29, 5436-5442.	2.5	189
77	Three-dimensional structure of CheY, the response regulator of bacterial chemotaxis. Nature, 1989, 337, 745-749.	27.8	397
78	Sensory transduction in bacterial chemotaxis involves phosphotransfer between CHE proteins. Biochemical and Biophysical Research Communications, 1988, 151, 891-896.	2.1	188
79	N-terminal methylation of proteins: Structure, function and specificity. FEBS Letters, 1987, 220, 8-14.	2.8	97
80	Two-Component Signal Transduction and Chemotaxis. , 0, , 17-36.		2