Urs Jenal

List of Publications by Year
in descending order

94 papers	10,341 citations	53789 45 h-index	37202 96 g-index
110 all docs	110 docs citations	110 times ranked	6458 citing authors

#	Article	IF	Citations
1	Combining CRISPRi and metabolomics for functional annotation of compound libraries. Nature Chemical Biology, 2022, 18, 482-491.	8.0	33
2	Photoaffinity Capture Compounds to Profile the Magic Spot Nucleotide Interactomes**. Angewandte Chemie - International Edition, 2022, 61, .	13.8	11
3	Reciprocal growth control by competitive binding of nucleotide second messengers to a metabolic switch in Caulobacter crescentus. Nature Microbiology, 2021, 6, 59-72.	13.3	23
4	Evolution of Antibiotic Tolerance Shapes Resistance Development in Chronic Pseudomonas aeruginosa Infections. MBio, 2021, 12, .	4.1	59
5	Pareto optimality between growth-rate and lag-time couples metabolic noise to phenotypic heterogeneity in Escherichia coli. Nature Communications, 2021, 12, 3204.	12.8	13
6	Defining Proteomic Signatures to Predict Multidrug Persistence in Pseudomonas aeruginosa. Methods in Molecular Biology, 2021, 2357, 161-175.	0.9	2
7	The Use of Experimental Evolution to Study the Response of Pseudomonas aeruginosa to Single or Double Antibiotic Treatment. Methods in Molecular Biology, 2021, 2357, 177-194.	0.9	1
8	A New Sugar for an Old Phage: a c-di-GMP-Dependent Polysaccharide Pathway Sensitizes <i>Escherichia coli</i> for Bacteriophage Infection. MBio, 2021, 12, e0324621.	4.1	15
9	Surface Sensing and Adaptation in Bacteria. Annual Review of Microbiology, 2020, 74, 735-760.	7.3	49
10	Regulation of Bacterial Cell Cycle Progression by Redundant Phosphatases. Journal of Bacteriology, 2020, 202, .	2.2	11
11	Novel Divisome-Associated Protein Spatially Coupling the Z-Ring with the Chromosomal Replication Terminus in Caulobacter crescentus. MBio, 2020, 11, .	4.1	15
12	Hybrid histidine kinase activation by cyclic di-GMPâ€“mediated domain liberation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1000-1008.	7.1	28
13	Intercepting second-messenger signaling by rationally designed peptides sequestering c-di-GMP. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17211-17220.	7.1	20
14	Precise timing of transcription by c-di-GMP coordinates cell cycle and morphogenesis in Caulobacter. Nature Communications, 2020, 11, 816.	12.8	38
15	Untargeted metabolomics links glutathione to bacterial cell cycle progression. Nature Metabolism, 2020, 2, 153-166.	11.9	34
16	In situ structure of the <i>Caulobacter crescentus</i> flagellar motor and visualization of binding of a CheYâ€homolog. Molecular Microbiology, 2020, 114, 443-453.	2.5	22
17	Tad Pili Play a Dynamic Role in Caulobacter crescentus Surface Colonization. MBio, 2019, 10, .	4.1	44
18	Definitions and guidelines for research on antibiotic persistence. Nature Reviews Microbiology, 2019, 17, 441-448.	28.6	748

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19	A Surface-Induced Asymmetric Program Promotes Tissue Colonization by Pseudomonas aeruginosa. Cell Host and Microbe, 2019, 25, 140-152.e6.	11.0	127
20	Functionalized Prolineâ€Rich Peptides Bind the Bacterial Second Messenger câ€diâ€GMP. Angewandte Chemie - International Edition, 2018, 57, 7729-7733.	13.8	23
21	Functionalized Prolineâ€Rich Peptides Bind the Bacterial Second Messenger câ€diâ€GMP. Angewandte Chemie, 2018, 130, 7855-7859.	2.0	3
22	A Single-Domain Response Regulator Functions as an Integrating Hub To Coordinate General Stress Response and Development in Alphaproteobacteria. MBio, 2018, 9, .	4.1	27
23	Cyclic di-GMP: second messenger extraordinaire. Nature Reviews Microbiology, 2017, 15, 271-284.	28.6	706
24	Cohesive Properties of the <i>Caulobacter crescentus</i> Holdfast Adhesin Are Regulated by a Novel c-di-GMP Effector Protein. MBio, 2017, 8, .	4.1	29
25	Second messengerâ€"mediated tactile response by a bacterial rotary motor. Science, 2017, 358, 531-534.	12.6	129
26	Pull-Down with a c-di-GMP-Specific Capture Compound Coupled to Mass Spectrometry as a Powerful Tool to Identify Novel Effector Proteins. Methods in Molecular Biology, 2017, 1657, 361-376.	0.9	4
27	BolA Is Required for the Accurate Regulation of c-di-GMP, a Central Player in Biofilm Formation. MBio, 2017, 8, .	4.1	38
28	Quorum-Quenching Human Designer Cells for Closed-Loop Control of <i>Pseudomonas aeruginosa</i> Biofilms. Nano Letters, 2017, 17, 5043-5050.	9.1	26
29	LadS is a calcium-responsive kinase that induces acute-to-chronic virulence switch in Pseudomonas aeruginosa. Nature Microbiology, 2017, 2, 16184.	13.3	94
30	Cyclic di-GMP differentially tunes a bacterial flagellar motor through a novel class of CheY-like regulators. ELife, 2017, 6, .	6.0	62
31	High intracellular c-di-GMP levels antagonize quorum sensing and virulence gene expression in Burkholderia cenocepacia H111. Microbiology (United Kingdom), 2017, 163, 754-764.	1.8	34
32	Cyclic di-GMP mediates a histidine kinase/phosphatase switch by noncovalent domain cross-linking. Science Advances, 2016, 2, e1600823.	10.3	69
33	Bacterial Signal Transduction by Cyclic Di-GMP and Other Nucleotide Second Messengers. Journal of Bacteriology, 2016, 198, 15-26.	2.2	127
34	Expression and Genetic Activation of Cyclic Di-GMP-Specific Phosphodiesterases in Escherichia coli. Journal of Bacteriology, 2016, 198, 448-462.	2.2	48
35	An Extended Cyclic Di-GMP Network in the Predatory Bacterium Bdellovibrio bacteriovorus. Journal of Bacteriology, 2016, 198, 127-137.	2.2	25
36	Systematic Nomenclature for GGDEF and EAL Domain-Containing Cyclic Di-GMP Turnover Proteins of Escherichia coli. Journal of Bacteriology, 2016, 198, 7-11.	2.2	96

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37	The Diguanylate Cyclase HsbD Intersects with the HptB Regulatory Cascade to Control Pseudomonas aeruginosa Biofilm and Motility. PLoS Genetics, 2016, 12, e1006354.	3.5	57
38	Capture Compound Mass Spectrometry - A Powerful Tool to Identify Novel c-di-GMP Effector Proteins. Journal of Visualized Experiments, 2015, , .	0.3	14
39	Bacteria in the CF Lung: Isolation Drives Diversity. Cell Host and Microbe, 2015, 18, 268-269.	11.0	4
40	The Diguanylate Cyclase SadC Is a Central Player in Gac/Rsm-Mediated Biofilm Formation in Pseudomonas aeruginosa. Journal of Bacteriology, 2014, 196, 4081-4088.	2.2	88
41	Cell cycle transition from S-phase to G1 in Caulobacter is mediated by ancestral virulence regulators. Nature Communications, 2014, 5, 4081.	12.8	80
42	Activation and polar sequestration of <scp>PopA</scp>, a câ€diâ€<scp>GMP</scp> effector protein involved in <scp><i>C</i></scp><i>aulobacter crescentus</i> cell cycle control. Molecular Microbiology, 2014, 94, 580-594.	2.5	52
43	Inherent Regulation of EAL Domain-catalyzed Hydrolysis of Second Messenger Cyclic di-GMP. Journal of Biological Chemistry, 2014, 289, 6978-6990.	3.4	60
44	Catalytic carbene transfer allows the direct customization of cyclic purine dinucleotides. Chemical Communications, 2014, 50, 8499.	4.1	8
45	Think globally, act locally: How bacteria integrate local decisions with their global cellular programme. EMBO Journal, 2013, 32, 1972-1974.	7.8	4
46	Structure and Signaling Mechanism of a Zinc-Sensory Diguanylate Cyclase. Structure, 2013, 21, 1149-1157.	3.3	95
47	Bi-modal Distribution of the Second Messenger c-di-GMP Controls Cell Fate and Asymmetry during the Caulobacter Cell Cycle. PLoS Genetics, 2013, 9, e1003744.	3.5	123
48	De- and repolarization mechanism of flagellar morphogenesis during a bacterial cell cycle. Genes and Development, 2013, 27, 2049-2062.	5.9	51
49	<scp>A</scp>lexander <scp>B</scp>Ã¶hm (1971â€“2012). Molecular Microbiology, 2013, 88, 219-221.	2.5	2
50	The YfiBNR Signal Transduction Mechanism Reveals Novel Targets for the Evolution of Persistent Pseudomonas aeruginosa in Cystic Fibrosis Airways. PLoS Pathogens, 2012, 8, e1002760.	4.7	105
51	Allosteric activation of exopolysaccharide synthesis through cyclic di-GMP-stimulated proteinâ€“protein interaction. EMBO Journal, 2012, 32, 354-368.	7.8	123
52	A novel capture compound for the identification and analysis of cyclic di-GMP binding proteins. Journal of Proteomics, 2012, 75, 4874-4878.	2.4	48
53	The orphan histidine protein kinase SgmT is a câ€diâ€GMP receptor and regulates composition of the extracellular matrix together with the orphan DNA binding response regulator DigR in Myxococcus xanthus. Molecular Microbiology, 2012, 84, 147-165.	2.5	52
54	Regulatory Cohesion of Cell Cycle and Cell Differentiation through Interlinked Phosphorylation and Second Messenger Networks. Molecular Cell, 2011, 43, 550-560.	9.7	169

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55	Solution Structure of the PilZ Domain Protein PA4608 Complex with Cyclic di-GMP Identifies Charge Clustering as Molecular Readout. Journal of Biological Chemistry, 2011, 286, 14304-14314.	3.4	76
56	Cyclic Diguanylate Signaling Proteins Control Intracellular Growth of Legionella pneumophila. MBio, 2011, 2, e00316-10.	4.1	46
57	YfiBNR Mediates Cyclic di-GMP Dependent Small Colony Variant Formation and Persistence in Pseudomonas aeruginosa. PLoS Pathogens, 2010, 6, e1000804.	4.7	197
58	A liquid chromatography-coupled tandem mass spectrometry method for quantitation of cyclic di-guanosine monophosphate. Journal of Microbiological Methods, 2010, 81, 226-231.	1.6	191
59	Second Messenger-Mediated Adjustment of Bacterial Swimming Velocity. Cell, 2010, 141, 107-116.	28.9	412
60	Second messenger signalling governs <i>Escherichia coli</i> biofilm induction upon ribosomal stress. Molecular Microbiology, 2009, 72, 1500-1516.	2.5	183
61	Structural and mechanistic determinants of c-di-GMP signalling. Nature Reviews Microbiology, 2009, 7, 724-735.	28.6	413
62	Second messenger-mediated spatiotemporal control of protein degradation regulates bacterial cell cycle progression. Genes and Development, 2009, 23, 93-104.	5.9	272
63	The role of proteolysis in the Caulobacter crescentus cell cycle and development. Research in Microbiology, 2009, 160, 687-695.	2.1	41
64	Single domain response regulators: molecular switches with emerging roles in cell organization and dynamics. Current Opinion in Microbiology, 2009, 12, 152-160.	5.1	77
65	Small molecule signaling. Current Opinion in Microbiology, 2009, 12, 125-128.	5.1	10
66	Allosteric Regulation of Histidine Kinases by Their Cognate Response Regulator Determines Cell Fate. Cell, 2008, 133, 452-461.	28.9	141
67	Activation of the Diguanylate Cyclase PleD by Phosphorylation-mediated Dimerization. Journal of Biological Chemistry, 2007, 282, 29170-29177.	3.4	167
68	DgrA is a member of a new family of cyclic diguanosine monophosphate receptors and controls flagellar motor function in Caulobacter crescentus. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 4112-4117.	7.1	185
69	Experimental evolution of aging in a bacterium. BMC Evolutionary Biology, 2007, 7, 126.	3.2	48
70	Structure of BeF3â˜’-Modified Response Regulator PleD: Implications for Diguanylate Cyclase Activation, Catalysis, and Feedback Inhibition. Structure, 2007, 15, 915-927.	3.3	209
71	Mechanisms of Cyclic-di-GMP Signaling in Bacteria. Annual Review of Genetics, 2006, 40, 385-407.	7.6	571
72	Allosteric Control of Cyclic di-GMP Signaling. Journal of Biological Chemistry, 2006, 281, 32015-32024.	3.4	260

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73	Holdfast Formation in Motile Swarmer Cells Optimizes Surface Attachment during Caulobacter crescentus Development. Journal of Bacteriology, 2006, 188, 5315-5318.	2.2	75
74	Allosteric Control of Cyclic di-GMP Signaling. Journal of Biological Chemistry, 2006, 281, 32015-32024.	3.4	100
75	â€œNeural Networksâ€•in Bacteria: Making Connections. Journal of Bacteriology, 2005, 187, 26-36.	2.2	19
76	Identification and Characterization of a Cyclic di-GMP-specific Phosphodiesterase and Its Allosteric Control by GTP. Journal of Biological Chemistry, 2005, 280, 30829-30837.	3.4	452
77	Identification of the Protease and the Turnover Signal Responsible for Cell Cycle-Dependent Degradation of the Caulobacter FliF Motor Protein. Journal of Bacteriology, 2004, 186, 4960-4971.	2.2	38
78	Cell cycle-dependent dynamic localization of a bacterial response regulator with a novel di-guanylate cyclase output domain. Genes and Development, 2004, 18, 715-727.	5.9	554
79	Structural basis of activity and allosteric control of diguanylate cyclase. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17084-17089.	7.1	428
80	Cyclic di-guanosine-monophosphate comes of age: a novel secondary messenger involved in modulating cell surface structures in bacteria?. Current Opinion in Microbiology, 2004, 7, 185-191.	5.1	191
81	Role of the GGDEF regulator PleD in polar development of Caulobacter crescentus. Molecular Microbiology, 2003, 47, 1695-1708.	2.5	255
82	Regulation by proteolysis in bacterial cells. Current Opinion in Microbiology, 2003, 6, 163-172.	5.1	158
83	Role of the Cytoplasmic C Terminus of the FliF Motor Protein in Flagellar Assembly and Rotation. Journal of Bacteriology, 2003, 185, 1624-1633.	2.2	40
84	Degradation of a Caulobacter Soluble Cytoplasmic Chemoreceptor Is ClpX Dependent. Journal of Bacteriology, 2002, 184, 6635-6641.	2.2	30
85	The Caulobacter cell cycle: timing, spatial organization and checkpoints. Current Opinion in Microbiology, 2002, 5, 558-563.	5.1	35
86	The FtsH protease is involved in development, stress response and heat shock control in Caulobacter crescentus. Molecular Microbiology, 2002, 44, 461-478.	2.5	74
87	Signal transduction mechanisms inCaulobacter crescentusdevelopment and cell cycle control. FEMS Microbiology Reviews, 2000, 24, 177-191.	8.6	48
88	Regulatory circuits in Caulobacter. Current Opinion in Microbiology, 2000, 3, 171-176.	5.1	23
89	Signal transduction mechanisms in Caulobacter crescentus development and cell cycle control. FEMS Microbiology Reviews, 2000, 24, 177-191.	8.6	36
90	Cell cycle-dependent degradation of a flagellar motor component requires a novel-type response regulator. Molecular Microbiology, 1999, 32, 379-391.	2.5	124

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91	Identification and Transcriptional Control of the Genes Encoding the <i>Caulobacter crescentus</i> ClpXP Protease. Journal of Bacteriology, 1999, 181, 3039-3050.	2.2	33
92	Expression of cell polarity during Caulobacter differentiation. Seminars in Developmental Biology, 1995, 6, 3-11.	1.3	5
93	Role of Cyclic Di-GMP in Caulobacter crescentus Development and Cell Cycle Control. , 0, , 120-136.		1
94	Photoaffinity Capture Compounds to Profile the Magic Spot Nucleotide Interactomes**. Angewandte Chemie, 0, , .	2.0	0