Christine Jacobs-Wagner

List of Publications by Year
in descending order

77 papers	7,849 citations	76031 42 h-index	93651 72 g-index
87 all docs	87 docs citations	87 times ranked	8226 citing authors

#	Article	IF	Citations
1	Interconnecting solvent quality, transcription, and chromosome folding in Escherichia coli. Cell, 2021, 184, 3626-3642.e14.	13.5	41
2	Christine Jacobs-Wagner. Current Biology, 2021, 31, R882-R883.	1.8	0
3	Proximity labeling reveals non-centrosomal microtubule-organizing center components required for microtubule growth and localization. Current Biology, 2021, 31, 3586-3600.e11.	1.8	31
4	A CRISPR Interference Platform for Selective Downregulation of Gene Expression in Borrelia burgdorferi. Applied and Environmental Microbiology, 2021, 87, .	1.4	16
5	Caulobacter crescentus: model system extraordinaire. Current Biology, 2020, 30, R1151-R1158.	1.8	22
6	Origin of exponential growth in nonlinear reaction networks. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 27795-27804.	3.3	9
7	A human secretome library screen reveals a role for Peptidoglycan Recognition Protein 1 in Lyme borreliosis. PLoS Pathogens, 2020, 16, e1009030.	2.1	9
8	Long-Distance Cooperative and Antagonistic RNA Polymerase Dynamics via DNA Supercoiling. Cell, 2019, 179, 106-119.e16.	13.5	77
9	<i>Borrelia burgdorferi</i>peptidoglycan is a persistent antigen in patients with Lyme arthritis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13498-13507.	3.3	97
10	Nucleoid Size Scaling and Intracellular Organization of Translation across Bacteria. Cell, 2019, 177, 1632-1648.e20.	13.5	91
11	Subcellular Organization: A Critical Feature of Bacterial Cell Replication. Cell, 2018, 172, 1271-1293.	13.5	157
12	Effects of mRNA Degradation and Site-Specific Transcriptional Pausing on Protein Expression Noise. Biophysical Journal, 2018, 114, 1718-1729.	0.2	27
13	Combinatorial Origin of Protein Expression Noise. Biophysical Journal, 2018, 114, 395a.	0.2	0
14	De novo design of self-assembling helical protein filaments. Science, 2018, 362, 705-709.	6.0	112
15	Fluorescent Proteins, Promoters, and Selectable Markers for Applications in the Lyme Disease Spirochete Borrelia burgdorferi. Applied and Environmental Microbiology, 2018, 84, .	1.4	26
16	Genomewide phenotypic analysis of growth, cell morphogenesis, and cell cycle events in <i>Escherichia coli</i>. Molecular Systems Biology, 2018, 14, e7573.	3.2	69
17	Pathogen-mediated manipulation of arthropod microbiota to promote infection. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E781-E790.	3.3	207
18	A Tick Antivirulence Protein Potentiates Antibiotics against Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2017, 61, .	1.4	12

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19	Replication fork passage drives asymmetric dynamics of a critical nucleoidâ€associated protein in <i>Caulobacter</i>. EMBO Journal, 2017, 36, 301-318.	3.5	47
20	Crosstalk between the tricarboxylic acid cycle and peptidoglycan synthesis in Caulobacter crescentus through the homeostatic control of Î±-ketoglutarate. PLoS Genetics, 2017, 13, e1006978.	1.5	55
21	Oufti: an integrated software package for highâ€accuracy, highâ€throughput quantitative microscopy analysis. Molecular Microbiology, 2016, 99, 767-777.	1.2	341
22	Ultra-High Resolution 3D Imaging of Whole Cells. Cell, 2016, 166, 1028-1040.	13.5	247
23	Lyme disease and relapsing fever<i>Borrelia</i>elongate through zones of peptidoglycan synthesis that mark division sites of daughter cells. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9162-9170.	3.3	42
24	DNA-relay mechanism is sufficient to explain ParA-dependent intracellular transport and patterning of single and multiple cargos. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7268-E7276.	3.3	66
25	The Slow Mobility of the ParA Partitioning Protein Underlies Its Steady-State Patterning in Caulobacter. Biophysical Journal, 2016, 110, 2790-2799.	0.2	36
26	Mycofumigation by the Volatile Organic Compound-Producing Fungus Muscodor albus Induces Bacterial Cell Death through DNA Damage. Applied and Environmental Microbiology, 2015, 81, 1147-1156.	1.4	53
27	Bacterial Evolution: What Goes Around Comes Around. Current Biology, 2015, 25, R496-R498.	1.8	4
28	Transferred interbacterial antagonism genes augment eukaryotic innate immune function. Nature, 2015, 518, 98-101.	13.7	82
29	Evidence for a DNA-relay mechanism in ParABS-mediated chromosome segregation. ELife, 2014, 3, e02758.	2.8	197
30	G1-arrested newborn cells are the predominant infectious form of the pathogen Brucella abortus. Nature Communications, 2014, 5, 4366.	5.8	100
31	A Constant Size Extension Drives Bacterial Cell Size Homeostasis. Cell, 2014, 159, 1433-1446.	13.5	480
32	The Bacterial Cytoplasm Has Glass-like Properties and Is Fluidized by Metabolic Activity. Cell, 2014, 156, 183-194.	13.5	643
33	How do bacteria localize proteins to the cell pole?. Journal of Cell Science, 2014, 127, 11-9.	1.2	157
34	Spatiotemporal control of PopZ localization through cell cycleâ€“coupled multimerization. Journal of Cell Biology, 2013, 201, 827-841.	2.3	87
35	Cellular organization of the transfer of genetic information. Current Opinion in Microbiology, 2013, 16, 171-176.	2.3	41
36	Transcriptomic and phylogenetic analysis of a bacterial cell cycle reveals strong associations between gene co-expression and evolution. BMC Genomics, 2013, 14, 450.	1.2	50

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37	Growth Medium-Dependent Glycine Incorporation into the Peptidoglycan of Caulobacter crescentus. PLoS ONE, 2013, 8, e57579.	1.1	27
38	Suppression of Amber Codons in Caulobacter crescentus by the Orthogonal Escherichia coli Histidyl-tRNA Synthetase/tRNAHis Pair. PLoS ONE, 2013, 8, e83630.	1.1	7
39	Osmolality-Dependent Relocation of Penicillin-Binding Protein PBP2 to the Division Site in Caulobacter crescentus. Journal of Bacteriology, 2012, 194, 3116-3127.	1.0	52
40	InÂVivo Biochemistry in Bacterial Cells Using FRAP: Insight into theÂTranslation Cycle. Biophysical Journal, 2012, 103, 1848-1859.	0.2	34
41	Probing Spatial Organization of mRNA in Bacterial Cells using 3D Super-Resolution Microscopy. Biophysical Journal, 2012, 102, 278a.	0.2	1
42	The evolution of new lipoprotein subunits of the bacterial outer membrane BAM complex. Molecular Microbiology, 2012, 84, 832-844.	1.2	65
43	Highâ€throughput, subpixel precision analysis of bacterial morphogenesis and intracellular spatioâ€temporal dynamics. Molecular Microbiology, 2011, 80, 612-627.	1.2	447
44	Localization of GroEL determined by in vivo incorporation of a fluorescent amino acid. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 6067-6070.	1.0	22
45	The domain organization of the bacterial intermediate filamentâ€like protein crescentin is important for assembly and function. Cytoskeleton, 2011, 68, 205-219.	1.0	22
46	Subcellular Protein Localization by Using a Genetically Encoded Fluorescent Amino Acid. ChemBioChem, 2011, 12, 1818-1821.	1.3	41
47	A protein critical for cell constriction in the Gramâ€negative bacterium <i>Caulobacter crescentus</i> localizes at the division site through its peptidoglycanâ€binding LysM domains. Molecular Microbiology, 2010, 77, 74-89.	1.2	56
48	Cell cycle coordination and regulation of bacterial chromosome segregation dynamics by polarly localized proteins. EMBO Journal, 2010, 29, 3068-3081.	3.5	163
49	Spatial organization of the flow of genetic information in bacteria. Nature, 2010, 466, 77-81.	13.7	334
50	A metabolic assembly line in bacteria. Nature Cell Biology, 2010, 12, 731-733.	4.6	3
51	A Modular BAM Complex in the Outer Membrane of the Î±-Proteobacterium Caulobacter crescentus. PLoS ONE, 2010, 5, e8619.	1.1	62
52	Polar Localization of the CckA Histidine Kinase and Cell Cycle Periodicity of the Essential Master Regulator CtrA in <i>Caulobacter crescentus</i>. Journal of Bacteriology, 2010, 192, 539-552.	1.0	49
53	Christine Jacobs-Wagner: Drawing the bacterial organizational chart. Journal of Cell Biology, 2010, 189, 390-391.	2.3	0
54	MreB Drives <i>De N</i> <i>ovo</i> Rod Morphogenesis in <i>Caulobacter crescentus</i> via Remodeling of the Cell Wall. Journal of Bacteriology, 2010, 192, 1671-1684.	1.0	103

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55	Mutations in the Lipopolysaccharide Biosynthesis Pathway Interfere with Crescentin-Mediated Cell Curvature in <i>Caulobacter crescentus</i>. Journal of Bacteriology, 2010, 192, 3368-3378.	1.0	28
56	Processivity of peptidoglycan synthesis provides a built-in mechanism for the robustness of straight-rod cell morphology. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10086-10091.	3.3	35
57	Function and Regulation of the Bacterial Cytoskeleton. Biophysical Journal, 2010, 98, 3a.	0.2	0
58	The Bacterial Cytoskeleton. Annual Review of Genetics, 2010, 44, 365-392.	3.2	117
59	RodZ, a component of the bacterial core morphogenic apparatus. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1239-1244.	3.3	156
60	Bacterial intermediate filaments: in vivo assembly, organization, and dynamics of crescentin. Genes and Development, 2009, 23, 1131-1144.	2.7	71
61	Bacterial cell curvature through mechanical control of cell growth. EMBO Journal, 2009, 28, 1208-1219.	3.5	147
62	The reducible complexity of a mitochondrial molecular machine. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15791-15795.	3.3	64
63	Localization of PBP3 in <i>Caulobacter crescentus</i> is highly dynamic and largely relies on its functional transpeptidase domain. Molecular Microbiology, 2008, 70, 634-651.	1.2	36
64	A Self-Associating Protein Critical for Chromosome Attachment, Division, and Polar Organization in Caulobacter. Cell, 2008, 134, 956-968.	13.5	286
65	PflI, a Protein Involved in Flagellar Positioning in <i>Caulobacter crescentus</i>. Journal of Bacteriology, 2008, 190, 1718-1729.	1.0	22
66	Skin and bones: the bacterial cytoskeleton, cell wall, and cell morphogenesis. Journal of Cell Biology, 2007, 179, 381-387.	2.3	73
67	Exploration into the spatial and temporal mechanisms of bacterial polarity. Trends in Microbiology, 2007, 15, 101-108.	3.5	50
68	The asymmetric distribution of the essential histidine kinase PdhS indicates a differentiation event in Brucella abortus. EMBO Journal, 2007, 26, 1444-1455.	3.5	70
69	The tubulin homologue FtsZ contributes to cell elongation by guiding cell wall precursor synthesis in Caulobacter crescentus. Molecular Microbiology, 2007, 64, 938-952.	1.2	203
70	A Landmark Protein Essential for Establishing and Perpetuating the Polarity of a Bacterial Cell. Cell, 2006, 124, 1011-1023.	13.5	163
71	Bacterial cell shape. Nature Reviews Microbiology, 2005, 3, 601-610.	13.6	437
72	Cytokinesis Monitoring during Development. Cell, 2004, 118, 579-590.	13.5	127

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73	Regulatory proteins with a sense of direction: cell cycle signalling network in Caulobacter. Molecular Microbiology, 2003, 51, 7-13.	1.2	29
74	The Bacterial Cytoskeleton. Cell, 2003, 115, 705-713.	13.5	321
75	The Asymmetric Spatial Distribution of Bacterial Signal Transduction Proteins Coordinates Cell Cycle Events. Developmental Cell, 2003, 5, 149-159.	3.1	93
76	Spatial and Temporal Control of Differentiation and Cell Cycle Progression inCaulobacter crescentus. Annual Review of Microbiology, 2003, 57, 225-247.	2.9	83
77	Nucleoid Size Scaling and Intracellular Organization of Translation Across Bacteria. SSRN Electronic Journal, 0, , .	0.4	0