

Stephan Gruber

List of Publications by Year in descending order

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Version: 2024-02-01

44
papers

3,619
citations

279798

23
h-index

254184

43
g-index

61
all docs

61
docs citations

61
times ranked

2300
citing authors

#	ARTICLE	IF	CITATIONS
1	Chromosomal Cohesin Forms a Ring. <i>Cell</i> , 2003, 112, 765-777.	28.9	540
2	Recruitment of Condensin to Replication Origin Regions by ParB/SpoOJ Promotes Chromosome Segregation in <i>B. subtilis</i> . <i>Cell</i> , 2009, 137, 685-696.	28.9	290
3	Evidence that Loading of Cohesin Onto Chromosomes Involves Opening of Its SMC Hinge. <i>Cell</i> , 2006, 127, 523-537.	28.9	271
4	Closing the cohesin ring: Structure and function of its Smc3-kleisin interface. <i>Science</i> , 2014, 346, 963-967.	12.6	255
5	ATP Hydrolysis Is Required for Cohesin's Association with Chromosomes. <i>Current Biology</i> , 2003, 13, 1941-1953.	3.9	254
6	Structure of Full-Length SMC and Rearrangements Required for Chromosome Organization. <i>Molecular Cell</i> , 2017, 67, 334-347.e5.	9.7	151
7	SMC is recruited to <i>oriC</i> by ParB and promotes chromosome segregation in <i>Streptococcus pneumoniae</i> . <i>Molecular Microbiology</i> , 2011, 81, 676-688.	2.5	136
8	SMC condensin entraps chromosomal DNA by an ATP hydrolysis dependent loading mechanism in <i>Bacillus subtilis</i> . <i>ELife</i> , 2015, 4, .	6.0	130
9	Molecular Basis for SMC Rod Formation and Its Dissolution upon DNA Binding. <i>Molecular Cell</i> , 2015, 57, 290-303.	9.7	126
10	An asymmetric SMC-kleisin bridge in prokaryotic condensin. <i>Nature Structural and Molecular Biology</i> , 2013, 20, 371-379.	8.2	119
11	Division of the Nucleolus and Its Release of CDC14 during Anaphase of Meiosis I Depends on Separase, SPO12, and SLK19. <i>Developmental Cell</i> , 2003, 4, 727-739.	7.0	115
12	Kite Proteins: a Superfamily of SMC/Kleisin Partners Conserved Across Bacteria, Archaea, and Eukaryotes. <i>Structure</i> , 2015, 23, 2183-2190.	3.3	112
13	Self-organization of <i>parS</i> centromeres by the ParB CTP hydrolase. <i>Science</i> , 2019, 366, 1129-1133.	12.6	110
14	DNA-segment-capture model for loop extrusion by structural maintenance of chromosome (SMC) protein complexes. <i>Nucleic Acids Research</i> , 2019, 47, 6956-6972.	14.5	92
15	Interlinked Sister Chromosomes Arise in the Absence of Condensin during Fast Replication in <i>B. subtilis</i> . <i>Current Biology</i> , 2014, 24, 293-298.	3.9	80
16	Control of Smc Coiled Coil Architecture by the ATPase Heads Facilitates Targeting to Chromosomal ParB/parS and Release onto Flanking DNA. <i>Cell Reports</i> , 2016, 14, 2003-2016.	6.4	80
17	Cohesin's ATPase Activity Is Stimulated by the C-Terminal Winged-Helix Domain of Its Kleisin Subunit. <i>Current Biology</i> , 2006, 16, 1998-2008.	3.9	74
18	Multilayer chromosome organization through DNA bending, bridging and extrusion. <i>Current Opinion in Microbiology</i> , 2014, 22, 102-110.	5.1	57

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19	Tuned SMC Arms Drive Chromosomal Loading of Prokaryotic Condensin. <i>Molecular Cell</i> , 2017, 65, 861-872.e9.	9.7	55
20	Transient DNA Occupancy of the SMC Interarm Space in Prokaryotic Condensin. <i>Molecular Cell</i> , 2019, 75, 209-223.e6.	9.7	55
21	SnapShot: SMC Protein Complexes Part I. <i>Cell</i> , 2016, 164, 326-326.e1.	28.9	44
22	Crystal structure of Hop2â€Mnd1 and mechanistic insights into its role in meiotic recombination. <i>Nucleic Acids Research</i> , 2015, 43, 3841-3856.	14.5	42
23	Relief of ParB autoinhibition by <i>parS</i> DNA catalysis and recycling of ParB by CTP hydrolysis promote bacterial centromere assembly. <i>Science Advances</i> , 2021, 7, eabj2854.	10.3	35
24	The ParB- <i>parS</i> Chromosome Segregation System Modulates Competence Development in <i>Streptococcus pneumoniae</i> . <i>MBio</i> , 2015, 6, e00662.	4.1	31
25	Nse5/6 inhibits the Smc5/6 ATPase and modulates DNA substrate binding. <i>EMBO Journal</i> , 2021, 40, e107807.	7.8	30
26	The complete and fully assembled genome sequence of <i>Aeromonas salmonicida</i> subsp. <i>pectinolytica</i> and its comparative analysis with other <i>Aeromonas</i> species: investigation of the mobilome in environmental and pathogenic strains. <i>BMC Genomics</i> , 2018, 19, 20.	2.8	28
27	SMC complexes sweeping through the chromosome: going with the flow and against the tide. <i>Current Opinion in Microbiology</i> , 2018, 42, 96-103.	5.1	26
28	ParB proteins can bypass DNA-bound roadblocks via dimer-dimer recruitment. <i>Science Advances</i> , 2022, 8, .	10.3	25
29	CcrZ is a pneumococcal spatiotemporal cell cycle regulator that interacts with FtsZ and controls DNA replication by modulating the activity of DnaA. <i>Nature Microbiology</i> , 2021, 6, 1175-1187.	13.3	24
30	MukBEF on the march: taking over chromosome organization in bacteria?. <i>Molecular Microbiology</i> , 2011, 81, 855-859.	2.5	23
31	SMC condensin: promoting cohesion of replicon arms. <i>Nature Structural and Molecular Biology</i> , 2015, 22, 653-655.	8.2	23
32	DNA tension-modulated translocation and loop extrusion by SMC complexes revealed by molecular dynamics simulations. <i>Nucleic Acids Research</i> , 2022, 50, 4974-4987.	14.5	23
33	A low Smc flux avoids collisions and facilitates chromosome organization in <i>Bacillus subtilis</i> . <i>ELife</i> , 2021, 10, .	6.0	20
34	Is chromatin remodeling required to build sister-chromatid cohesion?. <i>Trends in Biochemical Sciences</i> , 2004, 29, 389-392.	7.5	18
35	Shaping chromosomes by DNA capture and release: gating the SMC rings. <i>Current Opinion in Cell Biology</i> , 2017, 46, 87-93.	5.4	15
36	Optimization of sample preparation and green color imaging using the mNeonGreen fluorescent protein in bacterial cells for photoactivated localization microscopy. <i>Scientific Reports</i> , 2018, 8, 10137.	3.3	13

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37	Gradual opening of Smc arms in prokaryotic condensin. <i>Cell Reports</i> , 2021, 35, 109051.	6.4	11
38	SnapShot: SMC Protein Complexes Part II. <i>Cell</i> , 2016, 164, 818-818.e1.	28.9	9
39	Phospho-regulation of the Shugoshin - Condensin interaction at the centromere in budding yeast. <i>PLoS Genetics</i> , 2020, 16, e1008569.	3.5	9
40	A rod conformation of the <i>Pyrococcus furiosus</i> Rad50 coiled coil. <i>Proteins: Structure, Function and Bioinformatics</i> , 2021, 89, 251-255.	2.6	8
41	High-Throughput Allelic Replacement Screening in <i>Bacillus subtilis</i> . <i>Methods in Molecular Biology</i> , 2019, 2004, 49-61.	0.9	7
42	A Chromosome Co-Entrapment Assay to Study Topological Protein-DNA Interactions. <i>Methods in Molecular Biology</i> , 2017, 1624, 117-126.	0.9	6
43	Evidence for binary Smc complexes lacking kite subunits in archaea. <i>IUCrj</i> , 2020, 7, 193-206.	2.2	1
44	Decision Making in Phagocytosis. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1246, 71-81.	1.6	0