SÃ©rgio R Filipe

List of Publications by Year
in descending order

47 papers	3,123 citations	172457 29 h-index	214800 47 g-index
50 all docs	50 docs citations	50 times ranked	3489 citing authors

#	Article	IF	Citations
1	Spatial and temporal organization of replicating <i>Escherichia coli</i> chromosomes. Molecular Microbiology, 2003, 49, 731-743.	2.5	360
2	Teichoic acids are temporal and spatial regulators of peptidoglycan cross-linking in <i>Staphylococcus aureus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18991-18996.	7.1	225
3	Cell shape dynamics during the staphylococcal cell cycle. Nature Communications, 2015, 6, 8055.	12.8	208
4	Complementation of the Essential Peptidoglycan Transpeptidase Function of Penicillin-Binding Protein 2 (PBP2) by the Drug Resistance Protein PBP2A in Staphylococcus aureus. Journal of Bacteriology, 2001, 183, 6525-6531.	2.2	194
5	Inhibition of the expression of penicillin resistance in Streptococcus pneumoniae by inactivation of cell wall muropeptide branching genes. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 4891-4896.	7.1	165
6	Peptidoglycan synthesis drives an FtsZ-treadmilling-independent step of cytokinesis. Nature, 2018, 554, 528-532.	27.8	149
7	Antibiotic Resistance As a Stress Response: Complete Sequencing of a Large Number of Chromosomal Loci in<i>Staphylococcus aureus</i>Strain COL That Impact on the Expression of Resistance to Methicillin. Microbial Drug Resistance, 1999, 5, 163-175.	2.0	147
8	<i>Staphylococcus aureus</i> PBP4 Is Essential for Î²-Lactam Resistance in Community-Acquired Methicillin-Resistant Strains. Antimicrobial Agents and Chemotherapy, 2008, 52, 3955-3966.	3.2	146
9	Tracking of controlled Escherichia coli replication fork stalling and restart at repressor-bound DNA in vivo. EMBO Journal, 2006, 25, 2596-2604.	7.8	107
10	Requirements of peptidoglycan structure that allow detection by the <i>Drosophila</i> Toll pathway. EMBO Reports, 2005, 6, 327-333.	4.5	99
11	Sensing of Gram-positive bacteria in Drosophila: GNBP1 is needed to process and present peptidoglycan to PGRP-SA. EMBO Journal, 2006, 25, 5005-5014.	7.8	88
12	Staphylococcus aureus Survives with a Minimal Peptidoglycan Synthesis Machine but Sacrifices Virulence and Antibiotic Resistance. PLoS Pathogens, 2015, 11, e1004891.	4.7	82
13	Fluorescence Ratio Imaging Microscopy Shows Decreased Access of Vancomycin to Cell Wall Synthetic Sites in Vancomycin-Resistant<i>Staphylococcus aureus</i>. Antimicrobial Agents and Chemotherapy, 2007, 51, 3627-3633.	3.2	74
14	Recombination and chromosome segregation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2004, 359, 61-69.	4.0	70
15	L-Rhamnosylation of Listeria monocytogenes Wall Teichoic Acids Promotes Resistance to Antimicrobial Peptides by Delaying Interaction with the Membrane. PLoS Pathogens, 2015, 11, e1004919.	4.7	70
16	The murMN operon: A functional link between antibiotic resistance and antibiotic tolerance in Streptococcus pneumoniae. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 1550-1555.	7.1	60
17	Characterization of the murMN Operon Involved in the Synthesis of Branched Peptidoglycan Peptides in Streptococcus pneumoniae. Journal of Biological Chemistry, 2000, 275, 27768-27774.	3.4	57
18	Replication fork blockage by transcription factor-DNA complexes in Escherichia coli. Nucleic Acids Research, 2006, 34, 5194-5202.	14.5	49

#	Article	IF	Citations
19	Wall Teichoic Acids of Staphylococcus aureus Limit Recognition by the Drosophila Peptidoglycan Recognition Protein-SA to Promote Pathogenicity. PLoS Pathogens, 2011, 7, e1002421.	4.7	46
20	Distribution of the Mosaic StructuredmurM Genes among Natural Populations ofStreptococcus pneumoniae. Journal of Bacteriology, 2000, 182, 6798-6805.	2.2	45
21	Thioridazine Induces Major Changes in Global Gene Expression and Cell Wall Composition in Methicillin-Resistant Staphylococcus aureus USA300. PLoS ONE, 2013, 8, e64518.	2.5	44
22	Cell wall branches, penicillin resistance and the secrets of the MurM protein. Trends in Microbiology, 2003, 11, 547-553.	7.7	42
23	Hydrolysis of peptidoglycan is modulated by amidation of <i>meso</i>â€diaminopimelic acid and <scp>M</scp>g²⁺ in <scp><i>B</i></scp><i>acillus subtilis</i>. Molecular Microbiology, 2017, 104, 972-988.	2.5	42
24	Role of murE in the Expression of Î²-Lactam Antibiotic Resistance in Staphylococcus aureus. Journal of Bacteriology, 2004, 186, 1705-1713.	2.2	41
25	Synthesis of capsular polysaccharide at the division septum of Streptococcus pneumoniae is dependent on a bacterial tyrosine kinase. Molecular Microbiology, 2011, 82, 515-534.	2.5	41
26	The pentaglycine bridges of Staphylococcus aureus peptidoglycan are essential for cell integrity. Scientific Reports, 2019, 9, 5010.	3.3	38
27	Peptidoglycan Branched Stem Peptides Contribute to Streptococcus pneumoniae Virulence by Inhibiting Pneumolysin Release. PLoS Pathogens, 2015, 11, e1004996.	4.7	37
28	Peptidoglycan recognition protein-SD provides versatility of receptor formation in <i>Drosophila</i> immunity. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11881-11886.	7.1	35
29	An early cytoplasmic step of peptidoglycan synthesis is associated to <scp>MreB</scp> in <i><scp>B</scp>acillus subtilis</i>. Molecular Microbiology, 2014, 91, 348-362.	2.5	35
30	The Invertebrate Lysozyme Effector ILYS-3 Is Systemically Activated in Response to Danger Signals and Confers Antimicrobial Protection in C. elegans. PLoS Pathogens, 2016, 12, e1005826.	4.7	33
31	Bacterial autolysins trim cell surface peptidoglycan to prevent detection by the Drosophila innate immune system. ELife, 2014, 3, e02277.	6.0	32
32	Accessibility to Peptidoglycan Is Important for the Recognition of Gram-Positive Bacteria in Drosophila. Cell Reports, 2019, 27, 2480-2492.e6.	6.4	32
33	Functional Analysis of Streptococcus pneumoniae MurM Reveals the Region Responsible for Its Specificity in the Synthesis of Branched Cell Wall Peptides. Journal of Biological Chemistry, 2001, 276, 39618-39628.	3.4	31
34	Revisiting Anti-tuberculosis Therapeutic Strategies That Target the Peptidoglycan Structure and Synthesis. Frontiers in Microbiology, 2019, 10, 190.	3.5	31
35	Cell Wall Glycans Mediate Recognition of the Dairy Bacterium Streptococcus thermophilus by Bacteriophages. Applied and Environmental Microbiology, 2018, 84, .	3.1	30
36	A comparative genomics approach for identifying host-range determinants in Streptococcus thermophilus bacteriophages. Scientific Reports, 2019, 9, 7991.	3.3	26

#	ARTICLE	IF	CITATIONS
37	The Role ofmurMNOperon in Penicillin Resistance and Antibiotic Tolerance ofStreptococcus pneumoniae. Microbial Drug Resistance, 2001, 7, 303-316.	2.0	24
38	Construction of Improved Tools for Protein Localization Studies in Streptococcus pneumoniae. PLoS ONE, 2013, 8, e55049.	2.5	23
39	Analysis of Cell Wall Teichoic Acids in Staphylococcus aureus. Methods in Molecular Biology, 2016, 1440, 201-213.	0.9	17
40	eHooke: A tool for automated image analysis of spherical bacteria based on cell cycle progression. Biological Imaging, 2021, 1, e3.	2.2	11
41	A molecular link between cell wall biosynthesis, translation fidelity, and stringent response in<i>Streptococcus pneumoniae</i>. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	8
42	A top-down chemo-enzymatic approach towards N-acetylglucosamine-N-acetylmuramic oligosaccharides: Chitosan as a reliable template. Carbohydrate Polymers, 2019, 224, 115133.	10.2	7
43	The Mycobacteriophage Ms6 LysB N-Terminus Displays Peptidoglycan Binding Affinity. Viruses, 2021, 13, 1377.	3.3	6
44	Optimization of Fluorescent Tools for Cell Biology Studies in Gram-Positive Bacteria. PLoS ONE, 2014, 9, e113796.	2.5	5
45	From a Natural Polymer to Relevant NAGâ€NAM Precursors. Asian Journal of Organic Chemistry, 2018, 7, 2544-2551.	2.7	5
46	Assembly of Peptidoglycan Fragmentsâ€"A Synthetic Challenge. Pharmaceuticals, 2020, 13, 392.	3.8	2
47	Encapsulation of the septal cell wall protects Streptococcus pneumoniae from its major peptidoglycan hydrolase and host defenses. PLoS Pathogens, 2022, 18, e1010516.	4.7	2