Mariana Gomes de Pinho

List of Publications by Year
in descending order

70 papers	5,411 citations	94269 37 h-index	91712 69 g-index
77 all docs	77 docs citations	77 times ranked	4755 citing authors

#	Article	IF	Citations
1	Bacterial Cell Wall Synthesis: New Insights from Localization Studies. Microbiology and Molecular Biology Reviews, 2005, 69, 585-607.	2.9	499
2	An acquired and a native penicillin-binding protein cooperate in building the cell wall of drug-resistant staphylococci. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 10886-10891.	3.3	312
3	How to get (a)round: mechanisms controlling growth and division of coccoid bacteria. Nature Reviews Microbiology, 2013, 11, 601-614.	13.6	231
4	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.	3.3	225
5	Dispersed mode of Staphylococcus aureus cell wall synthesis in the absence of the division machinery. Molecular Microbiology, 2003, 50, 871-881.	1.2	215
6	Cell shape dynamics during the staphylococcal cell cycle. Nature Communications, 2015, 6, 8055.	5.8	208
7	Restoring Methicillin-Resistant <i>Staphylococcus aureus</i> Susceptibility to Î2-Lactam Antibiotics. Science Translational Medicine, 2012, 4, 126ra35.	5.8	205
8	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.	1.0	194
9	Inhibition of WTA Synthesis Blocks the Cooperative Action of PBPs and Sensitizes MRSA to Î2-Lactams. ACS Chemical Biology, 2013, 8, 226-233.	1.6	184
10	The different shapes of cocci. FEMS Microbiology Reviews, 2008, 32, 345-360.	3.9	164
11	Peptidoglycan synthesis drives an FtsZ-treadmilling-independent step of cytokinesis. Nature, 2018, 554, 528-532.	13.7	149
12	Recruitment of penicillin-binding protein PBP2 to the division site of Staphylococcus aureus is dependent on its transpeptidation substrates. Molecular Microbiology, 2004, 55, 799-807.	1.2	148
13	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.	0.9	147
14	<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.	1.4	146
15	Inactivated pbp4 in Highly Glycopeptide-resistant Laboratory Mutants of Staphylococcus aureus. Journal of Biological Chemistry, 1999, 274, 18942-18946.	1.6	119
16	Role of PBP1 in Cell Division of Staphylococcus aureus. Journal of Bacteriology, 2007, 189, 3525-3531.	1.0	100
17	Reduction of the Peptidoglycan Crosslinking Causes a Decrease in Stiffness of the Staphylococcus aureus Cell Envelope. Biophysical Journal, 2014, 107, 1082-1089.	0.2	83
18	Staphylococcus aureus Survives with a Minimal Peptidoglycan Synthesis Machine but Sacrifices Virulence and Antibiotic Resistance. PLoS Pathogens, 2015, 11, e1004891.	2.1	82

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19	Cloning, Characterization, and Inactivation of the Gene pbpC, Encoding Penicillin-Binding Protein 3 ofStaphylococcus aureus. Journal of Bacteriology, 2000, 182, 1074-1079.	1.0	78
20	SEDSâ€"bPBP pairs direct lateral and septal peptidoglycan synthesis in Staphylococcus aureus. Nature Microbiology, 2019, 4, 1368-1377.	5.9	77
21	Murgocil is a Highly Bioactive Staphylococcal-Specific Inhibitor of the Peptidoglycan Glycosyltransferase Enzyme MurG. ACS Chemical Biology, 2013, 8, 2442-2451.	1.6	75
22	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.	1.4	74
23	Auxiliary factors: a chink in the armor of MRSA resistance to Î²-lactam antibiotics. Current Opinion in Microbiology, 2013, 16, 538-548.	2.3	70
24	Effect of Oxygen on Glucose Metabolism: Utilization of Lactate in Staphylococcus Aureus as Revealed by In Vivo NMR Studies. PLoS ONE, 2013, 8, e58277.	1.1	64
25	Absence of nucleoid occlusion effector Noc impairs formation of orthogonal FtsZ rings during <i>Staphylococcus aureus</i> cell division. Molecular Microbiology, 2011, 80, 1366-1380.	1.2	61
26	The Staphylococcus aureus Chaperone PrsA Is a New Auxiliary Factor of Oxacillin Resistance Affecting Penicillin-Binding Protein 2A. Antimicrobial Agents and Chemotherapy, 2016, 60, 1656-1666.	1.4	60
27	Insertion of Epicatechin Gallate into the Cytoplasmic Membrane of Methicillin-resistant Staphylococcus aureus Disrupts Penicillin-binding Protein (PBP) 2a-mediated Î²-Lactam Resistance by Delocalizing PBP2. Journal of Biological Chemistry, 2010, 285, 24055-24065.	1.6	59
28	Evidence for a dual role of PBP1 in the cell division and cell separation of <i>Staphylococcus aureus</i>. Molecular Microbiology, 2009, 72, 895-904.	1.2	58
29	EzrA Contributes to the Regulation of Cell Size in Staphylococcus aureus. PLoS ONE, 2011, 6, e27542.	1.1	58
30	Reassessment of the distinctive geometry of Staphylococcus aureus cell division. Nature Communications, 2020, 11, 4097.	5.8	58
31	Characterization of the murMN Operon Involved in the Synthesis of Branched Peptidoglycan Peptides in Streptococcus pneumoniae. Journal of Biological Chemistry, 2000, 275, 27768-27774.	1.6	57
32	Cocrystal Structures of Diaminopimelate Decarboxylase. Structure, 2002, 10, 1499-1508.	1.6	57
33	AdivIVAnull mutant ofStaphylococcus aureusundergoes normal cell division. FEMS Microbiology Letters, 2004, 240, 145-149.	0.7	56
34	Differential localization of <scp>LTA</scp> synthesis proteins and their interaction with the cell division machinery in <i><scp>S</scp>taphylococcus aureus</i>. Molecular Microbiology, 2014, 92, 273-286.	1.2	55
35	The ClpXP protease is dispensable for degradation of unfolded proteins in Staphylococcus aureus. Scientific Reports, 2017, 7, 11739.	1.6	53
36	Monofunctional Transglycosylases Are Not Essential for Staphylococcus aureus Cell Wall Synthesis. Journal of Bacteriology, 2011, 193, 2549-2556.	1.0	51

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37	Inactivation of the SauI Type I Restriction-Modification System Is Not Sufficient To Generate <i>Staphylococcus aureus</i> Strains Capable of Efficiently Accepting Foreign DNA. Applied and Environmental Microbiology, 2009, 75, 3034-3038.	1.4	46
38	The SpoIIQâ€SpoIIIAH complex of <scp><i>C</i></scp><i>lostridium difficile</i> controls forespore engulfment and late stages of gene expression and spore morphogenesis. Molecular Microbiology, 2016, 100, 204-228.	1.2	46
39	Staphylococcus aureus cell growth and division are regulated by an amidase that trims peptides from uncrosslinked peptidoglycan. Nature Microbiology, 2020, 5, 291-303.	5.9	44
40	Fluorescent Reporters for Studies of Cellular Localization of Proteins in <i>Staphylococcus aureus</i>. Applied and Environmental Microbiology, 2010, 76, 4346-4353.	1.4	40
41	Transcriptional Analysis of the <i>Staphylococcus aureus</i> Penicillin Binding Protein 2 Gene. Journal of Bacteriology, 1998, 180, 6077-6081.	1.0	40
42	Massive Reduction in Methicillin Resistance by Transposon Inactivation of the Normal PBP2 in a Methicillin-Resistant Strain ofStaphylococcus aureus. Microbial Drug Resistance, 1997, 3, 409-413.	0.9	39
43	The pentaglycine bridges of Staphylococcus aureus peptidoglycan are essential for cell integrity. Scientific Reports, 2019, 9, 5010.	1.6	38
44	New Role of the Disulfide Stress Effector YjbH in Î²-Lactam Susceptibility of Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2011, 55, 5452-5458.	1.4	35
45	Chemical Genetic Analysis and Functional Characterization of Staphylococcal Wall Teichoic Acid 2-Epimerases Reveals Unconventional Antibiotic Drug Targets. PLoS Pathogens, 2016, 12, e1005585.	2.1	35
46	Synergy between Ursolic and Oleanolic Acids from Vitellaria paradoxa Leaf Extract and Î²-Lactams against Methicillin-Resistant Staphylococcus aureus: In Vitro and In Vivo Activity and Underlying Mechanisms. Molecules, 2017, 22, 2245.	1.7	34
47	An Activityâ€Based Probe for Studying Crosslinking in Live Bacteria. Angewandte Chemie - International Edition, 2015, 54, 10492-10496.	7.2	33
48	Oxazolineâ€Based Antimicrobial Oligomers: Synthesis by CROP Using Supercritical CO₂. Macromolecular Bioscience, 2011, 11, 1128-1137.	2.1	32
49	Bacterial autolysins trim cell surface peptidoglycan to prevent detection by the Drosophila innate immune system. ELife, 2014, 3, e02277.	2.8	32
50	The ClpX chaperone controls autolytic splitting of Staphylococcus aureus daughter cells, but is bypassed by Î²-lactam antibiotics or inhibitors of WTA biosynthesis. PLoS Pathogens, 2019, 15, e1008044.	2.1	32
51	DeepBacs for multi-task bacterial image analysis using open-source deep learning approaches. Communications Biology, 2022, 5, .	2.0	30
52	A comparative genomics approach for identifying host-range determinants in Streptococcus thermophilus bacteriophages. Scientific Reports, 2019, 9, 7991.	1.6	26
53	Blue emission of carbamic acid oligooxazoline biotags. Materials Letters, 2012, 81, 205-208.	1.3	24
54	Antimicrobial Contact-Active Oligo(2-oxazoline)s-Grafted Surfaces for Fast Water Disinfection at the Point-of-Use. Biomacromolecules, 2015, 16, 3904-3915.	2.6	24

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55	The Holliday junction resolvase RecU is required for chromosome segregation and DNA damage repair in Staphylococcus aureus. BMC Microbiology, 2013, 13, 18.	1.3	23
56	Characterization of a Novel Small Molecule That Potentiates Î²-Lactam Activity against Gram-Positive and Gram-Negative Pathogens. Antimicrobial Agents and Chemotherapy, 2015, 59, 1876-1885.	1.4	23
57	FtsZ-Dependent Elongation of a Coccoid Bacterium. MBio, 2016, 7, .	1.8	21
58	Role of SCCmec type in resistance to the synergistic activity of oxacillin and cefoxitin in MRSA. Scientific Reports, 2017, 7, 6154.	1.6	21
59	MreC and MreD Proteins Are Not Required for Growth of Staphylococcus aureus. PLoS ONE, 2015, 10, e0140523.	1.1	21
60	<scp><i>S</i></scp><i>taphylococcus aureus</i> requires at least one <scp>F</scp>ts<scp>K</scp>/<scp>S</scp>po<scp>IIIE</scp> protein for correct chromosome segregation. Molecular Microbiology, 2017, 103, 504-517.	1.2	19
61	PBP4 activity and its overexpression are necessary for PBP4-mediated high-level Î²-lactam resistance. Journal of Antimicrobial Chemotherapy, 2018, 73, 1177-1180.	1.3	19
62	Analysis of Cell Wall Teichoic Acids in Staphylococcus aureus. Methods in Molecular Biology, 2016, 1440, 201-213.	0.4	17
63	BPEI-Induced Delocalization of PBP4 Potentiates Î²-Lactams against MRSA. Biochemistry, 2019, 58, 3813-3822.	1.2	17
64	Anti-biofouling 3D porous systems: the blend effect of oxazoline-based oligomers on chitosan scaffolds. Biofouling, 2013, 29, 273-282.	0.8	14
65	eHooke: A tool for automated image analysis of spherical bacteria based on cell cycle progression. Biological Imaging, 2021, 1, e3.	1.0	11
66	Transcriptional Analysis of theStaphylococcus aureus Penicillin Binding Protein 2 Gene. Journal of Bacteriology, 1998, 180, 6077-6081.	1.0	10
67	Revisiting the Role of VraTSR in <i>Staphylococcus aureus</i> Response to Cell Wall-Targeting Antibiotics. Journal of Bacteriology, 2022, 204, .	1.0	9
68	A quinolinol-based small molecule with anti-MRSA activity that targets bacterial membrane and promotes fermentative metabolism. Journal of Antibiotics, 2017, 70, 1009-1019.	1.0	7
69	Synthetic antimicrobial peptides as enhancers of the bacteriolytic action of staphylococcal phage endolysins. Scientific Reports, 2022, 12, 1245.	1.6	6
70	The Staphylococcus aureus Membrane Protein SA2056 Interacts with Peptidoglycan Synthesis Enzymes. Antibiotics, 2013, 2, 11-27.	1.5	1