Malcolm E Winkler

List of Publications by Year
in descending order

63 papers	4,147 citations	101543 36 h-index	128289 60 g-index
71 all docs	71 docs citations	71 times ranked	3305 citing authors

#	Article	IF	Citations
1	SifR is an Rrf2-family quinone sensor associated with catechol iron uptake in Streptococcus pneumoniae D39. Journal of Biological Chemistry, 2022, , 102046.	3.4	9
2	Organization of peptidoglycan synthesis in nodes and separate rings at different stages of cell division of <i>Streptococcus pneumoniae</i>. Molecular Microbiology, 2021, 115, 1152-1169.	2.5	22
3	Treadmilling FtsZ polymers drive the directional movement of sPG-synthesis enzymes via a Brownian ratchet mechanism. Nature Communications, 2021, 12, 609.	12.8	52
4	Undermodification cues division. Nature Chemical Biology, 2021, 17, 841-843.	8.0	2
5	Cellular Mn/Zn Ratio Influences Phosphoglucomutase Activity and Capsule Production in Streptococcus pneumoniae D39. Journal of Bacteriology, 2021, 203, e0060220.	2.2	5
6	Biochemical reconstitution defines new functions for membrane-bound glycosidases in assembly of the bacterial cell wall. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	21
7	Pivotal Roles for Ribonucleases in Streptococcus pneumoniae Pathogenesis. MBio, 2021, 12, e0238521.	4.1	5
8	The Pneumococcal Divisome: Dynamic Control of Streptococcus pneumoniae Cell Division. Frontiers in Microbiology, 2021, 12, 737396.	3.5	22
9	FtsZ-Ring Regulation and Cell Division Are Mediated by Essential EzrA and Accessory Proteins ZapA and ZapJ in Streptococcus pneumoniae. Frontiers in Microbiology, 2021, 12, 780864.	3.5	12
10	S1 Domain RNA-Binding Protein CvfD Is a New Posttranscriptional Regulator That Mediates Cold Sensitivity, Phosphate Transport, and Virulence in Streptococcus pneumoniae D39. Journal of Bacteriology, 2020, 202, .	2.2	16
11	Chemical tools for selective activity profiling of bacterial penicillin-binding proteins. Methods in Enzymology, 2020, 638, 27-55.	1.0	14
12	Structure of the Large Extracellular Loop of FtsX and Its Interaction with the Essential Peptidoglycan Hydrolase PcsB in Streptococcus pneumoniae. MBio, 2019, 10, .	4.1	35
13	A Mn-sensing riboswitch activates expression of a Mn2+/Ca2+ ATPase transporter in Streptococcus. Nucleic Acids Research, 2019, 47, 6885-6899.	14.5	40
14	Competence beyond Genes: Filling in the Details of the Pneumococcal Competence Transcriptome by a Systems Approach. Journal of Bacteriology, 2019, 201, .	2.2	3
15	Redefining the Small Regulatory RNA Transcriptome in Streptococcus pneumoniae Serotype 2 Strain D39. Journal of Bacteriology, 2019, 201, .	2.2	17
16	Movement dynamics of divisome proteins and PBP2x:FtsW in cells of <i>Streptococcus pneumoniae</i>. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3211-3220.	7.1	107
17	The cell cycle regulator GpsB functions as cytosolic adaptor for multiple cell wall enzymes. Nature Communications, 2019, 10, 261.	12.8	71
18	Bacterial Pathogenesis: A Molecular Approach, Fourth Edition. , 2019, , .		7

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19	The Opp (AmiACDEF) Oligopeptide Transporter Mediates Resistance of Serotype 2 Streptococcus pneumoniae D39 to Killing by Chemokine CXCL10 and Other Antimicrobial Peptides. Journal of Bacteriology, 2018, 200, .	2.2	13
20	Perturbation of manganese metabolism disrupts cell division in <i>Streptococcus pneumoniae</i>. Molecular Microbiology, 2017, 104, 334-348.	2.5	58
21	The zinc efflux activator <scp>S</scp>cz<scp>A</scp> protects <scp><i>S</i></scp><i>treptococcus pneumoniae</i> serotype 2 <scp>D</scp>39 from intracellular zinc toxicity. Molecular Microbiology, 2017, 104, 636-651.	2.5	40
22	Biological and Chemical Adaptation to Endogenous Hydrogen Peroxide Production in Streptococcus pneumoniae D39. MSphere, 2017, 2, .	2.9	58
23	Suppression and syntheticâ€lethal genetic relationships of Î"<i>gps</i><scp><i>B</i></scp> mutations indicate that <scp>G</scp>ps<scp>B</scp> mediates protein phosphorylation and penicillinâ€binding protein interactions in <scp><i>S</i></scp><i>treptococcus pneumoniae</i><scp>D</scp>39. Molecular Microbiology, 2017, 103, 931-957.	2.5	70
24	Novel Electrophilic Scaffold for Imaging of Essential Penicillin-Binding Proteins in <i>Streptococcus pneumoniae</i>. ACS Chemical Biology, 2017, 12, 2849-2857.	3.4	32
25	Absence of the KhpA and KhpB (JAG/EloR) RNAâ€binding proteins suppresses the requirement for PBP2b by overproduction of FtsA in <i>Streptococcus pneumoniae</i> D39. Molecular Microbiology, 2017, 106, 793-814.	2.5	61
26	Roles of the Essential Protein FtsA in Cell Growth and Division in Streptococcus pneumoniae. Journal of Bacteriology, 2017, 199, .	2.2	33
27	Physiological Roles of the Dual Phosphate Transporter Systems in Low and High Phosphate Conditions and in Capsule Maintenance of Streptococcus pneumoniae D39. Frontiers in Cellular and Infection Microbiology, 2016, 6, 63.	3.9	39
28	Biochemical characterization of essential cell division proteins FtsX and FtsE that mediate peptidoglycan hydrolysis by PcsB in <i>Streptococcus pneumoniae</i>. MicrobiologyOpen, 2016, 5, 738-752.	3.0	22
29	Suppression of a deletion mutation in the gene encoding essential PBP2b reveals a new lytic transglycosylase involved in peripheral peptidoglycan synthesis in <scp><i>S</i></scp><i>treptococcus pneumoniae</i> D39. Molecular Microbiology, 2016, 100, 1039-1065.	2.5	77
30	1H, 13C, 15N resonance assignments of the extracellular loop 1 domain (ECL1) of Streptococcus pneumoniae D39 FtsX, an essential cell division protein. Biomolecular NMR Assignments, 2016, 10, 89-92.	0.8	5
31	A new quorumâ€sensing system (<scp>TprA</scp>/<scp>PhrA</scp>) for <scp><i>S</i></scp><i>treptococcus pneumoniae</i>â€…<scp>D</scp>39 that regulates a lantibiotic biosynthesis gene cluster. Molecular Microbiology, 2015, 97, 229-243.	2.5	78
32	Profiling of Î²-Lactam Selectivity for Penicillin-Binding Proteins in Streptococcus pneumoniae D39. Antimicrobial Agents and Chemotherapy, 2015, 59, 3548-3555.	3.2	87
33	Minimal Peptidoglycan (PG) Turnover in Wild-Type and PG Hydrolase and Cell Division Mutants of Streptococcus pneumoniae D39 Growing Planktonically and in Host-Relevant Biofilms. Journal of Bacteriology, 2015, 197, 3472-3485.	2.2	56
34	<scp>Pbp2x</scp> localizes separately from <scp>Pbp2b</scp> and other peptidoglycan synthesis proteins during later stages of cell division of <scp><i>S</i></scp><i>treptococcus pneumoniae</i>â€…<scp>D</scp>39. Molecular Microbiology, 2014, 94, 21-40.	2.5	88
35	Requirement of essential <scp>P</scp>bp2x and <scp>GpsB</scp> for septal ring closure in <i><scp>S</scp>treptococcus pneumoniae</i>â€…<scp>D</scp>39. Molecular Microbiology, 2013, 90, 939-955.	2.5	103
36	A new structural paradigm in copper resistance in Streptococcus pneumoniae. Nature Chemical Biology, 2013, 9, 177-183.	8.0	85

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37	Involvement of FtsE ATPase and FtsX Extracellular Loops 1 and 2 in FtsEX-PcsB Complex Function in Cell Division of Streptococcus pneumoniae D39. MBio, 2013, 4, .	4.1	48
38	Involvement of <scp>WalK</scp> (<scp>VicK</scp>) phosphatase activity in setting <scp>WalR</scp> (<scp>VicR</scp>) response regulator phosphorylation level and limiting crossâ€talk in <i><scp>S</scp>treptococcus pneumoniae</i><scp>D</scp>39 cells. Molecular Microbiology, 2012, 86, 645-660.	2.5	59
39	Recent advances in pneumococcal peptidoglycan biosynthesis suggest new vaccine and antimicrobial targets. Current Opinion in Microbiology, 2012, 15, 194-203.	5.1	66
40	Selective Penicillin-Binding Protein Imaging Probes Reveal Substructure in Bacterial Cell Division. ACS Chemical Biology, 2012, 7, 1746-1753.	3.4	82
41	Interplay between manganese and zinc homeostasis in the human pathogen Streptococcus pneumoniae. Metallomics, 2011, 3, 38-41.	2.4	104
42	Characterization of Mutants Deficient in the l,d -Carboxypeptidase (DacB) and WalRK (VicRK) Regulon, Involved in Peptidoglycan Maturation of Streptococcus pneumoniae Serotype 2 Strain D39. Journal of Bacteriology, 2011, 193, 2290-2300.	2.2	57
43	The Putative Hydrolase YycJ (WalJ) Affects the Coordination of Cell Division with DNA Replication in<i>Bacillus subtilis</i>and May Play a Conserved Role in Cell Wall Metabolism. Journal of Bacteriology, 2011, 193, 896-908.	2.2	17
44	Essential PcsB putative peptidoglycan hydrolase interacts with the essential FtsX _{<i>Spn</i>} cell division protein in <i>Streptococcus pneumoniae</i> D39. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E1061-9.	7.1	149
45	The Requirement for Pneumococcal MreC and MreD Is Relieved by Inactivation of the Gene Encoding PBP1a. Journal of Bacteriology, 2011, 193, 4166-4179.	2.2	84
46	Dynamic Distribution of the SecA and SecY Translocase Subunits and Septal Localization of the HtrA Surface Chaperone/Protease during Streptococcus pneumoniae D39 Cell Division. MBio, 2011, 2, .	4.1	57
47	Bacterial Pathogenesis. , 2011, , .		36
48	Identification and Characterization of Noncoding Small RNAs in<i>Streptococcus pneumoniae</i>Serotype 2 Strain D39. Journal of Bacteriology, 2010, 192, 264-279.	2.2	70
49	Kinetic Characterization of the WalRK_{<i>Spn</i>}(VicRK) Two-Component System of<i>Streptococcus pneumoniae</i>: Dependence of WalK_{<i>Spn</i>}(VicK) Phosphatase Activity on Its PAS Domain. Journal of Bacteriology, 2010, 192, 2346-2358.	2.2	70
50	Localization and Cellular Amounts of the WalRKJ (VicRKX) Two-Component Regulatory System Proteins in Serotype 2<i>Streptococcus pneumoniae</i>. Journal of Bacteriology, 2010, 192, 4388-4394.	2.2	46
51	Instability of<i>ackA</i>(Acetate Kinase) Mutations and Their Effects on Acetyl Phosphate and ATP Amounts in<i>Streptococcus pneumoniae</i>D39. Journal of Bacteriology, 2010, 192, 6390-6400.	2.2	48
52	The Metalloregulatory Zinc Site in Streptococcus pneumoniae AdcR, a Zinc-activated MarR Family Repressor. Journal of Molecular Biology, 2010, 403, 197-216.	4.2	81
53	Influences of Capsule on Cell Shape and Chain Formation of Wild-Type and<i>pcsB</i>Mutants of Serotype 2<i>Streptococcus pneumoniae</i>. Journal of Bacteriology, 2009, 191, 3024-3040.	2.2	69
54	Roles of <i>rel</i>_{<i>Spn</i>} in stringent response, global regulation and virulence of serotype 2 <i>Streptococcus pneumoniae</i> D39. Molecular Microbiology, 2009, 72, 590-611.	2.5	83

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55	Polymorphism and regulation of the <i>spxB</i> (pyruvate oxidase) virulence factor gene by a CBSâ€HotDog domain protein (SpxR) in serotype 2 <i>Streptococcus pneumoniae</i>. Molecular Microbiology, 2008, 67, 729-746.	2.5	115
56	Essentiality, Bypass, and Targeting of the YycFG (VicRK) Two-Component Regulatory System in Gram-Positive Bacteria. Journal of Bacteriology, 2008, 190, 2645-2648.	2.2	89
57	Genome Sequence of Avery's Virulent Serotype 2 Strain D39 of<i>Streptococcus pneumoniae</i>and Comparison with That of Unencapsulated Laboratory Strain R6. Journal of Bacteriology, 2007, 189, 38-51.	2.2	429
58	Regulation of the pspA Virulence Factor and Essential pcsB Murein Biosynthetic Genes by the Phosphorylated VicR (YycF) Response Regulator in Streptococcus pneumoniae. Journal of Bacteriology, 2005, 187, 7444-7459.	2.2	112
59	Singular structures and operon organizations of essential two-component systems in species of Streptococcus. Microbiology (United Kingdom), 2004, 150, 3096-3098.	1.8	30
60	Kinetic and mechanistic analyses of new classes of inhibitors of two-component signal transduction systems using a coupled assay containing HpkAâ€"DrrA from Thermotoga maritima. Microbiology (United Kingdom), 2004, 150, 885-896.	1.8	32
61	Defective cell wall synthesis in <i>Streptococcus pneumoniae</i> R6 depleted for the essential PcsB putative murein hydrolase or the VicR (YycF) response regulator. Molecular Microbiology, 2004, 53, 1161-1175.	2.5	139
62	Constitutive expression of PcsB suppresses the requirement for the essential VicR (YycF) response regulator in Streptococcus pneumoniae R6Â§. Molecular Microbiology, 2003, 50, 1647-1663.	2.5	131
63	Characterization of broadly pleiotropic phenotypes caused by an hfq insertion mutation in Escherichia coli K-12. Molecular Microbiology, 1994, 13, 35-49.	2.5	372