

Malcolm E Winkler

List of Publications by Year in descending order

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63
papers

4,147
citations

101543

36
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128289

60
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71
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71
docs citations

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times ranked

3305
citing authors

#	ARTICLE	IF	CITATIONS
1	Genome Sequence of Avery's Virulent Serotype 2 Strain D39 of <i>Streptococcus pneumoniae</i> and Comparison with That of Unencapsulated Laboratory Strain R6. <i>Journal of Bacteriology</i> , 2007, 189, 38-51.	2.2	429
2	Characterization of broadly pleiotropic phenotypes caused by an hfq insertion mutation in <i>Escherichia coli</i> K-12. <i>Molecular Microbiology</i> , 1994, 13, 35-49.	2.5	372
3	Essential PcsB putative peptidoglycan hydrolase interacts with the essential FtsX cell division protein in <i>Streptococcus pneumoniae</i> D39. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, E1061-9.	7.1	149
4	Defective cell wall synthesis in <i>Streptococcus pneumoniae</i> R6 depleted for the essential PcsB putative murein hydrolase or the VicR (YycF) response regulator. <i>Molecular Microbiology</i> , 2004, 53, 1161-1175.	2.5	139
5	Constitutive expression of PcsB suppresses the requirement for the essential VicR (YycF) response regulator in <i>Streptococcus pneumoniae</i> R6. <i>Molecular Microbiology</i> , 2003, 50, 1647-1663.	2.5	131
6	Polymorphism and regulation of the <i>spxB</i> (pyruvate oxidase) virulence factor gene by a CBS HotDog domain protein (SpxR) in serotype 2 <i>Streptococcus pneumoniae</i> . <i>Molecular Microbiology</i> , 2008, 67, 729-746.	2.5	115
7	Regulation of the <i>pspA</i> Virulence Factor and Essential <i>pcsB</i> Murein Biosynthetic Genes by the Phosphorylated VicR (YycF) Response Regulator in <i>Streptococcus pneumoniae</i> . <i>Journal of Bacteriology</i> , 2005, 187, 7444-7459.	2.2	112
8	Movement dynamics of divisome proteins and PBP2x:FtsW in cells of <i>Streptococcus pneumoniae</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 3211-3220.	7.1	107
9	Interplay between manganese and zinc homeostasis in the human pathogen <i>Streptococcus pneumoniae</i> . <i>Metallomics</i> , 2011, 3, 38-41.	2.4	104
10	Requirement of essential <i>Pbp2x</i> and <i>GpsB</i> for septal ring closure in <i>Streptococcus pneumoniae</i> D39. <i>Molecular Microbiology</i> , 2013, 90, 939-955.	2.5	103
11	Essentiality, Bypass, and Targeting of the YycFG (VicRK) Two-Component Regulatory System in Gram-Positive Bacteria. <i>Journal of Bacteriology</i> , 2008, 190, 2645-2648.	2.2	89
12	<i>Pbp2x</i> localizes separately from <i>Pbp2b</i> and other peptidoglycan synthesis proteins during later stages of cell division of <i>Streptococcus pneumoniae</i> D39. <i>Molecular Microbiology</i> , 2014, 94, 21-40.	2.5	88
13	Profiling of β -Lactam Selectivity for Penicillin-Binding Proteins in <i>Streptococcus pneumoniae</i> D39. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 3548-3555.	3.2	87
14	A new structural paradigm in copper resistance in <i>Streptococcus pneumoniae</i> . <i>Nature Chemical Biology</i> , 2013, 9, 177-183.	8.0	85
15	The Requirement for Pneumococcal MreC and MreD Is Relieved by Inactivation of the Gene Encoding PBP1a. <i>Journal of Bacteriology</i> , 2011, 193, 4166-4179.	2.2	84
16	Roles of <i>rel</i> in stringent response, global regulation and virulence of serotype 2 <i>Streptococcus pneumoniae</i> D39. <i>Molecular Microbiology</i> , 2009, 72, 590-611.	2.5	83
17	Selective Penicillin-Binding Protein Imaging Probes Reveal Substructure in Bacterial Cell Division. <i>ACS Chemical Biology</i> , 2012, 7, 1746-1753.	3.4	82
18	The Metalloregulatory Zinc Site in <i>Streptococcus pneumoniae</i> AdcR, a Zinc-activated MarR Family Repressor. <i>Journal of Molecular Biology</i> , 2010, 403, 197-216.	4.2	81

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19	A new quorum-sensing system (<sc>TprA</sc>/<sc>PhrA</sc>) for <sc>S</sc> treptococcus pneumoniae</i> D39 that regulates a lantibiotic biosynthesis gene cluster. <i>Molecular Microbiology</i> , 2015, 97, 229-243.	2.5	78
20	Suppression of a deletion mutation in the gene encoding essential PBP2b reveals a new lytic transglycosylase involved in peripheral peptidoglycan synthesis in <sc>S</sc> treptococcus pneumoniae</i> D39. <i>Molecular Microbiology</i> , 2016, 100, 1039-1065.	2.5	77
21	The cell cycle regulator GpsB functions as cytosolic adaptor for multiple cell wall enzymes. <i>Nature Communications</i> , 2019, 10, 261.	12.8	71
22	Identification and Characterization of Noncoding Small RNAs in <i>Streptococcus pneumoniae</i> Serotype 2 Strain D39. <i>Journal of Bacteriology</i> , 2010, 192, 264-279.	2.2	70
23	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. <i>Journal of Bacteriology</i> , 2010, 192, 2346-2358.	2.2	70
24	Suppression and synthetic-lethal genetic relationships of \hat{P} <i>gps</i> <sc>B</sc> mutations indicate that <sc>G</sc>ps<sc>B</sc> mediates protein phosphorylation and penicillin-binding protein interactions in <sc>S</sc> treptococcus pneumoniae</i> D39. <i>Molecular Microbiology</i> , 2017, 103, 931-957.	2.5	70
25	Influences of Capsule on Cell Shape and Chain Formation of Wild-Type and <i>pcsB</i> Mutants of Serotype 2 <i>Streptococcus pneumoniae</i>. <i>Journal of Bacteriology</i> , 2009, 191, 3024-3040.	2.2	69
26	Recent advances in pneumococcal peptidoglycan biosynthesis suggest new vaccine and antimicrobial targets. <i>Current Opinion in Microbiology</i> , 2012, 15, 194-203.	5.1	66
27	Absence of the KhpA and KhpB (JAG/EloR) RNA-binding proteins suppresses the requirement for PBP2b by overproduction of FtsA in <i>Streptococcus pneumoniae</i> D39. <i>Molecular Microbiology</i> , 2017, 106, 793-814.	2.5	61
28	Involvement of <sc>WalK</sc> (<sc>VicK</sc>) phosphatase activity in setting <sc>WalR</sc> (<sc>VicR</sc>) response regulator phosphorylation level and limiting cross-talk in <sc>S</sc> treptococcus pneumoniae</i> D39 cells. <i>Molecular Microbiology</i> , 2012, 86, 645-660.	2.5	59
29	Perturbation of manganese metabolism disrupts cell division in <i>Streptococcus pneumoniae</i>. <i>Molecular Microbiology</i> , 2017, 104, 334-348.	2.5	58
30	Biological and Chemical Adaptation to Endogenous Hydrogen Peroxide Production in <i>Streptococcus pneumoniae</i> D39. <i>MSphere</i> , 2017, 2, .	2.9	58
31	Characterization of Mutants Deficient in the L,d -Carboxypeptidase (DacB) and WalRK (VicRK) Regulon, Involved in Peptidoglycan Maturation of <i>Streptococcus pneumoniae</i> Serotype 2 Strain D39. <i>Journal of Bacteriology</i> , 2011, 193, 2290-2300.	2.2	57
32	Dynamic Distribution of the SecA and SecY Translocase Subunits and Septal Localization of the HtrA Surface Chaperone/Protease during <i>Streptococcus pneumoniae</i> D39 Cell Division. <i>MBio</i> , 2011, 2, .	4.1	57
33	Minimal Peptidoglycan (PG) Turnover in Wild-Type and PG Hydrolase and Cell Division Mutants of <i>Streptococcus pneumoniae</i> D39 Growing Planktonically and in Host-Relevant Biofilms. <i>Journal of Bacteriology</i> , 2015, 197, 3472-3485.	2.2	56
34	Treadmilling FtsZ polymers drive the directional movement of sPG-synthesis enzymes via a Brownian ratchet mechanism. <i>Nature Communications</i> , 2021, 12, 609.	12.8	52
35	Instability of <i>ackA</i> (Acetate Kinase) Mutations and Their Effects on Acetyl Phosphate and ATP Amounts in <i>Streptococcus pneumoniae</i> D39. <i>Journal of Bacteriology</i> , 2010, 192, 6390-6400.	2.2	48
36	Involvement of FtsE ATPase and FtsX Extracellular Loops 1 and 2 in FtsEX-PcsB Complex Function in Cell Division of <i>Streptococcus pneumoniae</i> D39. <i>MBio</i> , 2013, 4, .	4.1	48

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37	Localization and Cellular Amounts of the WalRKJ (VicRKX) Two-Component Regulatory System Proteins in Serotype 2 <i>Streptococcus pneumoniae</i> . <i>Journal of Bacteriology</i> , 2010, 192, 4388-4394.	2.2	46
38	The zinc efflux activator <i>ScaA</i> protects <i>Streptococcus pneumoniae</i> serotype 2 <i>D39</i> from intracellular zinc toxicity. <i>Molecular Microbiology</i> , 2017, 104, 636-651.	2.5	40
39	A Mn-sensing riboswitch activates expression of a Mn ²⁺ /Ca ²⁺ ATPase transporter in <i>Streptococcus</i> . <i>Nucleic Acids Research</i> , 2019, 47, 6885-6899.	14.5	40
40	Physiological Roles of the Dual Phosphate Transporter Systems in Low and High Phosphate Conditions and in Capsule Maintenance of <i>Streptococcus pneumoniae</i> D39. <i>Frontiers in Cellular and Infection Microbiology</i> , 2016, 6, 63.	3.9	39
41	Bacterial Pathogenesis. , 2011, , .		36
42	Structure of the Large Extracellular Loop of FtsX and Its Interaction with the Essential Peptidoglycan Hydrolase PcsB in <i>Streptococcus pneumoniae</i> . <i>MBio</i> , 2019, 10, .	4.1	35
43	Roles of the Essential Protein FtsA in Cell Growth and Division in <i>Streptococcus pneumoniae</i> . <i>Journal of Bacteriology</i> , 2017, 199, .	2.2	33
44	Kinetic and mechanistic analyses of new classes of inhibitors of two-component signal transduction systems using a coupled assay containing HpkA and DrrA from <i>Thermotoga maritima</i> . <i>Microbiology (United Kingdom)</i> , 2004, 150, 885-896.	1.8	32
45	Novel Electrophilic Scaffold for Imaging of Essential Penicillin-Binding Proteins in <i>Streptococcus pneumoniae</i> . <i>ACS Chemical Biology</i> , 2017, 12, 2849-2857.	3.4	32
46	Singular structures and operon organizations of essential two-component systems in species of <i>Streptococcus</i> . <i>Microbiology (United Kingdom)</i> , 2004, 150, 3096-3098.	1.8	30
47	Biochemical characterization of essential cell division proteins FtsX and FtsE that mediate peptidoglycan hydrolysis by PcsB in <i>Streptococcus pneumoniae</i> . <i>MicrobiologyOpen</i> , 2016, 5, 738-752.	3.0	22
48	Organization of peptidoglycan synthesis in nodes and separate rings at different stages of cell division of <i>Streptococcus pneumoniae</i> . <i>Molecular Microbiology</i> , 2021, 115, 1152-1169.	2.5	22
49	The Pneumococcal Divisome: Dynamic Control of <i>Streptococcus pneumoniae</i> Cell Division. <i>Frontiers in Microbiology</i> , 2021, 12, 737396.	3.5	22
50	Biochemical reconstitution defines new functions for membrane-bound glycosidases in assembly of the bacterial cell wall. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	21
51	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. <i>Journal of Bacteriology</i> , 2011, 193, 896-908.	2.2	17
52	Redefining the Small Regulatory RNA Transcriptome in <i>Streptococcus pneumoniae</i> Serotype 2 Strain D39. <i>Journal of Bacteriology</i> , 2019, 201, .	2.2	17
53	S1 Domain RNA-Binding Protein CvfD Is a New Posttranscriptional Regulator That Mediates Cold Sensitivity, Phosphate Transport, and Virulence in <i>Streptococcus pneumoniae</i> D39. <i>Journal of Bacteriology</i> , 2020, 202, .	2.2	16
54	Chemical tools for selective activity profiling of bacterial penicillin-binding proteins. <i>Methods in Enzymology</i> , 2020, 638, 27-55.	1.0	14

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55	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
56	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
57	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
58	Bacterial Pathogenesis: A Molecular Approach, Fourth Edition. , 2019, , .		7
59	¹ H, ¹³ C, ¹⁵ N 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
60	Cellular Mn/Zn Ratio Influences Phosphoglucomutase Activity and Capsule Production in Streptococcus pneumoniae D39. Journal of Bacteriology, 2021, 203, e0060220.	2.2	5
61	Pivotal Roles for Ribonucleases in Streptococcus pneumoniae Pathogenesis. MBio, 2021, 12, e0238521.	4.1	5
62	Competence beyond Genes: Filling in the Details of the Pneumococcal Competence Transcriptome by a Systems Approach. Journal of Bacteriology, 2019, 201, .	2.2	3
63	Undermodification cues division. Nature Chemical Biology, 2021, 17, 841-843.	8.0	2