Michel Arthur

List of Publications by Citations

153 papers	7,259 citations	50 h-index	81 g-index
162 ext. papers	8,247 ext. citations	6.5 avg, IF	5.53 L-index

#	Paper	IF	Citations
153	Molecular basis for vancomycin resistance in Enterococcus faecium BM4147: biosynthesis of a depsipeptide peptidoglycan precursor by vancomycin resistance proteins VanH and VanA. *Biochemistry*, **1991**, 30, 10408-15	3.2	521
152	Glycopeptide resistance in enterococci. *Trends in Microbiology*, **1996**, 4, 401-7	12.4	333
151	The peptidoglycan of stationary-phase Mycobacterium tuberculosis predominantly contains cross-links generated by L,D-transpeptidation. *Journal of Bacteriology*, **2008**, 190, 4360-6	3.5	256
150	The Mycobacterium tuberculosis protein LdtMt2 is a nonclassical transpeptidase required for virulence and resistance to amoxicillin. *Nature Medicine*, **2010**, 16, 466-9	50.5	208
149	Identification of vancomycin resistance protein VanA as a D-alanine:D-alanine ligase of altered substrate specificity. *Biochemistry*, **1991**, 30, 2017-21	3.2	204
148	Glycopeptide resistance mediated by enterococcal transposon Tn1546 requires production of VanX for hydrolysis of D-alanyl-D-alanine. *Molecular Microbiology*, **1994**, 13, 1065-70	4.1	179
147	A novel peptidoglycan cross-linking enzyme for a beta-lactam-resistant transpeptidation pathway. *Journal of Biological Chemistry*, **2005**, 280, 38146-52	5.4	152
146	Quantitative analysis of the metabolism of soluble cytoplasmic peptidoglycan precursors of glycopeptide-resistant enterococci. *Molecular Microbiology*, **1996**, 21, 33-44	4.1	150
145	The vanZ gene of Tn1546 from Enterococcus faecium BM4147 confers resistance to teicoplanin. *Gene*, **1995**, 154, 87-92	3.8	132
144	Sequence of the vanC gene of Enterococcus gallinarum BM4174 encoding a D-alanine:D-alanine ligase-related protein necessary for vancomycin resistance. *Gene*, **1992**, 112, 53-8	3.8	132
143	Evolution of peptidoglycan biosynthesis under the selective pressure of antibiotics in Gram-positive bacteria. *FEMS Microbiology Reviews*, **2008**, 32, 386-408	15.1	130
142	Identification of the L,D-transpeptidases responsible for attachment of the Braun lipoprotein to Escherichia coli peptidoglycan. *Journal of Bacteriology*, **2007**, 189, 3927-31	3.5	126
141	Origin and evolution of genes specifying resistance to macrolide, lincosamide and streptogramin antibiotics: data and hypotheses. *Journal of Antimicrobial Chemotherapy*, **1987**, 20, 783-802	5.1	123
140	Identification of the L,D-transpeptidases for peptidoglycan cross-linking in Escherichia coli. *Journal of Bacteriology*, **2008**, 190, 4782-5	3.5	115
139	Novel mechanism of beta-lactam resistance due to bypass of DD-transpeptidation in Enterococcus faecium. *Journal of Biological Chemistry*, **2000**, 275, 16490-6	5.4	115
138	The VANA glycopeptide resistance protein is related to D-alanyl-D-alanine ligase cell wall biosynthesis enzymes. *Molecular Genetics and Genomics*, **1990**, 224, 364-72		108
137	Inactivation of Mycobacterium tuberculosis l,d-transpeptidase LdtMt1 by carbapenems and cephalosporins. *Antimicrobial Agents and Chemotherapy*, **2012**, 56, 4189-95	5.9	103

136	Unexpected inhibition of peptidoglycan LD-transpeptidase from Enterococcus faecium by the beta-lactam imipenem. *Journal of Biological Chemistry*, **2007**, 282, 30414-22	5.4	97
135	Crystal structure of a novel beta-lactam-insensitive peptidoglycan transpeptidase. *Journal of Molecular Biology*, **2006**, 359, 533-8	6.5	95
134	Regulation of VanA- and VanB-type glycopeptide resistance in enterococci. *Antimicrobial Agents and Chemotherapy*, **2001**, 45, 375-81	5.9	94
133	Covalent attachment of proteins to peptidoglycan. *FEMS Microbiology Reviews*, **2008**, 32, 307-20	15.1	93
132	In vitro cross-linking of Mycobacterium tuberculosis peptidoglycan by L,D-transpeptidases and inactivation of these enzymes by carbapenems. *Antimicrobial Agents and Chemotherapy*, **2013**, 57, 5940-5	5.9	91
131	Requirement of the VanY and VanX D,D-peptidases for glycopeptide resistance in enterococci. *Molecular Microbiology*, **1998**, 30, 819-30	4.1	91
130	Factors essential for L,D-transpeptidase-mediated peptidoglycan cross-linking and β-lactam resistance in. *ELife*, **2016**, 5,	8.9	90
129	β-Lactamase inhibition by avibactam in Mycobacterium abscessus. *Journal of Antimicrobial Chemotherapy*, **2015**, 70, 1051-8	5.1	88
128	Mechanisms of glycopeptide resistance in enterococci. *Journal of Infection*, **1996**, 32, 11-6	18.9	87
127	Role of class A penicillin-binding proteins in PBP5-mediated beta-lactam resistance in Enterococcus faecalis. *Journal of Bacteriology*, **2004**, 186, 1221-8	3.5	82
126	Structural relationship between the vancomycin resistance protein VanH and 2-hydroxycarboxylic acid dehydrogenases. *Gene*, **1991**, 103, 133-4	3.8	82
125	Mutations leading to increased levels of resistance to glycopeptide antibiotics in VanB-type enterococci. *Molecular Microbiology*, **1997**, 25, 93-105	4.1	78
124	903. Resensitization to β-Lactams in Enterococci Depends on Penicillin-Binding Protein (PBP) Mislocalization and Is Mediated by a Single Protein That Modulates Cell Membrane (CM) Adaptation to Daptomycin (DAP). *Open Forum Infectious Diseases*, **2019**, 6, S28-S29	1	78
123	The CroRS two-component regulatory system is required for intrinsic beta-lactam resistance in Enterococcus faecalis. *Journal of Bacteriology*, **2003**, 185, 7184-92	3.5	77
122	Analysis of the nucleotide sequence of the ereB gene encoding the erythromycin esterase type II. *Nucleic Acids Research*, **1986**, 14, 4987-99	20.1	76
121	Rapid cytolysis of Mycobacterium tuberculosis by faropenem, an orally bioavailable β-lactam antibiotic. *Antimicrobial Agents and Chemotherapy*, **2015**, 59, 1308-19	5.9	75
120	The peptidoglycan of Mycobacterium abscessus is predominantly cross-linked by L,D-transpeptidases. *Journal of Bacteriology*, **2011**, 193, 778-82	3.5	74
119	Role of penicillin-binding protein 5 in expression of ampicillin resistance and peptidoglycan structure in Enterococcus faecium. *Antimicrobial Agents and Chemotherapy*, **2001**, 45, 2594-7	5.9	70

118	Aslfm, the D-aspartate ligase responsible for the addition of D-aspartic acid onto the peptidoglycan precursor of Enterococcus faecium. *Journal of Biological Chemistry*, **2006**, 281, 11586-94	5.4	68
117	Specificity of L,D-transpeptidases from gram-positive bacteria producing different peptidoglycan chemotypes. *Journal of Biological Chemistry*, **2007**, 282, 13151-9	5.4	66
116	Synthesis of mosaic peptidoglycan cross-bridges by hybrid peptidoglycan assembly pathways in gram-positive bacteria. *Journal of Biological Chemistry*, **2004**, 279, 41546-56	5.4	66
115	Crystal structures of Weissella viridescens FemX and its complex with UDP-MurNAc-pentapeptide: insights into FemABX family substrates recognition. *Structure*, **2004**, 12, 257-67	5.2	65
114	Characterization and modelling of VanT: a novel, membrane-bound, serine racemase from vancomycin-resistant Enterococcus gallinarum BM4174. *Molecular Microbiology*, **1999**, 31, 1653-64	4.1	65
113	Functional analysis of AtlA, the major N-acetylglucosaminidase of Enterococcus faecalis. *Journal of Bacteriology*, **2006**, 188, 8513-9	3.5	64
112	Characterization of broad-spectrum Mycobacterium abscessus class A β-lactamase. *Journal of Antimicrobial Chemotherapy*, **2014**, 69, 691-6	5.1	63
111	Balance between two transpeptidation mechanisms determines the expression of beta-lactam resistance in Enterococcus faecium. *Journal of Biological Chemistry*, **2002**, 277, 35801-7	5.4	62
110	Moderate-level resistance to glycopeptide LY333328 mediated by genes of the vanA and vanB clusters in enterococci. *Antimicrobial Agents and Chemotherapy*, **1999**, 43, 1875-80	5.9	62
109	Synthesis of the L-alanyl-L-alanine cross-bridge of Enterococcus faecalis peptidoglycan. *Journal of Biological Chemistry*, **2002**, 277, 45935-41	5.4	61
108	Human- and plant-pathogenic Pseudomonas species produce bacteriocins exhibiting colicin M-like hydrolase activity towards peptidoglycan precursors. *Journal of Bacteriology*, **2009**, 191, 3657-64	3.5	55
107	Inhibition of the β-Lactamase Bla by Avibactam Improves the and Efficacy of Imipenem against Mycobacterium abscessus. *Antimicrobial Agents and Chemotherapy*, **2017**, 61,	5.9	54
106	Characterization of CrgA, a new partner of the Mycobacterium tuberculosis peptidoglycan polymerization complexes. *Journal of Bacteriology*, **2011**, 193, 3246-56	3.5	53
105	Role of N-acetylglucosaminidase and N-acetylmuramidase activities in Enterococcus faecalis peptidoglycan metabolism. *Journal of Biological Chemistry*, **2008**, 283, 19845-53	5.4	51
104	Impaired Inhibition by Avibactam and Resistance to the Ceftazidime-Avibactam Combination Due to the DY Substitution in the KPC-2 β-Lactamase. *Antimicrobial Agents and Chemotherapy*, **2017**, 61,	5.9	50
103	Regulated interactions between partner and non-partner sensors and response regulators that control glycopeptide resistance gene expression in enterococci. *Microbiology (United Kingdom)*, **1999**, 145 (Pt 8), 1849-1858	2.9	50
102	Quantitative high-performance liquid chromatography analysis of the pool levels of undecaprenyl phosphate and its derivatives in bacterial membranes. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2009**, 877, 213-20	3.2	45
101	Sequence of the vanY gene required for production of a vancomycin-inducible D,D-carboxypeptidase in Enterococcus faecium BM4147. *Gene*, **1992**, 120, 111-4	3.8	44

100	Role of class A penicillin-binding proteins in the expression of beta-lactam resistance in Enterococcus faecium. *Journal of Bacteriology*, **2009**, 191, 3649-56	3.5	42
99	Synthesis of stable aminoacyl-tRNA analogues containing triazole as a bioisoster of esters. *Chemistry - A European Journal*, **2009**, 15, 1929-38	4.8	42
98	Inactivation kinetics of a new target of beta-lactam antibiotics. *Journal of Biological Chemistry*, **2011**, 286, 22777-84	5.4	42
97	Kinetic features of L,D-transpeptidase inactivation critical for β-lactam antibacterial activity. *PLoS ONE*, **2013**, 8, e67831	3.7	42
96	In vitro activity of cefoxitin and imipenem against Mycobacterium abscessus complex. *Clinical Microbiology and Infection*, **2014**, 20, O297-300	9.5	41
95	Bactericidal and intracellular activity of β-lactams against Mycobacterium abscessus. *Journal of Antimicrobial Chemotherapy*, **2016**, 71, 1556-63	5.1	41
94	Idiosyncratic features in tRNAs participating in bacterial cell wall synthesis. *Nucleic Acids Research*, **2007**, 35, 6870-83	20.1	40
93	Single-cell analysis of glycopeptide resistance gene expression in teicoplanin-resistant mutants of a VanB-type Enterococcus faecalis. *Molecular Microbiology*, **1999**, 32, 17-28	4.1	39
92	Copper inhibits peptidoglycan LD-transpeptidases suppressing β-lactam resistance due to bypass of penicillin-binding proteins. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 10786-10791	11.5	39
91	Atomic model of a cell-wall cross-linking enzyme in complex with an intact bacterial peptidoglycan. *Journal of the American Chemical Society*, **2014**, 136, 17852-60	16.4	38
90	The beta-lactam-sensitive D,D-carboxypeptidase activity of Pbp4 controls the L,D and D,D transpeptidation pathways in Corynebacterium jeikeium. *Molecular Microbiology*, **2009**, 74, 650-61	4.1	36
89	Identification of the UDP-MurNAc-pentapeptide:L-alanine ligase for synthesis of branched peptidoglycan precursors in Enterococcus faecalis. *Journal of Bacteriology*, **2001**, 183, 5122-7	3.5	36
88	Activation of the L,D-transpeptidation peptidoglycan cross-linking pathway by a metallo-D,D-carboxypeptidase in Enterococcus faecium. *Molecular Microbiology*, **2010**, 75, 874-85	4.1	35
87	Novel mechanism of resistance to glycopeptide antibiotics in Enterococcus faecium. *Journal of Biological Chemistry*, **2006**, 281, 32254-62	5.4	32
86	Combinations of β-Lactam Antibiotics Currently in Clinical Trials Are Efficacious in a DHP-I-Deficient Mouse Model of Tuberculosis Infection. *Antimicrobial Agents and Chemotherapy*, **2015**, 59, 4997-9	5.9	31
85	Aminoacyl-tRNA recognition by the FemXWv transferase for bacterial cell wall synthesis. *Nucleic Acids Research*, **2009**, 37, 1589-601	20.1	31
84	Diaminopimelic Acid Amidation in Corynebacteriales: NEW INSIGHTS INTO THE ROLE OF LtsA IN PEPTIDOGLYCAN MODIFICATION. *Journal of Biological Chemistry*, **2015**, 290, 13079-94	5.4	30
83	Structure of Enterococcus faeciuml,d-transpeptidase acylated by ertapenem provides insight into the inactivation mechanism. *ACS Chemical Biology*, **2013**, 8, 1140-6	4.9	30

82	Structure-based site-directed mutagenesis of the UDP-MurNAc-pentapeptide-binding cavity of the FemX alanyl transferase from Weissella viridescens. *Journal of Bacteriology*, **2005**, 187, 3833-8	3.5	30
81	Inhibition of Elactamases of mycobacteria by avibactam and clavulanate. *Journal of Antimicrobial Chemotherapy*, **2017**, 72, 1081-1088	5.1	30
80	The structure of FemX(Wv) in complex with a peptidyl-RNA conjugate: mechanism of aminoacyl transfer from Ala-tRNA(Ala) to peptidoglycan precursors. *Angewandte Chemie - International Edition*, **2013**, 52, 7278-81	16.4	29
79	Methicillin-Susceptible, Vancomycin-Resistant Staphylococcus aureus, Brazil. *Emerging Infectious Diseases*, **2015**, 21, 1844-8	10.2	28
78	and Intracellular Activity of Imipenem Combined with Tedizolid, Rifabutin, and Avibactam against. *Antimicrobial Agents and Chemotherapy*, **2019**, 63,	5.9	27
77	Impact of Elactamase inhibition on the activity of ceftaroline against Mycobacterium tuberculosis and Mycobacterium abscessus. *Antimicrobial Agents and Chemotherapy*, **2015**, 59, 2938-41	5.9	26
76	Specificity determinants for the two tRNA substrates of the cyclodipeptide synthase AlbC from Streptomyces noursei. *Nucleic Acids Research*, **2014**, 42, 7247-58	20.1	26
75	Dynamics induced by Elactam antibiotics in the active site of Bacillus subtilis L,D-transpeptidase. *Structure*, **2012**, 20, 850-61	5.2	25
74	Two-step acquisition of resistance to the teicoplanin-gentamicin combination by VanB-type Enterococcus faecalis in vitro and in experimental endocarditis. *Antimicrobial Agents and Chemotherapy*, **1999**, 43, 476-82	5.9	25
73	and Intracellular Activity of Imipenem Combined with Rifabutin and Avibactam against Mycobacterium abscessus. *Antimicrobial Agents and Chemotherapy*, **2018**, 62,	5.9	24
72	Decoding the logic of the tRNA regiospecificity of nonribosomal FemX(Wv) aminoacyl transferase. *Angewandte Chemie - International Edition*, **2010**, 49, 5115-9	16.4	24
71	Stable analogues of aminoacyl-tRNA for inhibition of an essential step of bacterial cell-wall synthesis. *Journal of the American Chemical Society*, **2007**, 129, 12642-3	16.4	24
70	Functional and structural characterization of PaeM, a colicin M-like bacteriocin produced by Pseudomonas aeruginosa. *Journal of Biological Chemistry*, **2012**, 287, 37395-405	5.4	23
69	The elucidation of the structure of Thermotoga maritima peptidoglycan reveals two novel types of cross-link. *Journal of Biological Chemistry*, **2009**, 284, 21856-21862	5.4	23
68	Synthesis of Avibactam Derivatives and Activity on ELactamases and Peptidoglycan Biosynthesis Enzymes of Mycobacteria. *Chemistry - A European Journal*, **2018**, 24, 8081-8086	4.8	22
67	Peptidoglycan cross-linking in glycopeptide-resistant Actinomycetales. *Antimicrobial Agents and Chemotherapy*, **2014**, 58, 1749-56	5.9	22
66	Kinetic analysis of Enterococcus faecium L,D-transpeptidase inactivation by carbapenems. *Antimicrobial Agents and Chemotherapy*, **2012**, 56, 3409-12	5.9	22
65	In vitro activity of tedizolid against the Mycobacterium abscessus complex. *Diagnostic Microbiology and Infectious Disease*, **2018**, 90, 186-189	2.9	22

64	Hydrolysis of clavulanate by Mycobacterium tuberculosis β-lactamase BlaC harboring a canonical SDN motif. *Antimicrobial Agents and Chemotherapy*, **2015**, 59, 5714-20	5.9	21
63	Regulation of icosahedral virion capsid size by the in vivo activity of a cloned gene product. *Proceedings of the National Academy of Sciences of the United States of America*, **1990**, 87, 2428-32	11.5	21
62	Critical Impact of Peptidoglycan Precursor Amidation on the Activity of l,d-Transpeptidases from Enterococcus faecium and Mycobacterium tuberculosis. *Chemistry - A European Journal*, **2018**, 24, 5743-5747	4.8	20
61	Efficient access to peptidyl-RNA conjugates for picomolar inhibition of non-ribosomal FemX(Wv) aminoacyl transferase. *Chemistry - A European Journal*, **2013**, 19, 1357-63	4.8	19
60	Serine/threonine protein phosphatase-mediated control of the peptidoglycan cross-linking L,D-transpeptidase pathway in Enterococcus faecium. *MBio*, **2014**, 5, e01446-14	7.8	19
59	Fighting resistant tuberculosis with old compounds: the carbapenem paradigm. *Clinical Microbiology and Infection*, **2011**, 17, 1755-6	9.5	18
58	Inhibition by Avibactam and Clavulanate of the β-Lactamases KPC-2 and CTX-M-15 Harboring the Substitution NG in the Conserved SDN Motif. *Antimicrobial Agents and Chemotherapy*, **2017**, 61,	5.9	17
57	Reversible inactivation of a peptidoglycan transpeptidase by a β-lactam antibiotic mediated by β-lactam-ring recyclization in the enzyme active site. *Scientific Reports*, **2017**, 7, 9136	4.9	16
56	Impact of peptidoglycan O-acetylation on autolytic activities of the Enterococcus faecalis N-acetylglucosaminidase AtlA and N-acetylmuramidase AtlB. *FEBS Letters*, **2009**, 583, 3033-8	3.8	16
55	Characterization of colicin M and its orthologs targeting bacterial cell wall peptidoglycan biosynthesis. *Microbial Drug Resistance*, **2012**, 18, 222-9	2.9	16
54	Routes of Synthesis of Carbapenems for Optimizing Both the Inactivation of L,D-Transpeptidase LdtMt1 of Mycobacterium tuberculosis and the Stability toward Hydrolysis by β-Lactamase BlaC. *Journal of Medicinal Chemistry*, **2016**, 59, 3427-38	8.3	15
53	Involvement of the Eukaryote-Like Kinase-Phosphatase System and a Protein That Interacts with Penicillin-Binding Protein 5 in Emergence of Cephalosporin Resistance in Cephalosporin-Sensitive Class A Penicillin-Binding Protein Mutants in Enterococcus faecium. *MBio*, **2016**, 7, e02188-15	7.8	15
52	Colicin M hydrolyses branched lipids II from Gram-positive bacteria. *Biochimie*, **2012**, 94, 985-90	4.6	14
51	Discovery of the first inhibitors of bacterial enzyme D-aspartate ligase from Enterococcus faecium (Aslfm). *European Journal of Medicinal Chemistry*, **2013**, 67, 208-20	6.8	13
50	Colicin M, a peptidoglycan lipid-II-degrading enzyme: potential use for antibacterial means?. *Biochemical Society Transactions*, **2012**, 40, 1522-7	5.1	13
49	Bactericidal activity of gentamicin against Enterococcus faecalis in vitro and in vivo. *Antimicrobial Agents and Chemotherapy*, **2000**, 44, 2077-80	5.9	13
48	Combination of Amino Acid Substitutions Leading to CTX-M-15-Mediated Resistance to the Ceftazidime-Avibactam Combination. *Antimicrobial Agents and Chemotherapy*, **2018**, 62,	5.9	13
47	The in vitro contribution of autolysins to bacterial killing elicited by amoxicillin increases with inoculum size in Enterococcus faecalis. *Antimicrobial Agents and Chemotherapy*, **2011**, 55, 910-2	5.9	12

46	Structural insight into YcbB-mediated beta-lactam resistance in Escherichia coli. *Nature Communications*, **2019**, 10, 1849	17.4	11
45	Peptidoglycan Cross-Linking Activity of l,d-Transpeptidases from Clostridium difficile and Inactivation of These Enzymes by β-Lactams. *Antimicrobial Agents and Chemotherapy*, **2018**, 62,	5.9	11
44	Expression of glycopeptide-resistance gene in response to vancomycin and teicoplanin in the cardiac vegetations of rabbits infected with VanB-type Enterococcus faecalis. *Journal of Infectious Diseases*, **2004**, 189, 90-7	7	11
43	Contribution of the autolysin AtlA to the bactericidal activity of amoxicillin against Enterococcus faecalis JH2-2. *Antimicrobial Agents and Chemotherapy*, **2009**, 53, 1667-9	5.9	10
42	Recognition of Peptidoglycan Fragments by the Transpeptidase PBP4 From. *Frontiers in Microbiology*, **2018**, 9, 3223	5.7	10
41	Electrophilic RNA for Peptidyl-RNA Synthesis and Site-Specific Cross-Linking with tRNA-Binding Enzymes. *Angewandte Chemie - International Edition*, **2016**, 55, 13553-13557	16.4	9
40	Ceftazidime-Avibactam Resistance Mediated by the NY Substitution in Various AmpC β-Lactamases. *Antimicrobial Agents and Chemotherapy*, **2020**, 64,	5.9	7
39	Electrophilic RNA for Peptidyl-RNA Synthesis and Site-Specific Cross-Linking with tRNA-Binding Enzymes. *Angewandte Chemie*, **2016**, 128, 13751-13755	3.6	7
38	Decoding the Logic of the tRNA Regiospecificity of Nonribosomal FemXWv Aminoacyl Transferase. *Angewandte Chemie*, **2010**, 122, 5241-5245	3.6	7
37	Heterogeneity of genes conferring high-level resistance to erythromycin by inactivation in enterobacteria. *Annales De L'Institut Pasteur Microbiologie*, **1986**, 137A, 125-34		7
36	Mutation landscape of acquired cross-resistance to glycopeptide and β-lactam antibiotics in Enterococcus faecium. *Antimicrobial Agents and Chemotherapy*, **2015**, 59, 5306-15	5.9	6
35	Acyl acceptor recognition by Enterococcus faecium L,D-transpeptidase Ldtfm. *Molecular Microbiology*, **2015**, 98, 90-100	4.1	6
34	The Structure of FemXWv in Complex with a Peptidyl-RNA Conjugate: Mechanism of Aminoacyl Transfer from Ala-tRNAAla to Peptidoglycan Precursors. *Angewandte Chemie*, **2013**, 125, 7419-7422	3.6	6
33	A phasmid shuttle vector for the cloning of complex operons in Salmonella. *Plasmid*, **1990**, 23, 42-58	3.3	6
32	Tryptophan Fluorescence Quenching in β-Lactam-Interacting Proteins Is Modulated by the Structure of Intermediates and Final Products of the Acylation Reaction. *ACS Infectious Diseases*, **2019**, 5, 1169-1176	5.5	5
31	Negative Impact of Carbapenem Methylation on the Reactivity of β-Lactams for Cysteine Acylation as Revealed by Quantum Calculations and Kinetic Analyses. *Antimicrobial Agents and Chemotherapy*, **2019**, 63,	5.9	5
30	Activity-Based Protein Profiling Reveals That Cephalosporins Selectively Active on Non-replicating Bind Multiple Protein Families and Spare Peptidoglycan Transpeptidases. *Frontiers in Microbiology*, **2020**, 11, 1248	5.7	5
29	Diazabicyclooctane Functionalization for Inhibition of β-Lactamases from Enterobacteria. *Journal of Medicinal Chemistry*, **2020**, 63, 5257-5273	8.3	5

28	Cleavage specificity of Enterococcus faecalis EnpA (EF1473), a peptidoglycan endopeptidase related to the LytM/lysostaphin family of metallopeptidases. *Journal of Molecular Biology*, **2010**, 398, 507-17	6.5	5
27	Unusual substrate specificity of the peptidoglycan MurE ligase from Erysipelothrix rhusiopathiae. *Biochimie*, **2016**, 121, 209-18	4.6	4
26	Synthesis of 3Sfluoro-tRNA analogues for exploring non-ribosomal peptide synthesis in bacteria. *ChemBioChem*, **2015**, 16, 477-86	3.8	4
25	Hybrid Potential Simulation of the Acylation of Enterococcus faecium l,d-Transpeptidase by Carbapenems. *Journal of Physical Chemistry B*, **2016**, 120, 4767-81	3.4	4
24	Synthesis of Lipid-Carbohydrate-Peptidyl-RNA Conjugates to Explore the Limits Imposed by the Substrate Specificity of Cell Wall Enzymes on the Acquisition of Drug Resistance. *Chemistry - A European Journal*, **2018**, 24, 14911-14915	4.8	3
23	Synthesis and biological evaluation of non-isomerizable analogues of Ala-tRNA(Ala). *Organic and Biomolecular Chemistry*, **2013**, 11, 6161-9	3.9	3
22	Backbone and side-chain 1H, 15N and 13C assignment of apo- and imipenem-acylated L,D-transpeptidase from Bacillus subtilis. *Biomolecular NMR Assignments*, **2012**, 6, 205-8	0.7	3
21	Author response: Factors essential for L,D-transpeptidase-mediated peptidoglycan cross-linking and β-lactam resistance in Escherichia coli **2016**,		3
20	Regulation of Bacterial Peptidoglycan Polymerization. *Trends in Microbiology*, **2016**, 24, 519-521	12.4	3
19	Role of endopeptidases in peptidoglycan synthesis mediated by alternative cross-linking enzymes in Escherichia coli. *EMBO Journal*, **2021**, 40, e108126	13	3
18	Impact of relebactam-mediated inhibition of Mycobacterium abscessus BlaMab β-lactamase on the in vitro and intracellular efficacy of imipenem. *Journal of Antimicrobial Chemotherapy*, **2020**, 75, 379-383	5.1	2
17	Synthesis of tRNA analogues containing a terminal ribose locked in the South conformation to study tRNA-dependent enzymes. *Organic and Biomolecular Chemistry*, **2018**, 16, 1903-1911	3.9	2
16	Chemical shift perturbations induced by the acylation of Enterococcus faecium L,D-transpeptidase catalytic cysteine with ertapenem. *Biomolecular NMR Assignments*, **2014**, 8, 339-43	0.7	2
15	Crystallization and preliminary X-ray analysis of Weissella viridescens FemX UDP-MurNAc-pentapeptide:l-alanine ligase. *Acta Crystallographica Section D: Biological Crystallography*, **2003**, 59, 1055-7		2
14	Regulation of Glycopeptide Resistance Genes of Enterococcal Transposon Tn1546 by the VanR-VanS Two-Component Regulatory System387-391		2
13	Phosphine-Mediated Bioconjugation of the 3SEnd of RNA. *Organic Letters*, **2020**, 22, 8034-8038	6.2	2
12	In vitro and intracellular activity of imipenem combined with tedizolid, rifabutin, and avibactam against Mycobacterium abscessus		2
11	Traceless Staudinger Ligation for Bioconjugation of RNA. *Current Protocols*, **2021**, 1, e42		2

10	Synthesis of stable aminoacyl-tRNA analogs. *Current Protocols in Nucleic Acid Chemistry*, **2011**, Chapter 4, Unit 4.44	0.5	1
9	Inhibition Activity of Avibactam against Nocardia farcinica β-Lactamase FAR. *Antimicrobial Agents and Chemotherapy*, **2020**, 64,	5.9	1
8	Synthesis of Carbapenems Containing Peptidoglycan Mimetics and Inhibition of the Cross-Linking Activity of a Transpeptidase of l,d Specificity. *Chemistry - A European Journal*, **2021**, 27, 3542-3551	4.8	1
7	Traceless Staudinger Ligation To Introduce Chemical Diversity on β-Lactamase Inhibitors of Second Generation. *Organic Letters*, **2021**, 23, 7755-7758	6.2	0
6	Partition of tRNAGly isoacceptors between protein and cell-wall peptidoglycan synthesis in Staphylococcus aureus. *Nucleic Acids Research*, **2021**, 49, 684-699	20.1	0
5	Click and Release Chemistry for Activity-Based Purification of β-Lactam Targets. *Chemistry - A European Journal*, **2021**, 27, 7687-7695	4.8	0
4	Synthesis of 3Striazoyl-dinucleotides as precursors of stable Phe-tRNA(Phe) and Leu-tRNA(Leu) analogues. *Bioorganic and Medicinal Chemistry Letters*, **2014**, 24, 3231-3	2.9	
3	Covalent Organic Functionalization of Nucleic Acids **2015**, 272-298		
2	l,d-Transpeptidase (Enterococcus) **2013**, 2465-2472		
1	Transfert heterogramique de la resistance bacterienne aux antibiotiques dans les conditions naturelles. *Médecine Et Maladies Infectieuses*, **1988**, 18, 225-229	4	