Alex John O'Neill

List of Publications by Year
in descending order

57 papers	3,322 citations	218677 26 h-index	149698 56 g-index
59 all docs	59 docs citations	59 times ranked	5273 citing authors

#	Article	IF	Citations
1	Targeting bacterial membrane function: an underexploited mechanism for treating persistent infections. Nature Reviews Microbiology, 2011, 9, 62-75.	28.6	667
2	Staphylococcus aureus Biofilms Promote Horizontal Transfer of Antibiotic Resistance. Antimicrobial Agents and Chemotherapy, 2013, 57, 1968-1970.	3.2	266
3	ABC-F Proteins Mediate Antibiotic Resistance through Ribosomal Protection. MBio, 2016, 7, e01975.	4.1	222
4	Silver resistance in Gram-negative bacteria: a dissection of endogenous and exogenous mechanisms. Journal of Antimicrobial Chemotherapy, 2015, 70, 1037-1046.	3.0	195
5	Consequences of daptomycin-mediated membrane damage in Staphylococcus aureus. Journal of Antimicrobial Chemotherapy, 2008, 62, 1003-1008.	3.0	115
6	The Target of Daptomycin Is Absent from Escherichia coli and Other Gram-Negative Pathogens. Antimicrobial Agents and Chemotherapy, 2013, 57, 637-639.	3.2	105
7	Preclinical evaluation of novel antibacterial agents by microbiological and molecular techniques. Expert Opinion on Investigational Drugs, 2004, 13, 1045-1063.	4.1	104
8	In vivo transfer of high-level mupirocin resistance from Staphylococcus epidermidis to methicillin-resistant Staphylococcus aureus associated with failure of mupirocin prophylaxis. Journal of Antimicrobial Chemotherapy, 2005, 56, 1166-1168.	3.0	101
9	The silver cation (Ag+): antistaphylococcal activity, mode of action and resistance studies. Journal of Antimicrobial Chemotherapy, 2013, 68, 131-138.	3.0	101
10	Target protection as a key antibiotic resistance mechanism. Nature Reviews Microbiology, 2020, 18, 637-648.	28.6	100
11	Staphylococcus aureus SH1000 and 8325-4: comparative genome sequences of key laboratory strains in staphylococcal research. Letters in Applied Microbiology, 2010, 51, 358-361.	2.2	97
12	Antibiotic Resistance ABC-F Proteins: Bringing Target Protection into the Limelight. ACS Infectious Diseases, 2018, 4, 239-246.	3.8	79
13	Increased Mutability of Staphylococci in Biofilms as a Consequence of Oxidative Stress. PLoS ONE, 2012, 7, e47695.	2.5	76
14	The nature of <i>Staphylococcus aureus</i> MurA and MurZ and approaches for detection of peptidoglycan biosynthesis inhibitors. Molecular Microbiology, 2009, 72, 335-343.	2.5	75
15	<i>In Vitro</i> Studies Indicate a High Resistance Potential for the Lantibiotic Nisin in Staphylococcus aureus and Define a Genetic Basis for Nisin Resistance. Antimicrobial Agents and Chemotherapy, 2011, 55, 2362-2368.	3.2	73
16	Anti-staphylococcal activity of indolmycin, a potential topical agent for control of staphylococcal infections. Journal of Antimicrobial Chemotherapy, 2004, 54, 549-552.	3.0	66
17	Transposon library screening for identification of genetic loci participating in intrinsic susceptibility and acquired resistance to antistaphylococcal agents. Journal of Antimicrobial Chemotherapy, 2013, 68, 12-16.	3.0	64
18	Structureâ€“activity relationships of new cyanothiophene inhibitors ofÂthe essential peptidoglycan biosynthesis enzyme MurF. European Journal of Medicinal Chemistry, 2013, 66, 32-45.	5.5	62

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19	Epistasis analysis uncovers hidden antibiotic resistance-associated fitness costs hampering the evolution of MRSA. Genome Biology, 2018, 19, 94.	8.8	43
20	Structural basis of ABCF-mediated resistance to pleuromutilin, lincosamide, and streptogramin A antibiotics in Gram-positive pathogens. Nature Communications, 2021, 12, 3577.	12.8	40
21	The isoleucyl-tRNA synthetase mutation V588F conferring mupirocin resistance in glycopeptide-intermediate Staphylococcus aureus is not associated with a significant fitness burden. Journal of Antimicrobial Chemotherapy, 2003, 53, 102-104.	3.0	39
22	Transient Silencing of Antibiotic Resistance by Mutation Represents a Significant Potential Source of Unanticipated Therapeutic Failure. MBio, 2019, 10, .	4.1	39
23	Analysis of mutational resistance to trimethoprim in Staphylococcus aureus by genetic and structural modelling techniques. Journal of Antimicrobial Chemotherapy, 2009, 63, 1112-1117.	3.0	38
24	Elucidation of the Mode of Action of a New Antibacterial Compound Active against Staphylococcus aureus and Pseudomonas aeruginosa. PLoS ONE, 2016, 11, e0155139.	2.5	30
25	Cryptic silver resistance is prevalent and readily activated in certain Gram-negative pathogens. Journal of Antimicrobial Chemotherapy, 2017, 72, 3043-3046.	3.0	30
26	Redox-active compounds with a history of human use: antistaphylococcal action and potential for repurposing as topical antibiofilm agents. Journal of Antimicrobial Chemotherapy, 2015, 70, 479-488.	3.0	29
27	Activity of and Development of Resistance to Corallopyronin A, an Inhibitor of RNA Polymerase. Antimicrobial Agents and Chemotherapy, 2011, 55, 2413-2416.	3.2	28
28	Intrinsic Novobiocin Resistance in Staphylococcus saprophyticus. Antimicrobial Agents and Chemotherapy, 2007, 51, 4484-4485.	3.2	26
29	Population Diversification in Staphylococcus aureus Biofilms May Promote Dissemination and Persistence. PLoS ONE, 2013, 8, e62513.	2.5	26
30	Design, synthesis and evaluation of second generation MurF inhibitors based on a cyanothiophene scaffold. European Journal of Medicinal Chemistry, 2014, 73, 83-96.	5.5	25
31	Acquired Nisin Resistance in <i>Staphylococcus aureus</i> Involves Constitutive Activation of an Intrinsic Peptide Antibiotic Detoxification Module. MSphere, 2018, 3, .	2.9	25
32	Impaired Alanine Transport or Exposure to d-Cycloserine Increases the Susceptibility of MRSA to Î²-lactam Antibiotics. Journal of Infectious Diseases, 2020, 221, 1000-1016.	4.0	25
33	6-Arylpyrido[2,3-d]pyrimidines as Novel ATP-Competitive Inhibitors of Bacterial D-Alanine:D-Alanine Ligase. PLoS ONE, 2012, 7, e39922.	2.5	21
34	Zinc oxide nanoparticle-coated films: fabrication, characterization, and antibacterial properties. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	20
35	Discovery of the first inhibitors of bacterial enzyme d-aspartate ligase from Enterococcus faecium (Aslfm). European Journal of Medicinal Chemistry, 2013, 67, 208-220.	5.5	19
36	A target-protection mechanism of antibiotic resistance at atomic resolution: insights into FusB-type fusidic acid resistance. Scientific Reports, 2016, 6, 19524.	3.3	19

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37	Revisiting unexploited antibiotics in search of new antibacterial drug candidates: the case of Î³-actinorhodin. Scientific Reports, 2017, 7, 17419.	3.3	19
38	Targeting Multiple Aminoacyl-tRNA Synthetases Overcomes the Resistance Liabilities Associated with Antibacterial Inhibitors Acting on a Single Such Enzyme. Antimicrobial Agents and Chemotherapy, 2016, 60, 6359-6361.	3.2	18
39	Furanyl-Rhodanines Are Unattractive Drug Candidates for Development as Inhibitors of Bacterial RNA Polymerase. Antimicrobial Agents and Chemotherapy, 2010, 54, 4506-4509.	3.2	17
40	Structure-Based Ligand Design of Novel Bacterial RNA Polymerase Inhibitors. ACS Medicinal Chemistry Letters, 2011, 2, 729-734.	2.8	17
41	Identification and characterization of an anti-pseudomonal dichlorocarbazol derivative displaying anti-biofilm activity. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 5404-5408.	2.2	16
42	Structure of the 70S Ribosome from the Human Pathogen Acinetobacter baumannii in Complex with Clinically Relevant Antibiotics. Structure, 2020, 28, 1087-1100.e3.	3.3	16
43	Sal-type ABC-F proteins: intrinsic and common mediators of pleuromutilin resistance by target protection in staphylococci. Nucleic Acids Research, 2022, 50, 2128-2142.	14.5	16
44	<i>N</i>-Leucinyl Benzenesulfonamides as Structurally Simplified Leucyl-tRNA Synthetase Inhibitors. ACS Medicinal Chemistry Letters, 2018, 9, 84-88.	2.8	15
45	Further Characterization ofBacillus subtilisAntibiotic Biosensors and Their Use for Antibacterial Mode-of-Action Studies. Antimicrobial Agents and Chemotherapy, 2011, 55, 1784-1786.	3.2	13
46	â€œ <i>tet</i> (U)â€•Is Not a Tetracycline Resistance Determinant. Antimicrobial Agents and Chemotherapy, 2012, 56, 3378-3379.	3.2	13
47	<i>Tert</i>-butyl benzoquinone: mechanism of biofilm eradication and potential for use as a topical antibiofilm agent. Journal of Antimicrobial Chemotherapy, 2016, 71, 1841-1844.	3.0	11
48	1-((2,4-Dichlorophenethyl)Amino)-3-Phenoxypropan-2-ol Kills Pseudomonas aeruginosa through Extensive Membrane Damage. Frontiers in Microbiology, 2018, 9, 129.	3.5	9
49	Activity-directed expansion of a series of antibacterial agents. Chemical Communications, 2020, 56, 8047-8050.	4.1	9
50	A Polymorphism in <i>leuS</i> Confers Reduced Susceptibility to GSK2251052 in a Clinical Isolate of Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2016, 60, 3219-3221.	3.2	8
51	Creating a framework to align antimicrobial resistance (AMR) research with the global guidance: a viewpoint. Journal of Antimicrobial Chemotherapy, 2022, 77, 2315-2320.	3.0	8
52	Batumin does not exert its antistaphylococcal effect through inhibition of aminoacyl-tRNA synthetase enzymes. International Journal of Antimicrobial Agents, 2017, 49, 121-122.	2.5	6
53	Revisiting unexploited antibiotics in search of new antibacterial drug candidates: the case of MSD-819 (6-chloro-2-quinoxalinecarboxylic acid 1,4-dioxide). Journal of Antibiotics, 2017, 70, 317-319.	2.0	5
54	Mutagenesis Mapping of the Protein-Protein Interaction Underlying FusB-Type Fusidic Acid Resistance. Antimicrobial Agents and Chemotherapy, 2013, 57, 4640-4644.	3.2	4

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55	Potential for repurposing the personal care product preservatives bronopol and bronidox as broad-spectrum antibiofilm agents for topical application. Journal of Antimicrobial Chemotherapy, 2019, 74, 907-911.	3.0	4
56	A platform for detecting cross-resistance in antibacterial drug discovery. Journal of Antimicrobial Chemotherapy, 2021, 76, 1467-1471.	3.0	3
57	Design, synthesis and microbiological evaluation of novel compounds as potential Staphylococcus aureus phenylalanine tRNA synthetase inhibitors. Egyptian Journal of Chemistry, 2018, 61, 0-0.	0.2	2