Xilin Zhao

List of Publications by Year
in descending order

84 papers	6,371 citations	76326 40 h-index	69250 77 g-index
85 all docs	85 docs citations	85 times ranked	5183 citing authors

#	Article	IF	Citations
1	Quinolone-Mediated Bacterial Death. Antimicrobial Agents and Chemotherapy, 2008, 52, 385-392.	3.2	450
2	Restricting the Selection of Antibioticâ€Resistant Mutants: A General Strategy Derived from Fluoroquinolone Studies. Clinical Infectious Diseases, 2001, 33, S147-S156.	5.8	346
3	Mutant Selection Window Hypothesis Updated. Clinical Infectious Diseases, 2007, 44, 681-688.	5.8	345
4	Reactive oxygen species and the bacterial response to lethal stress. Current Opinion in Microbiology, 2014, 21, 1-6.	5.1	305
5	Mutant Prevention Concentrations of Fluoroquinolones for Clinical Isolates of <i>Streptococcus pneumoniae</i>. Antimicrobial Agents and Chemotherapy, 2001, 45, 433-438.	3.2	299
6	Quinolones: Action and Resistance Updated. Current Topics in Medicinal Chemistry, 2009, 9, 981-998.	2.1	292
7	Effect of Fluoroquinolone Concentration on Selection of Resistant Mutants of <i>Mycobacterium bovis</i> BCG and <i>Staphylococcus aureus</i>. Antimicrobial Agents and Chemotherapy, 1999, 43, 1756-1758.	3.2	265
8	Post-stress bacterial cell death mediated by reactive oxygen species. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10064-10071.	7.1	254
9	DNA topoisomerase targets of the fluoroquinolones: A strategy for avoiding bacterialâ€‰resistance. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 13991-13996.	7.1	203
10	Restricting the Selection of Antibioticâ€Resistant Mutant Bacteria: Measurement and Potential Use of the Mutant Selection Window. Journal of Infectious Diseases, 2002, 185, 561-565.	4.0	203
11	Contribution of Oxidative Damage to Antimicrobial Lethality. Antimicrobial Agents and Chemotherapy, 2009, 53, 1395-1402.	3.2	185
12	Selection of Antibioticâ€Resistant Bacterial Mutants: Allelic Diversity among Fluoroquinoloneâ€Resistant Mutations. Journal of Infectious Diseases, 2000, 182, 517-525.	4.0	131
13	Fluoroquinolone Action against Mycobacteria: Effects of C-8 Substituents on Growth, Survival, and Resistance. Antimicrobial Agents and Chemotherapy, 1998, 42, 2978-2984.	3.2	125
14	Mutant Prevention Concentration as a Measure of Antibiotic Potency: Studies with Clinical Isolates of <i>Mycobacterium tuberculosis</i>. Antimicrobial Agents and Chemotherapy, 2000, 44, 2581-2584.	3.2	124
15	Fluoroquinolone-Gyrase-DNA Complexes. Journal of Biological Chemistry, 2014, 289, 12300-12312.	3.4	123
16	Contribution of reactive oxygen species to pathways of quinolone-mediated bacterial cell death. Journal of Antimicrobial Chemotherapy, 2010, 65, 520-524.	3.0	117
17	Lethal fragmentation of bacterial chromosomes mediated by DNA gyrase and quinolones. Molecular Microbiology, 2006, 61, 810-825.	2.5	111
18	Lateral Flow Immunoassay Using Europium Chelate-Loaded Silica Nanoparticles as Labels. Clinical Chemistry, 2009, 55, 179-182.	3.2	110

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19	Fluoroquinoloneâ€ResistantStreptococcus pneumoniaeAssociated with Levofloxacin Therapy. Journal of Infectious Diseases, 2001, 184, 794-798.	4.0	108
20	Selection of <i>Streptococcus pneumoniae</i> Mutants Having Reduced Susceptibility to Moxifloxacin and Levofloxacin. Antimicrobial Agents and Chemotherapy, 2002, 46, 522-524.	3.2	100
21	Emergence of resistant Streptococcus pneumoniae in an in vitro dynamic model that simulates moxifloxacin concentrations inside and outside the mutant selection window: related changes in susceptibility, resistance frequency and bacterial killing. Journal of Antimicrobial Chemotherapy, 2003, 52, 616-622.	3.0	99
22	The Mutant Selection Window in Rabbits Infected withStaphylococcus aureus. Journal of Infectious Diseases, 2006, 194, 1601-1608.	4.0	96
23	Gatifloxacin Activity against Quinolone-Resistant Gyrase: Allele-Specific Enhancement of Bacteriostatic and Bactericidal Activities by the C-8-Methoxy Group. Antimicrobial Agents and Chemotherapy, 1999, 43, 2969-2974.	3.2	94
24	Mutant Prevention Concentration as a Measure of Fluoroquinolone Potency against Mycobacteria. Antimicrobial Agents and Chemotherapy, 2000, 44, 3337-3343.	3.2	90
25	Killing of Staphylococcus aureus by C-8-Methoxy Fluoroquinolones. Antimicrobial Agents and Chemotherapy, 1998, 42, 956-958.	3.2	86
26	Selective Targeting of Topoisomerase IV and DNA Gyrase in Staphylococcus aureus: Different Patterns of Quinolone- Induced Inhibition of DNA Synthesis. Antimicrobial Agents and Chemotherapy, 2000, 44, 2160-2165.	3.2	84
27	Contribution of reactive oxygen species to thymineless death in Escherichia coli. Nature Microbiology, 2017, 2, 1667-1675.	13.3	75
28	YihE Kinase Is a Central Regulator of Programmed Cell Death in Bacteria. Cell Reports, 2013, 3, 528-537.	6.4	68
29	Fluoroquinolone and Quinazolinedione Activities against Wild-Type and Gyrase Mutant Strains of Mycobacterium smegmatis. Antimicrobial Agents and Chemotherapy, 2011, 55, 2335-2343.	3.2	67
30	Inhibitors of Reactive Oxygen Species Accumulation Delay and/or Reduce the Lethality of Several Antistaphylococcal Agents. Antimicrobial Agents and Chemotherapy, 2012, 56, 6048-6050.	3.2	66
31	A unified anti-mutant dosing strategy. Journal of Antimicrobial Chemotherapy, 2008, 62, 434-436.	3.0	65
32	Moving forward with reactive oxygen species involvement in antimicrobial lethality. Journal of Antimicrobial Chemotherapy, 2015, 70, 639-642.	3.0	65
33	Mutant prevention concentration for ciprofloxacin and levofloxacin with Pseudomonas aeruginosa. International Journal of Antimicrobial Agents, 2006, 27, 120-124.	2.5	60
34	Enhancement of Fluoroquinolone Activity by C-8 Halogen and Methoxy Moieties: Action against a Gyrase Resistance Mutant of <i>Mycobacterium smegmatis</i> and a Gyrase-Topoisomerase IV Double Mutant of <i>Staphylococcus aureus</i>. Antimicrobial Agents and Chemotherapy, 2001, 45, 2703-2709.	3.2	55
35	Cytokine storm induced by SARS-CoV-2 infection: The spectrum of its neurological manifestations. Cytokine, 2021, 138, 155404.	3.2	55
36	Superoxide-Mediated Protection of Escherichia coli from Antimicrobials. Antimicrobial Agents and Chemotherapy, 2013, 57, 5755-5759.	3.2	48

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37	Resistance to Levofloxacin and Failure of Treatment of Pneumococcal Pneumonia. New England Journal of Medicine, 2002, 347, 65-67.	27.0	45
38	Escherichia coli genes that reduce the lethal effects of stress. BMC Microbiology, 2010, 10, 35.	3.3	44
39	Mutant Prevention Concentration of Garenoxacin (BMS-284756) for Ciprofloxacin-Susceptible or -Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2003, 47, 1023-1027.	3.2	43
40	Daptomycin inoculum effects and mutant prevention concentration with Staphylococcus aureus. Journal of Antimicrobial Chemotherapy, 2007, 60, 1380-1383.	3.0	43
41	Mutant Prevention Concentration-Based Pharmacokinetic/Pharmacodynamic Indices as Dosing Targets for Suppressing the Enrichment of Levofloxacin-Resistant Subpopulations of Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2011, 55, 2409-2412.	3.2	43
42	Low Correlation between MIC and Mutant Prevention Concentration. Antimicrobial Agents and Chemotherapy, 2006, 50, 403-404.	3.2	42
43	Are the new quinolones appropriate treatment for community-acquired methicillin-resistant Staphylococcus aureus?. International Journal of Antimicrobial Agents, 2004, 24, 32-34.	2.5	38
44	Dimethyl Sulfoxide Protects Escherichia coli from Rapid Antimicrobial-Mediated Killing. Antimicrobial Agents and Chemotherapy, 2016, 60, 5054-5058.	3.2	38
45	Effect of chloramphenicol, erythromycin, moxifloxacin, penicillin and tetracycline concentration on the recovery of resistant mutants of Mycobacterium smegmatis and Staphylococcus aureus. Journal of Antimicrobial Chemotherapy, 2003, 52, 61-64.	3.0	34
46	Reactive oxygen species play a dominant role in all pathways of rapid quinolone-mediated killing. Journal of Antimicrobial Chemotherapy, 2020, 75, 576-585.	3.0	32
47	Resveratrol Antagonizes Antimicrobial Lethality and Stimulates Recovery of Bacterial Mutants. PLoS ONE, 2016, 11, e0153023.	2.5	32
48	Multicolor Combinatorial Probe Coding for Real-Time PCR. PLoS ONE, 2011, 6, e16033.	2.5	31
49	Bacterial death from treatment with fluoroquinolones and other lethal stressors. Expert Review of Anti-Infective Therapy, 2021, 19, 601-618.	4.4	30
50	gyrB-225, a mutation of DNA gyrase that compensates for topoisomerase I deficiency: investigation of its low activity and quinolone hypersensitivity. Journal of Molecular Biology, 2001, 309, 1219-1231.	4.2	29
51	A Toxin-Antitoxin Module in Bacillus subtilis Can Both Mitigate and Amplify Effects of Lethal Stress. PLoS ONE, 2011, 6, e23909.	2.5	29
52	Lethal synergy involving bicyclomycin: an approach for reviving old antibiotics. Journal of Antimicrobial Chemotherapy, 2014, 69, 3227-3235.	3.0	29
53	Emergence of carbapenem resistance in Bacteroides fragilis in China. International Journal of Antimicrobial Agents, 2019, 53, 859-863.	2.5	29
54	Lethality of Quinolones against Mycobacterium smegmatis in the Presence or Absence of Chloramphenicol. Antimicrobial Agents and Chemotherapy, 2005, 49, 2008-2014.	3.2	28

#	ARTICLE	IF	CITATIONS
55	Selection of rifampicin-resistant Staphylococcus aureus during tuberculosis therapy: concurrent bacterial eradication and acquisition of resistance. Journal of Antimicrobial Chemotherapy, 2005, 56, 1172-1175.	3.0	27
56	Ribosomal Elongation Factor 4 Promotes Cell Death Associated with Lethal Stress. MBio, 2014, 5, e01708.	4.1	27
57	Suppression of Reactive Oxygen Species Accumulation Accounts for Paradoxical Bacterial Survival at High Quinolone Concentration. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	26
58	Early stage detection of Staphylococcus epidermidis biofilm formation using MgZnO dual-gate TFT biosensor. Biosensors and Bioelectronics, 2020, 151, 111993.	10.1	25
59	Resistance Rather Than Virulence Selects for the Clonal Spread of Methicillin-Resistant<i>Staphylococcus aureus:</i>Implications for MRSA Transmission. Microbial Drug Resistance, 2000, 6, 239-244.	2.0	24
60	Lethal Action of Quinolones against a Temperature-Sensitive dnaB Replication Mutant of Escherichia coli. Antimicrobial Agents and Chemotherapy, 2006, 50, 362-364.	3.2	24
61	Fluoroquinolones as pneumococcal therapy: closing the barn door before the horse escapes. Lancet Infectious Diseases, The, 2001, 1, 145-146.	9.1	23
62	A broadly applicable, stress-mediated bacterial death pathway regulated by the phosphotransferase system (PTS) and the cAMP-Crp cascade. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	21
63	Suppression of gyrase-mediated resistance by C7 aryl fluoroquinolones. Nucleic Acids Research, 2016, 44, 3304-3316.	14.5	19
64	Gain-of-Function Mutations in Acid Stress Response (<i>evgS</i>) Protect Escherichia coli from Killing by Gallium Nitrate, an Antimicrobial Candidate. Antimicrobial Agents and Chemotherapy, 2021, 65, .	3.2	15
65	Clarification of MPC and the mutant selection window concept. Journal of Antimicrobial Chemotherapy, 2003, 52, 731-731.	3.0	14
66	Induction of Mycobacterial Resistance to Quinolone Class Antimicrobials. Antimicrobial Agents and Chemotherapy, 2012, 56, 3879-3887.	3.2	14
67	Bactericidal activity and target preference of a piperazinyl-cross-linked ciprofloxacin dimer with Staphylococcus aureus and Escherichia coli. Journal of Antimicrobial Chemotherapy, 2006, 58, 1283-1286.	3.0	13
68	Spoligotyping of Mycobacterium tuberculosis Complex Isolates by Use of Ligation-Based Amplification and Melting Curve Analysis. Journal of Clinical Microbiology, 2016, 54, 2384-2387.	3.9	12
69	Minimising moxifloxacin resistance with tuberculosis. Lancet Infectious Diseases, The, 2008, 8, 273-275.	9.1	11
70	Involvement of Holliday Junction Resolvase in Fluoroquinolone-Mediated Killing of Mycobacterium smegmatis. Antimicrobial Agents and Chemotherapy, 2015, 59, 1782-1785.	3.2	9
71	Fluoroquinolone Resistance: Mechanisms, Restrictive Dosing, and Anti-Mutant Screening Strategies for New Compounds. , 2012, , 485-514.		8
72	Mycoplasma pneumoniae infection is associated with subacute cough. European Respiratory Journal, 2014, 43, 1178-1181.	6.7	7

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73	Rapid and dynamic detection of antimicrobial treatment response using spectral amplitude modulation in MZO nanostructure-modified quartz crystal microbalance. Journal of Microbiological Methods, 2020, 178, 106071.	1.6	7
74	MicroPET imaging of bacterial infection with nitroreductase-specific responsive 18F-labelled nitrogen mustard analogues. European Journal of Nuclear Medicine and Molecular Imaging, 2022, 49, 2645-2654.	6.4	7
75	Is â€˜dosing-to-cureâ€™ appropriate in the face of antimicrobial resistance?. Reviews in Medical Microbiology, 2004, 15, 73-80.	0.9	6
76	Fluoroquinolone-resistant Streptococcus pneumoniae. Reviews in Medical Microbiology, 2003, 14, 95-103.	0.9	5
77	<i>In Situ</i> Live Imaging of Gut Microbiota. MSphere, 2021, 6, e0054521.	2.9	5
78	Antimicrobial Studies with the <i>Pseudomonas aeruginosa</i> Two-Allele Library Require Caution. Antimicrobial Agents and Chemotherapy, 2008, 52, 3826-3827.	3.2	4
79	Heteroresistance: A Harbinger of Future Resistance. , 2018, , 269-296.		2
80	Mutant Selection Window Hypothesis: A Framework for Anti-mutant Dosing of Antimicrobial Agents. , 2008, , 101-106.		2
81	An Anti-mutant Approach for Antimicrobial Use. , 2008, , 371-400.		2
82	Cytotoxic Hammerhead Ribozymes. Oligonucleotides, 1999, 9, 117-123.	4.3	0
83	Antimicrobial-Mediated Bacterial Suicide. , 2018, , 619-642.		0
84	Controlling Antibiotic Resistance: Strategies Based on the Mutant Selection Window. , 2004, , 295-331.		0