Alexander A Firsov

List of Publications by Year
in descending order

61 papers	1,421 citations	331670 21 h-index	361022 35 g-index
63 all docs	63 docs citations	63 times ranked	742 citing authors

#	Article	IF	Citations
1	In Vitro Pharmacodynamic Evaluation of the Mutant Selection Window Hypothesis Using Four Fluoroquinolones against Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2003, 47, 1604-1613.	3.2	215
2	Testing the mutant selection window hypothesis with Staphylococcus aureus exposed to daptomycin and vancomycin in an in vitro dynamic model. Journal of Antimicrobial Chemotherapy, 2006, 58, 1185-1192.	3.0	100
3	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
4	Inter- and Intraquinolone Predictors of Antimicrobial Effect in an In Vitro Dynamic Model: New Insight into a Widely Used Concept. Antimicrobial Agents and Chemotherapy, 1998, 42, 659-665.	3.2	65
5	Prediction of the antimicrobial effects of trovafloxacin and ciprofloxacin on staphylococci using an in-vitro dynamic model. Journal of Antimicrobial Chemotherapy, 1999, 43, 483-490.	3.0	61
6	ABT492 and levofloxacin: comparison of their pharmacodynamics and their abilities to prevent the selection of resistant Staphylococcus aureus in an in vitro dynamic model. Journal of Antimicrobial Chemotherapy, 2004, 54, 178-186.	3.0	46
7	A New Approach to In Vitro Comparisons of Antibiotics in Dynamic Models: Equivalent Area under the Curve/MIC Breakpoints and Equiefficient Doses of Trovafloxacin and Ciprofloxacin against Bacteria of Similar Susceptibilities. Antimicrobial Agents and Chemotherapy, 1998, 42, 2841-2847.	3.2	36
8	Prevention of the selection of resistant Staphylococcus aureus by moxifloxacin plus doxycycline in an in vitro dynamic model: an additive effect of the combination. International Journal of Antimicrobial Agents, 2004, 23, 451-456.	2.5	35
9	Enrichment of resistant Staphylococcus aureus at ciprofloxacin concentrations simulated within the mutant selection window: bolus versus continuous infusion. International Journal of Antimicrobial Agents, 2008, 32, 488-493.	2.5	33
10	Bacterial Resistance Studies Using <i>In Vitro</i> Dynamic Models: the Predictive Power of the Mutant Prevention and Minimum Inhibitory Antibiotic Concentrations. Antimicrobial Agents and Chemotherapy, 2013, 57, 4956-4962.	3.2	33
11	Enrichment of Fluoroquinolone-Resistant <i>Staphylococcus aureus</i> : Oscillating Ciprofloxacin Concentrations Simulated at the Upper and Lower Portions of the Mutant Selection Window. Antimicrobial Agents and Chemotherapy, 2008, 52, 1924-1928.	3.2	31
12	Selection of linezolid-resistant Enterococcus faecium in an in vitro dynamic model: protective effect of doxycycline. Journal of Antimicrobial Chemotherapy, 2008, 61, 629-635.	3.0	31
13	Comparative pharmacodynamics of moxifloxacin and levofloxacin in an in vitro dynamic model: prediction of the equivalent AUC/MIC breakpoints and equiefficient doses. Journal of Antimicrobial Chemotherapy, 2000, 46, 725-732.	3.0	30
14	Relationships of the Area under the Curve/MIC Ratio to Different Integral Endpoints of the Antimicrobial Effect: Gemifloxacin Pharmacodynamics in an In Vitro Dynamic Model. Antimicrobial Agents and Chemotherapy, 2001, 45, 927-931.	3.2	26
15	Biodegradable Implants Containing Gentamicin: Drug Release and Pharmacokinetics. Drug Development and Industrial Pharmacy, 1987, 13, 1651-1674.	2.0	25
16	Concentration-dependent changes in the susceptibility and killing of Staphylococcus aureus in an in vitro dynamic model that simulates normal and impaired gatifloxacin elimination. International Journal of Antimicrobial Agents, 2004, 23, 60-66.	2.5	25
17	Prediction of the Effects of Inoculum Size on the Antimicrobial Action of Trovafloxacin and Ciprofloxacin against Staphylococcus aureus and Escherichia coli in an In Vitro Dynamic Model. Antimicrobial Agents and Chemotherapy, 1999, 43, 498-502.	3.2	25
18	Comparative Pharmacodynamics of Gatifloxacin and Ciprofloxacin in an In Vitro Dynamic Model: Prediction of Equiefficient Doses and the Breakpoints of the Area under the Curve/MIC Ratio. Antimicrobial Agents and Chemotherapy, 2000, 44, 879-884.	3.2	24

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19	<i>In Vitro</i> Resistance Studies with Bacteria That Exhibit Low Mutation Frequencies: Prediction of â€œAntimutantâ€•Linezolid Concentrations Using a Mixed Inoculum Containing both Susceptible and Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2015, 59, 1014-1019.	3.2	23
20	Antistaphylococcal Effect Related to the Area under the Curve/MIC Ratio in an In Vitro Dynamic Model: Predicted Breakpoints versus Clinically Achievable Values for Seven Fluoroquinolones. Antimicrobial Agents and Chemotherapy, 2005, 49, 2642-2647.	3.2	22
21	MIC-Based Interspecies Prediction of the Antimicrobial Effects of Ciprofloxacin on Bacteria of Different Susceptibilities in an In Vitro Dynamic Model. Antimicrobial Agents and Chemotherapy, 1998, 42, 2848-2852.	3.2	21
22	Predicting bacterial resistance using the time inside the mutant selection window: Possibilities and limitations. International Journal of Antimicrobial Agents, 2014, 44, 301-305.	2.5	21
23	Synthesis and Antibacterial Activity of Quaternary Ammonium 4-Deoxypyridoxine Derivatives. BioMed Research International, 2016, 2016, 1-8.	1.9	21
24	Time inside the mutant selection window as a predictor of staphylococcal resistance to linezolid. Journal of Antibiotics, 2018, 71, 514-521.	2.0	20
25	AUC/MIC relationships to different endpoints of the antimicrobial effect: multiple-dose in vitro simulations with moxifloxacin and levofloxacin. Journal of Antimicrobial Chemotherapy, 2002, 50, 533-539.	3.0	19
26	Concentration-resistance relationships with Pseudomonas aeruginosa exposed to doripenem and ciprofloxacin in an in vitro model. Journal of Antimicrobial Chemotherapy, 2013, 68, 881-887.	3.0	19
27	Predictors of bacterial resistance using<i>in vitro</i>dynamic models: area under the concentrationâ€"time curve related to either the minimum inhibitory or mutant prevention antibiotic concentration. Journal of Antimicrobial Chemotherapy, 2016, 71, 678-684.	3.0	19
28	The impact of duration of antibiotic exposure on bacterial resistance predictions using in vitro dynamic models. Journal of Antimicrobial Chemotherapy, 2009, 64, 815-820.	3.0	17
29	Use of modeling techniques to aid in antibiotic selection. Current Infectious Disease Reports, 2001, 3, 35-43.	3.0	15
30	Telavancin and vancomycin pharmacodynamics with Staphylococcus aureus in an in vitro dynamic model. Journal of Antimicrobial Chemotherapy, 2008, 62, 1065-1069.	3.0	15
31	Searching for the Optimal Predictor of Ciprofloxacin Resistance in Klebsiella pneumoniae by Using <i>In Vitro</i> Dynamic Models. Antimicrobial Agents and Chemotherapy, 2016, 60, 1208-1215.	3.2	15
32	Testing the mutant selection window hypothesis with Staphylococcus aureus exposed to linezolid in an in vitro dynamic model. Journal of Antimicrobial Chemotherapy, 2017, 72, 3100-3107.	3.0	15
33	Pharmacokinetically-based prediction of the effects of antibiotic combinations on resistant Staphylococcus aureus mutants: in vitro model studies with linezolid and rifampicin. Journal of Chemotherapy, 2017, 29, 220-226.	1.5	15
34	Gemifloxacin and ciprofloxacin pharmacodynamics in an in-vitro dynamic model: prediction of the equivalent AUC/MIC breakpoints and doses. International Journal of Antimicrobial Agents, 2000, 16, 407-414.	2.5	14
35	Comparative pharmacodynamics of the new fluoroquinolone ABT492 and ciprofloxacin with Escherichia coli and Pseudomonas aeruginosa in an in vitro dynamic model. International Journal of Antimicrobial Agents, 2004, 24, 173-177.	2.5	13
36	Comparative pharmacodynamics of azithromycin and roxithromycin with S. pyogenes and S. pneumoniae in a model that simulates in vitro pharmacokinetics in human tonsils. Journal of Antimicrobial Chemotherapy, 2002, 49, 113-119.	3.0	12

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37	Linezolid pharmacodynamics with Staphylococcus aureus in an in vitro dynamic model. International Journal of Antimicrobial Agents, 2009, 33, 251-254.	2.5	11
38	Predicting antibiotic combination effects on the selection of resistant Staphylococcus aureus: In vitro model studies with linezolid and gentamicin. International Journal of Antimicrobial Agents, 2018, 52, 854-860.	2.5	11
39	Validation of Optimal Ampicillin/Sulbactam Ratio in Dosage Forms Using In-Vitro Dynamic Model. Drug Development and Industrial Pharmacy, 1988, 14, 2425-2442.	2.0	10
40	Simulated in vitro Quinolone Pharmacodynamics at Clinically Achievable AUC/MIC Ratios: Advantage of <i>I</i>_E over Other Integral Parameters. Chemotherapy, 2002, 48, 275-279.	1.6	10
41	Comparative pharmacodynamics of the new fluoroquinolone ABT492 and levofloxacin with Streptococcus pneumoniae in an in vitro dynamic model. International Journal of Antimicrobial Agents, 2005, 25, 409-413.	2.5	9
42	Comparative Pharmacodynamics and Antimutant Potentials of Doripenem and Imipenem with Ciprofloxacin-Resistant Pseudomonas aeruginosa in an <i>In Vitro</i> Model. Antimicrobial Agents and Chemotherapy, 2012, 56, 1223-1228.	3.2	9
43	Bacterial antibiotic resistance studies using in vitro dynamic models: Population analysis vs. susceptibility testing as endpoints of mutant enrichment. International Journal of Antimicrobial Agents, 2015, 46, 313-318.	2.5	7
44	A novel parameter to predict the effects of antibiotic combinations on the development of Staphylococcus aureus resistance: in vitro model studies at subtherapeutic daptomycin and rifampicin exposures. Journal of Chemotherapy, 2019, 31, 320-328.	1.5	7
45	Predicting effects of antibiotic combinations using MICs determined at pharmacokinetically derived concentration ratios:in vitromodel studies with linezolid- and rifampicin-exposedStaphylococcus aureus. Journal of Chemotherapy, 2017, 29, 267-273.	1.5	6
46	Species differences in ciprofloxacin resistance among Gram-negative bacteria: can â€œanti-mutantâ€• ratios of the area under the concentrationâ€“time curve to the MIC be achieved clinically?. Journal of Chemotherapy, 2017, 29, 351-357.	1.5	6
47	Resistance studies with Streptococcus pneumoniae using an in vitro dynamic model: amoxicillin versus azithromycin at clinical exposures. Journal of Chemotherapy, 2019, 31, 252-260.	1.5	6
48	In Vitro Dynamic Models as Tools to Predict Antibiotic Pharmacodynamics. Infectious Disease and Therapy, 2007, , 45-78.	0.0	6
49	Comparative pharmacodynamics of telithromycin and clarithromycin with and in an in vitro dynamic model: focus on clinically achievable antibiotic concentrations. International Journal of Antimicrobial Agents, 2005, 26, 197-204.	2.5	5
50	In vitro dynamic model for determining the comparative pharmacology of fluoroquinolones. American Journal of Health-System Pharmacy, 1999, 56, S12-S15.	1.0	4
51	Bacterial strain-independent AUC/MIC and strain-specific doseâ€“response relationships reflecting comparative fluoroquinolone anti-pseudomonal pharmacodynamics in an in vitro dynamic model. International Journal of Antimicrobial Agents, 2002, 20, 44-49.	2.5	4
52	Concentrationâ€“response relationships as a basis for choice of the optimal endpoints of the antimicrobial effect: daptomycin and vancomycin pharmacodynamics with staphylococci in an in vitro dynamic model. International Journal of Antimicrobial Agents, 2007, 29, 165-169.	2.5	4
53	Concentration-dependent enrichment of resistant Enterococcus faecium exposed to linezolid in an in vitro dynamic model. Journal of Chemotherapy, 2018, 30, 364-370.	1.5	4
54	Predicting the antistaphylococcal effects of daptomycinâ€“rifampicin combinations in an in vitro dynamic model. Journal of Antibiotics, 2020, 73, 101-107.	2.0	4

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55	Verification of a Novel Approach to Predicting Effects of Antibiotic Combinations: In Vitro Dynamic Model Study with Daptomycin and Gentamicin against Staphylococcus aureus. Antibiotics, 2020, 9, 538.	3.7	4
56	Comparative anti-staphylococcal effects of gemifloxacin and trovafloxacin in an in vitro dynamic model in terms of AUC/MIC and dose relationships. Diagnostic Microbiology and Infectious Disease, 2001, 40, 167-171.	1.8	3
57	Species-independent pharmacodynamics of gemifloxacin and ciprofloxacin with Haemophilus influenzae and Moraxella catarrhalis in an in vitro dynamic model. International Journal of Antimicrobial Agents, 2002, 20, 201-205.	2.5	3
58	Anti-mutant efficacy of antibiotic combinations: <i>in vitro</i> model studies with linezolid and daptomycin. Journal of Antimicrobial Chemotherapy, 2021, 76, 1832-1839.	3.0	2
59	PK/PD-Based Prediction of â€œAnti-Mutantâ€•Antibiotic Exposures Using In Vitro Dynamic Models. , 2018, , 643-666.		2
60	Antibiotic pharmacodynamics and bacterial resistance: Usefulness of in vitro models. Current Infectious Disease Reports, 2007, 9, 175-177.	3.0	1
61	MPC-Based Prediction of Anti-Mutant Effectiveness of Antibiotic Combinations: In Vitro Model Study with Daptomycin and Gentamicin against Staphylococcus aureus. Antibiotics, 2021, 10, 1148.	3.7	1