Larry Mark Fisher

List of Publications by Citations

47 papers	2,462 citations	27 h-index	49 g-index
52 ext. papers	2,673 ext. citations	10.3 avg, IF	4.46 L-index

#	Paper	IF	Citations
47	Structural insight into the quinolone-DNA cleavage complex of type IIA topoisomerases. *Nature Structural and Molecular Biology*, **2009**, 16, 667-9	17.6	214
46	Mycobacterium tuberculosis DNA gyrase: interaction with quinolones and correlation with antimycobacterial drug activity. *Antimicrobial Agents and Chemotherapy*, **2004**, 48, 1281-8	5.9	189
45	DNA gyrase and topoisomerase IV are dual targets of clinafloxacin action in Streptococcus pneumoniae. *Antimicrobial Agents and Chemotherapy*, **1998**, 42, 2810-6	5.9	185
44	Novel gyrase mutations in quinolone-resistant and -hypersusceptible clinical isolates of Mycobacterium tuberculosis: functional analysis of mutant enzymes. *Antimicrobial Agents and Chemotherapy*, **2006**, 50, 104-12	5.9	160
43	Structural basis of gate-DNA breakage and resealing by type II topoisomerases. *PLoS ONE*, **2010**, 5, e11338	3.7	127
42	Streptococcus pneumoniae DNA gyrase and topoisomerase IV: overexpression, purification, and differential inhibition by fluoroquinolones. *Antimicrobial Agents and Chemotherapy*, **1999**, 43, 1129-36	5.9	109
41	DNase I hypersensitive sites in the chromatin of human mu immunoglobulin heavy-chain genes. *Nature*, **1983**, 306, 809-12	50.4	108
40	Engineering the specificity of antibacterial fluoroquinolones: benzenesulfonamide modifications at C-7 of ciprofloxacin change its primary target in Streptococcus pneumoniae from topoisomerase IV to gyrase. *Antimicrobial Agents and Chemotherapy*, **2000**, 44, 320-5	5.9	87
39	Interaction of bleomycin A2 with deoxyribonucleic acid: DNA unwinding and inhibition of bleomycin-induced DNA breakage by cationic thiazole amides related to bleomycin A2. *Biochemistry*, **1985**, 24, 3199-207	3.2	83
38	Expression, domain structure, and enzymatic properties of an active recombinant human DNA topoisomerase II beta. *Journal of Biological Chemistry*, **1995**, 270, 15739-46	5.4	81
37	Probing the differential interactions of quinazolinedione PD 0305970 and quinolones with gyrase and topoisomerase IV. *Antimicrobial Agents and Chemotherapy*, **2009**, 53, 3822-31	5.9	74
36	First functional characterization of a singly expressed bacterial type II topoisomerase: the enzyme from Mycobacterium tuberculosis. *Biochemical and Biophysical Research Communications*, **2006**, 348, 158-65	3.4	69
35	Potent antipneumococcal activity of gemifloxacin is associated with dual targeting of gyrase and topoisomerase IV, an in vivo target preference for gyrase, and enhanced stabilization of cleavable complexes in vitro. *Antimicrobial Agents and Chemotherapy*, **2000**, 44, 3112-7	5.9	69
34	Target specificity of the new fluoroquinolone besifloxacin in Streptococcus pneumoniae, Staphylococcus aureus and Escherichia coli. *Journal of Antimicrobial Chemotherapy*, **2009**, 63, 443-50	5.1	60
33	Quinolone resistance mutations in Streptococcus pneumoniae GyrA and ParC proteins: mechanistic insights into quinolone action from enzymatic analysis, intracellular levels, and phenotypes of wild-type and mutant proteins. *Antimicrobial Agents and Chemotherapy*, **2001**, 45, 3140-7	5.9	56
32	Complementation of temperature-sensitive topoisomerase II mutations in Saccharomyces cerevisiae by a human TOP2 beta construct allows the study of topoisomerase II beta inhibitors in yeast. *Cancer Chemotherapy and Pharmacology*, **1997**, 39, 367-75	3.5	52
31	Energetics of proline racemase: racemization of unlabeled proline in the unsaturated, saturated, and oversaturated regimes. *Biochemistry*, **1986**, 25, 2529-37	3.2	51

30	Cleavable-complex formation by wild-type and quinolone-resistant Streptococcus pneumoniae type II topoisomerases mediated by gemifloxacin and other fluoroquinolones. *Antimicrobial Agents and Chemotherapy*, **2002**, 46, 413-9	5.9	47
29	Small-colony mutants of Staphylococcus aureus allow selection of gyrase-mediated resistance to dual-target fluoroquinolones. *Antimicrobial Agents and Chemotherapy*, **2002**, 46, 2498-506	5.9	42
28	Structure of an [open[clamp type II topoisomerase-DNA complex provides a mechanism for DNA capture and transport. *Nucleic Acids Research*, **2013**, 41, 9911-23	20.1	41
27	Identification of yeast DNA topoisomerase II mutants resistant to the antitumor drug doxorubicin: implications for the mechanisms of doxorubicin action and cytotoxicity. *Molecular Pharmacology*, **1997**, 52, 658-66	4.3	41
26	Novel symmetric and asymmetric DNA scission determinants for Streptococcus pneumoniae topoisomerase IV and gyrase are clustered at the DNA breakage site. *Journal of Biological Chemistry*, **2005**, 280, 14252-63	5.4	36
25	Activity of gemifloxacin against penicillin- and ciprofloxacin-resistant Streptococcus pneumoniae displaying topoisomerase- and efflux-mediated resistance mechanisms. *Antimicrobial Agents and Chemotherapy*, **1999**, 43, 2998-3000	5.9	32
24	Energetics of proline racemase: tracer perturbation experiments using [14C]proline that measure the interconversion rate of the two forms of free enzyme. *Biochemistry*, **1986**, 25, 2538-42	3.2	30
23	Breakage-reunion domain of Streptococcus pneumoniae topoisomerase IV: crystal structure of a gram-positive quinolone target. *PLoS ONE*, **2007**, 2, e301	3.7	29
22	Energetics of proline racemase: transition-state fractionation factors for the two protons involved in the catalytic steps. *Biochemistry*, **1986**, 25, 2543-51	3.2	28
21	Methods to assay inhibitors of DNA gyrase and topoisomerase IV activities. *Methods in Molecular Medicine*, **2008**, 142, 11-23		25
20	Ciprofloxacin dimers target gyrase in Streptococcus pneumoniae. *Antimicrobial Agents and Chemotherapy*, **2004**, 48, 2108-15	5.9	22
19	Probing the interaction of the cytotoxic bisdioxopiperazine ICRF-193 with the closed enzyme clamp of human topoisomerase IIalpha. *Molecular Pharmacology*, **2000**, 58, 560-8	4.3	20
18	Energetics of proline racemase: rates, fractionation factors, and buffer catalysis in the oversaturated region. Nature of the interconversion of the two forms of free enzyme. *Biochemistry*, **1986**, 25, 2564-71	3.2	20
17	Energetics of triosephosphate isomerase: the nature of the proton transfer between the catalytic base and solvent water. *Biochemistry*, **1976**, 15, 5621-6	3.2	20
16	Dual activity of fluoroquinolones against Streptococcus pneumoniae. *Journal of Antimicrobial Chemotherapy*, **2003**, 51, 463-4; author reply 464-5	5.1	19
15	Mutations at arg486 and glu571 in human topoisomerase IIalpha confer resistance to amsacrine: relevance for antitumor drug resistance in human cells. *Molecular Pharmacology*, **2000**, 57, 784-91	4.3	17
14	Structure of a quinolone-stabilized cleavage complex of topoisomerase IV from Klebsiella pneumoniae and comparison with a related Streptococcus pneumoniae complex. *Acta Crystallographica Section D: Structural Biology*, **2016**, 72, 488-96	5.5	16
13	Molecular cloning and expression of the Candida albicans TOP2 gene allows study of fungal DNA topoisomerase II inhibitors in yeast. *Biochemical Journal*, **1997**, 324 (Pt 1), 329-39	3.8	16

12	Functional determinants of gate-DNA selection and cleavage by bacterial type II topoisomerases. *Nucleic Acids Research*, **2013**, 41, 9411-23	20.1	14
11	Hot-spot consensus of fluoroquinolone-mediated DNA cleavage by Gram-negative and Gram-positive type II DNA topoisomerases. *Nucleic Acids Research*, **2007**, 35, 6075-85	20.1	14
10	Topoisomerase Inhibitors Addressing Fluoroquinolone Resistance in Gram-Negative Bacteria. *Journal of Medicinal Chemistry*, **2020**, 63, 7773-7816	8.3	13
9	Clerocidin selectively modifies the gyrase-DNA gate to induce irreversible and reversible DNA damage. *Nucleic Acids Research*, **2008**, 36, 5516-29	20.1	13
8	Exploring the active site of the Streptococcus pneumoniae topoisomerase IV-DNA cleavage complex with novel 7,8-bridged fluoroquinolones. *Open Biology*, **2016**, 6,	7	12
7	Trapping of the transport-segment DNA by the ATPase domains of a type II topoisomerase. *Nature Communications*, **2018**, 9, 2579	17.4	12
6	Grepafloxacin, a dimethyl derivative of ciprofloxacin, acts preferentially through gyrase in Streptococcus pneumoniae: role of the C-5 group in target specificity. *Antimicrobial Agents and Chemotherapy*, **2002**, 46, 582-5	5.9	11
5	Analysis of dual active fluoroquinolones in Streptococcus pneumoniae. *Journal of Antimicrobial Chemotherapy*, **2003**, 52, 312-3; author reply 313-4	5.1	10
4	Clerocidin interacts with the cleavage complex of Streptococcus pneumoniae topoisomerase IV to induce selective irreversible DNA damage. *Nucleic Acids Research*, **2006**, 34, 1982-91	20.1	9
3	Biochemical and immunological characterization of mammalian DNA topoisomerase II. *Biochemical Society Transactions*, **1989**, 17, 528-529	5.1	6
2	Discovery and Optimization of DNA Gyrase and Topoisomerase IV Inhibitors with Potent Activity against Fluoroquinolone-Resistant Gram-Positive Bacteria. *Journal of Medicinal Chemistry*, **2021**, 64, 6329-6357	8.3	4
1	The difficult case of crystallization and structure solution for the ParC55 breakage-reunion domain of topoisomerase IV from Streptococcus pneumoniae. *PLoS ONE*, **2008**, 3, e3201	3.7	2