Larry Mark Fisher

List of Publications by Year
in descending order

51 papers	2,918 citations	186209 28 h-index	175177 52 g-index
52 all docs	52 docs citations	52 times ranked	2203 citing authors

#	Article	IF	Citations
1	Structural insight into the quinoloneâ€“DNA cleavage complex of type IIA topoisomerases. Nature Structural and Molecular Biology, 2009, 16, 667-669.	3.6	246
2	Mycobacterium tuberculosis DNA Gyrase: Interaction with Quinolones and Correlation with Antimycobacterial Drug Activity. Antimicrobial Agents and Chemotherapy, 2004, 48, 1281-1288.	1.4	217
3	DNA Gyrase and Topoisomerase IV Are Dual Targets of Clinafloxacin Action in Streptococcus pneumoniae. Antimicrobial Agents and Chemotherapy, 1998, 42, 2810-2816.	1.4	206
4	Novel Gyrase Mutations in Quinolone-Resistant and -Hypersusceptible Clinical Isolates of Mycobacterium tuberculosis : Functional Analysis of Mutant Enzymes. Antimicrobial Agents and Chemotherapy, 2006, 50, 104-112.	1.4	176
5	Structural Basis of Gate-DNA Breakage and Resealing by Type II Topoisomerases. PLoS ONE, 2010, 5, e11338.	1.1	148
6	DNase I hypersensitive sites in the chromatin of human Î¼ immunoglobulin heavy-chain genes. Nature, 1983, 306, 809-812.	13.7	120
7	Streptococcus pneumoniae DNA Gyrase and Topoisomerase IV: Overexpression, Purification, and Differential Inhibition by Fluoroquinolones. Antimicrobial Agents and Chemotherapy, 1999, 43, 1129-1136.	1.4	120
8	Expression, Domain Structure, and Enzymatic Properties of an Active Recombinant Human DNA Topoisomerase IIÎ². Journal of Biological Chemistry, 1995, 270, 15739-15746.	1.6	117
9	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, 3199-3207.	1.2	104
10	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, 320-325.	1.4	102
11	First functional characterization of a singly expressed bacterial type II topoisomerase: The enzyme from Mycobacterium tuberculosis. Biochemical and Biophysical Research Communications, 2006, 348, 158-165.	1.0	87
12	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, 3112-3117.	1.4	82
13	Probing the Differential Interactions of Quinazolinedione PD 0305970 and Quinolones with Gyrase and Topoisomerase IV. Antimicrobial Agents and Chemotherapy, 2009, 53, 3822-3831.	1.4	82
14	Target specificity of the new fluoroquinolone besifloxacin in Streptococcus pneumoniae, Staphylococcus aureus and Escherichia coli. Journal of Antimicrobial Chemotherapy, 2009, 63, 443-450.	1.3	70
15	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, 3140-3147.	1.4	67
16	Complementation of temperature-sensitive topoisomerase II mutations in Saccharomyces cerevisiae by a human TOP2? construct allows the study of topoisomerase II? inhibitors in yeast.. Cancer Chemotherapy and Pharmacology, 1997, 39, 367-375.	1.1	63
17	Energetics of proline racemase: racemization of unlabeled proline in the unsaturated, saturated, and oversaturated regimes. Biochemistry, 1986, 25, 2529-2537.	1.2	59
18	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, 413-419.	1.4	52

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19	Structure of an â€˜openâ€™ clamp type II topoisomerase-DNA complex provides a mechanism for DNA capture and transport. Nucleic Acids Research, 2013, 41, 9911-9923.	6.5	51
20	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, 658-666.	1.0	47
21	Small-Colony Mutants of Staphylococcus aureus Allow Selection of Gyrase-Mediated Resistance to Dual-Target Fluoroquinolones. Antimicrobial Agents and Chemotherapy, 2002, 46, 2498-2506.	1.4	45
22	Genetics: DNA supercoiling and gene expression. Nature, 1984, 307, 686-687.	13.7	42
23	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, 14252-14263.	1.6	39
24	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.	1.4	38
25	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, 2538-2542.	1.2	35
26	Energetics of proline racemase: transition-state fractionation factors for the two protons involved in the catalytic steps. Biochemistry, 1986, 25, 2543-2551.	1.2	34
27	Methods to Assay Inhibitors of DNA Gyrase and Topoisomerase IV Activities. Methods in Molecular Medicine, 2008, 142, 11-23.	0.8	32
28	Breakage-Reunion Domain of Streptococcus pneumoniae Topoisomerase IV: Crystal Structure of a Gram-Positive Quinolone Target. PLoS ONE, 2007, 2, e301.	1.1	31
29	Structure of a quinolone-stabilized cleavage complex of topoisomerase IV fromKlebsiella pneumoniaeand comparison with a relatedStreptococcus pneumoniaecomplex. Acta Crystallographica Section D: Structural Biology, 2016, 72, 488-496.	1.1	28
30	Energetics of triosephosphate isomerase: the nature of the proton transfer between the catalytic base and solvent water. Biochemistry, 1976, 15, 5621-5626.	1.2	25
31	Probing the Interaction of the Cytotoxic Bisdioxopiperazine ICRF-193 with the Closed Enzyme Clamp of Human Topoisomerase IIÎ±. Molecular Pharmacology, 2000, 58, 560-568.	1.0	25
32	Dual activity of fluoroquinolones against Streptococcus pneumoniae. Journal of Antimicrobial Chemotherapy, 2003, 51, 463-464.	1.3	25
33	Ciprofloxacin Dimers Target Gyrase in Streptococcus pneumoniae. Antimicrobial Agents and Chemotherapy, 2004, 48, 2108-2115.	1.4	25
34	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, 2564-2571.	1.2	24
35	Topoisomerase Inhibitors Addressing Fluoroquinolone Resistance in Gram-Negative Bacteria. Journal of Medicinal Chemistry, 2020, 63, 7773-7816.	2.9	24
36	Mutations at Arg486 and Glu571 in Human Topoisomerase IIÎ± Confer Resistance to Amsacrine: Relevance for Antitumor Drug Resistance in Human Cells. Molecular Pharmacology, 2000, 57, 784-791.	1.0	20

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37	Hot-spot consensus of fluoroquinolone-mediated DNA cleavage by Gram-negative and Gram-positive type II DNA topoisomerases. Nucleic Acids Research, 2007, 35, 6075-6085.	6.5	19
38	Exploring the active site of the Streptococcus pneumoniae topoisomerase IVâ€“DNA cleavage complex with novel 7,8-bridged fluoroquinolones. Open Biology, 2016, 6, 160157.	1.5	19
39	Trapping of the transport-segment DNA by the ATPase domains of a type II topoisomerase. Nature Communications, 2018, 9, 2579.	5.8	19
40	Functional determinants of gate-DNA selection and cleavage by bacterial type II topoisomerases. Nucleic Acids Research, 2013, 41, 9411-9423.	6.5	18
41	Molecular cloning and expression of the Candida albicans TOP2 gene allows study of fungal DNA topoisomerase II inhibitors in yeast. Biochemical Journal, 1997, 324, 329-339.	1.7	16
42	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, 582-585.	1.4	14
43	Clerocidin selectively modifies the gyrase-DNA gate to induce irreversible and reversible DNA damage. Nucleic Acids Research, 2008, 36, 5516-5529.	6.5	14
44	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.	2.9	14
45	DNA supercoiling by DNA gyrase. Nature, 1981, 294, 607-608.	13.7	12
46	Analysis of dual active fluoroquinolones in Streptococcus pneumoniae. Journal of Antimicrobial Chemotherapy, 2003, 52, 312-313.	1.3	11
47	DNA unwinding in transcription and recombination. Nature, 1982, 299, 105-106.	13.7	9
48	Clerocidin interacts with the cleavage complex of Streptococcus pneumoniae topoisomerase IV to induce selective irreversible DNA damage. Nucleic Acids Research, 2006, 34, 1982-1991.	6.5	9
49	Biochemical and immunological characterization of mammalian DNA topoisomerase II. Biochemical Society Transactions, 1989, 17, 528-529.	1.6	8
50	The nature of the proton transfer from an acid group at the active site of an enzyme, to solvent water. The extent of 2H and 3H transfer in the reaction catalysed by triose phosphate isomerase. Faraday Symposia of the Chemical Society, 1975, 10, 154.	0.5	3
51	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.	1.1	2