Robert J Kerns

List of Publications by Citations

37 papers	2,049 citations	17 h-index	38 g-index
38 ext. papers	2,433 ext. citations	5.4 avg, IF	5.01 L-index

#	Paper	IF	Citations
37	Mechanism of quinolone action and resistance. *Biochemistry*, **2014**, 53, 1565-74	3.2	632
36	Quinolone-mediated bacterial death. *Antimicrobial Agents and Chemotherapy*, **2008**, 52, 385-92	5.9	374
35	Quinolones: action and resistance updated. *Current Topics in Medicinal Chemistry*, **2009**, 9, 981-98	3	236
34	Crystal structure and stability of gyrase-fluoroquinolone cleaved complexes from Mycobacterium tuberculosis. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 1706-13	11.5	112
33	Topoisomerase IV-quinolone interactions are mediated through a water-metal ion bridge: mechanistic basis of quinolone resistance. *Nucleic Acids Research*, **2013**, 41, 4628-39	20.1	97
32	Structural features of piperazinyl-linked ciprofloxacin dimers required for activity against drug-resistant strains of Staphylococcus aureus. *Bioorganic and Medicinal Chemistry Letters*, **2003**, 13, 2109-12	2.9	69
31	Drug interactions with Bacillus anthracis topoisomerase IV: biochemical basis for quinolone action and resistance. *Biochemistry*, **2012**, 51, 370-81	3.2	61
30	Fluoroquinolone interactions with Mycobacterium tuberculosis gyrase: Enhancing drug activity against wild-type and resistant gyrase. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E839-46	11.5	56
29	Overcoming target-mediated quinolone resistance in topoisomerase IV by introducing metal-ion-independent drug-enzyme interactions. *ACS Chemical Biology*, **2013**, 8, 2660-8	4.9	50
28	Piperazinyl-linked fluoroquinolone dimers possessing potent antibacterial activity against drug-resistant strains of Staphylococcus aureus. *Bioorganic and Medicinal Chemistry Letters*, **2003**, 13, 1745-9	2.9	48
27	Bypassing fluoroquinolone resistance with quinazolinediones: studies of drug-gyrase-DNA complexes having implications for drug design. *ACS Chemical Biology*, **2014**, 9, 2895-904	4.9	33
26	Role of the water-metal ion bridge in mediating interactions between quinolones and Escherichia coli topoisomerase IV. *Biochemistry*, **2014**, 53, 5558-67	3.2	32
25	A mitochondrial-targeted coenzyme q analog prevents weight gain and ameliorates hepatic dysfunction in high-fat-fed mice. *Journal of Pharmacology and Experimental Therapeutics*, **2014**, 351, 699-708	4.7	30
24	Lethal synergy involving bicyclomycin: an approach for reviving old antibiotics. *Journal of Antimicrobial Chemotherapy*, **2014**, 69, 3227-35	5.1	21
23	Effect of a mitochondrial-targeted coenzyme Q analog on pancreatic β-cell function and energetics in high fat fed obese mice. *Pharmacology Research and Perspectives*, **2018**, 6, e00393	3.1	20
22	Activity of quinolone CP-115,955 against bacterial and human type II topoisomerases is mediated by different interactions. *Biochemistry*, **2015**, 54, 1278-86	3.2	18
21	Metabolic effects of a mitochondrial-targeted coenzyme Q analog in high fat fed obese mice. *Pharmacology Research and Perspectives*, **2017**, 5, e00301	3.1	17

20	N-Arylacyl O-sulfonated aminoglycosides as novel inhibitors of human neutrophil elastase, cathepsin G and proteinase 3. *Glycobiology*, **2016**, 26, 701-709	5.8	17
19	Suppression of gyrase-mediated resistance by C7 aryl fluoroquinolones. *Nucleic Acids Research*, **2016**, 44, 3304-16	20.1	16
18	A Novel Triphenylphosphonium Carrier to Target Mitochondria without Uncoupling Oxidative Phosphorylation. *Journal of Medicinal Chemistry*, **2021**, 64, 662-676	8.3	14
17	Design, synthesis, and evaluation of novel N-1 fluoroquinolone derivatives: Probing for binding contact with the active site tyrosine of gyrase. *Bioorganic and Medicinal Chemistry Letters*, **2018**, 28, 1903-1910	2.9	13
16	Effect of mitoquinone (Mito-Q) on neuropathic endpoints in an obese and type 2 diabetic rat model. *Free Radical Research*, **2020**, 54, 311-318	4	11
15	Interactions between Quinolones and Bacillus anthracis Gyrase and the Basis of Drug Resistance. *Biochemistry*, **2017**, 56, 4191-4200	3.2	10
14	Susceptibility studies of piperazinyl-cross-linked fluoroquinolone dimers against test strains of Gram-positive and Gram-negative bacteria. *Diagnostic Microbiology and Infectious Disease*, **2006**, 54, 305-10	2.9	9
13	Bacillus anthracis GrlAV96A topoisomerase IV, a quinolone resistance mutation that does not affect the water-metal ion bridge. *Antimicrobial Agents and Chemotherapy*, **2014**, 58, 7182-7	5.9	8
12	Bacterial Type II Topoisomerases and Target-Mediated Drug Resistance **2018**, 507-529		8
11	Probing structural requirements for human topoisomerase I inhibition by a novel N1-Biphenyl fluoroquinolone. *European Journal of Medicinal Chemistry*, **2019**, 172, 109-130	6.8	5
10	Synthetic Methods To Incorporate Linked 2-Amino-2-Deoxy-D-Glucopyranoside and 2-Amino-2-Deoxy-D-Galactopyranoside Residues into Glycoconjugate Structures. *ACS Symposium Series*, **2012**, 235-263	0.4	5
9	Selective N-Sulfation of Glucosamine Derivatives using Phenyl Chlorosulfate in Non-Aqueous Solvent. *Synthetic Communications*, **1996**, 26, 2671-2680	1.7	5
8	Fluoroquinolones stimulate the DNA cleavage activity of topoisomerase IV by promoting the binding of Mg(2+) to the second metal binding site. *Biochimica Et Biophysica Acta - General Subjects*, **2016**, 1860, 569-75	4	4
7	Synthetic Methods to Incorporate Linked 2-Amino-2-Deoxy-D-Glucopyranoside and 2-Amino-2-Deoxy-D-Galactopyranoside Residues into Glycoconjugate Structures. *ACS Symposium Series*, **2006**, 205-236	0.4	4
6	The C7-aminomethylpyrrolidine group rescues the activity of a thio-fluoroquinolone. *Biochimie*, **2019**, 160, 24-27	4.6	4
5	Fluoroquinolone Resistance **2019**, 125-161		2
4	Novel N-1 substituted fluoroquinolones inhibit human topoisomerase I activity and exhibit anti-proliferative activity. *Investigational New Drugs*, **2019**, 37, 378-383	4.3	2
3	Identification of an ethyl 5,6-dihydropyrazolo[1,5-c]quinazoline-1-carboxylate as a catalytic inhibitor of DNA gyrase. *Bioorganic and Medicinal Chemistry*, **2020**, 28, 115439	3.4	2

2	Small molecule SWELL1 complex induction improves glycemic control and nonalcoholic fatty liver disease in murine Type 2 diabetes.. *Nature Communications*, **2022**, 13, 784	17.4	1
1	Suppression of human T cell activation by derivatives of glycerol monolaurate. *Scientific Reports*, **2021**, 11, 8943	4.9	1