# Robert J Kerns

List of Publications by Year
in descending order



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|---|---|---|---|
| 36 papers | 2,740 citations | 394421 19 h-index | 345221 36 g-index |
| 38 all docs | 38 docs citations | 38 times ranked | 3582 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Mechanism of Quinolone Action and Resistance. Biochemistry, 2014, 53, 1565-1574. | 2.5 | 889 |
| 2 | Quinolone-Mediated Bacterial Death. Antimicrobial Agents and Chemotherapy, 2008, 52, 385-392. | 3.2 | 450 |
| 3 | Quinolones: Action and Resistance Updated. Current Topics in Medicinal Chemistry, 2009, 9, 981-998. | 2.1 | 292 |
| 4 | Crystal structure and stability of gyraseâ€“fluoroquinolone cleaved complexes from Mycobacterium tuberculosis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1706-1713. | 7.1 | 164 |
| 5 | Topoisomerase IV-quinolone interactions are mediated through a water-metal ion bridge: mechanistic basis of quinolone resistance. Nucleic Acids Research, 2013, 41, 4628-4639. | 14.5 | 130 |
| 6 | Drug Interactions with Bacillus anthracis Topoisomerase IV: Biochemical Basis for Quinolone Action and Resistance. Biochemistry, 2012, 51, 370-381. | 2.5 | 79 |
| 7 | Structural features of piperazinyl-linked ciprofloxacin dimers required for activity against drug-resistant strains of Staphylococcus aureus. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 2109-2112. | 2.2 | 78 |
| 8 | 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. | 7.1 | 73 |
| 9 | Overcoming Target-Mediated Quinolone Resistance in Topoisomerase IV by Introducing Metal-Ion-Independent Drugâ€“Enzyme Interactions. ACS Chemical Biology, 2013, 8, 2660-2668. | 3.4 | 59 |
| 10 | Piperazinyl-linked fluoroquinolone dimers possessing potent antibacterial activity against drug-resistant strains of Staphylococcus aureus. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 1745-1749. | 2.2 | 51 |
| 11 | A Novel Triphenylphosphonium Carrier to Target Mitochondria without Uncoupling Oxidative Phosphorylation. Journal of Medicinal Chemistry, 2021, 64, 662-676. | 6.4 | 50 |
| 12 | A Mitochondrial-Targeted Coenzyme Q Analog Prevents Weight Gain and Ameliorates Hepatic Dysfunction in High-Fatâ€“Fed Mice. Journal of Pharmacology and Experimental Therapeutics, 2014, 351, 699-708. | 2.5 | 39 |
| 13 | Bypassing Fluoroquinolone Resistance with Quinazolinediones: Studies of Drugâ€“Gyraseâ€“DNA Complexes Having Implications for Drug Design. ACS Chemical Biology, 2014, 9, 2895-2904. | 3.4 | 38 |
| 14 | Role of the Waterâ€“Metal Ion Bridge in Mediating Interactions between Quinolones and Escherichia coli Topoisomerase IV. Biochemistry, 2014, 53, 5558-5567. | 2.5 | 38 |
| 15 | Lethal synergy involving bicyclomycin: an approach for reviving old antibiotics. Journal of Antimicrobial Chemotherapy, 2014, 69, 3227-3235. | 3.0 | 29 |
| 16 | Effect of a mitochondrialâ€targeted coenzyme Q analog on pancreatic Î²â€cell function and energetics in high fat fed obese mice. Pharmacology Research and Perspectives, 2018, 6, e00393. | 2.4 | 26 |
| 17 | N-ArylacylO-sulfonated aminoglycosides as novel inhibitors of human neutrophil elastase, cathepsin G and proteinase 3. Glycobiology, 2016, 26, 701-709. | 2.5 | 25 |
| 18 | Activity of Quinolone CP-115,955 Against Bacterial and Human Type II Topoisomerases Is Mediated by Different Interactions. Biochemistry, 2015, 54, 1278-1286. | 2.5 | 22 |

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|---|---|---|---|
| 19 | Metabolic effects of a mitochondrial-targeted coenzyme Q analog in high fat fed obese mice. Pharmacology Research and Perspectives, 2017, 5, e00301. | 2.4 | 22 |
| 20 | Suppression of gyrase-mediated resistance by C7 aryl fluoroquinolones. Nucleic Acids Research, 2016, 44, 3304-3316. | 14.5 | 19 |
| 21 | Effect of mitoquinone (Mito-Q) on neuropathic endpoints in an obese and type 2 diabetic rat model. Free Radical Research, 2020, 54, 311-318. | 3.3 | 19 |
| 22 | Small molecule SWELL1 complex induction improves glycemic control and nonalcoholic fatty liver disease in murine Type 2 diabetes. Nature Communications, 2022, 13, 784. | 12.8 | 19 |
| 23 | 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. | 2.2 | 17 |
| 24 | Interactions between Quinolones and Bacillus anthracis Gyrase and the Basis of Drug Resistance. Biochemistry, 2017, 56, 4191-4200. | 2.5 | 16 |
| 25 | Bacterial Type II Topoisomerases and Target-Mediated Drug Resistance. , 2018, , 507-529. | | 13 |
| 26 | Bacillus anthracis GrlA <sup>V96A</sup> Topoisomerase IV, a Quinolone Resistance Mutation That Does Not Affect the Water-Metal Ion Bridge. Antimicrobial Agents and Chemotherapy, 2014, 58, 7182-7187. | 3.2 | 10 |
| 27 | Susceptibility studies of piperazinylâ€“cross-linked fluoroquinolone dimers against test strains of Gram-positive and Gram-negative bacteria. Diagnostic Microbiology and Infectious Disease, 2006, 54, 305-310. | 1.8 | 9 |
| 28 | Probing structural requirements for human topoisomerase I inhibition by a novel N1-Biphenyl fluoroquinolone. European Journal of Medicinal Chemistry, 2019, 172, 109-130. | 5.5 | 9 |
| 29 | 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. | 3.0 | 8 |
| 30 | Synthetic Methods To Incorporate Î±-Linked 2-Amino-2-Deoxy-D-Glucopyranoside and 2-Amino-2-Deoxy-D-Galactopyranoside Residues into Glycoconjugate Structures. ACS Symposium Series, 2012, , 235-263. | 0.5 | 7 |
| 31 | Suppression of human T cell activation by derivatives of glycerol monolaurate. Scientific Reports, 2021, 11, 8943. | 3.3 | 7 |
| 32 | SelectiveN-Sulfation of Glucosamine Derivatives using Phenyl Chlorosulfate in Non-Aqueous Solvent. Synthetic Communications, 1996, 26, 2671-2680. | 2.1 | 6 |
| 33 | Fluoroquinolones stimulate the DNA cleavage activity of topoisomerase IV by promoting the binding of Mg2+ to the second metal binding site. Biochimica Et Biophysica Acta - General Subjects, 2016, 1860, 569-575. | 2.4 | 6 |
| 34 | Synthetic Methods to Incorporate Î±-Linked 2-Amino-2-Deoxy-D-Glucopyranoside and 2-Amino-2-Deoxy-D-Galactopyranoside Residues into Glycoconjugate Structures. ACS Symposium Series, 2006, , 205-236. | 0.5 | 5 |
| 35 | The C7-aminomethylpyrrolidine group rescues the activity of a thio-fluoroquinolone. Biochimie, 2019, 160, 24-27. | 2.6 | 5 |
| 36 | Novel N-1 substituted fluoroquinolones inhibit human topoisomerase I activity and exhibit anti-proliferative activity. Investigational New Drugs, 2019, 37, 378-383. | 2.6 | 5 |