Richard A Slayden

List of Publications by Citations

83 papers	4,429 citations	35 h-index	66 g-index
92 ext. papers	4,884 ext. citations	5.8 avg, IF	4.95 L-index

#	Paper	IF	Citations
83	Mycolic acids: structure, biosynthesis and physiological functions. *Progress in Lipid Research*, **1998**, 37, 143-79	14.3	437
82	Inhibition of a Mycobacterium tuberculosis beta-ketoacyl ACP synthase by isoniazid. *Science*, **1998**, 280, 1607-10	33.3	354
81	Biogenesis of the mycobacterial cell wall and the site of action of ethambutol. *Antimicrobial Agents and Chemotherapy*, **1995**, 39, 2484-9	5.9	238
80	High affinity InhA inhibitors with activity against drug-resistant strains of Mycobacterium tuberculosis. *ACS Chemical Biology*, **2006**, 1, 43-53	4.9	210
79	Combinatorial lead optimization of [1,2]-diamines based on ethambutol as potential antituberculosis preclinical candidates. *ACS Combinatorial Science*, **2003**, 5, 172-87		172
78	Hypoxic response of Mycobacterium tuberculosis studied by metabolic labeling and proteome analysis of cellular and extracellular proteins. *Journal of Bacteriology*, **2002**, 184, 3485-91	3.5	157
77	The genetics and biochemistry of isoniazid resistance in mycobacterium tuberculosis. *Microbes and Infection*, **2000**, 2, 659-69	9.3	151
76	Antimycobacterial action of thiolactomycin: an inhibitor of fatty acid and mycolic acid synthesis. *Antimicrobial Agents and Chemotherapy*, **1996**, 40, 2813-9	5.9	131
75	Isoniazid affects multiple components of the type II fatty acid synthase system of Mycobacterium tuberculosis. *Molecular Microbiology*, **2000**, 38, 514-25	4.1	126
74	Novel trisubstituted benzimidazoles, targeting Mtb FtsZ, as a new class of antitubercular agents. *Journal of Medicinal Chemistry*, **2011**, 54, 374-81	8.3	125
73	Unique mechanism of action of the thiourea drug isoxyl on Mycobacterium tuberculosis. *Journal of Biological Chemistry*, **2003**, 278, 53123-30	5.4	121
72	Use of genomics and combinatorial chemistry in the development of new antimycobacterial drugs. *Biochemical Pharmacology*, **2000**, 59, 221-31	6	107
71	Menaquinone synthesis is critical for maintaining mycobacterial viability during exponential growth and recovery from non-replicating persistence. *Molecular Microbiology*, **2009**, 72, 85-97	4.1	106
70	Slow-onset inhibition of the FabI enoyl reductase from francisella tularensis: residence time and in vivo activity. *ACS Chemical Biology*, **2009**, 4, 221-31	4.9	98
69	Targeting FtsZ for antituberculosis drug discovery: noncytotoxic taxanes as novel antituberculosis agents. *Journal of Medicinal Chemistry*, **2006**, 49, 463-6	8.3	95
68	Identification of the apparent carrier in mycolic acid synthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **1994**, 91, 12735-9	11.5	86
67	Disease state differentiation and identification of tuberculosis biomarkers via native antigen array profiling. *Molecular and Cellular Proteomics*, **2006**, 5, 2102-13	7.6	84

66	Synthesis and SAR studies of 1,4-benzoxazine MenB inhibitors: novel antibacterial agents against Mycobacterium tuberculosis. *Bioorganic and Medicinal Chemistry Letters*, **2010**, 20, 6306-9	2.9	74
65	A point mutation in the mma3 gene is responsible for impaired methoxymycolic acid production in Mycobacterium bovis BCG strains obtained after 1927. *Journal of Bacteriology*, **2000**, 182, 3394-9	3.5	74
64	Identification of cell cycle regulators in Mycobacterium tuberculosis by inhibition of septum formation and global transcriptional analysis. *Microbiology (United Kingdom)*, **2006**, 152, 1789-1797	2.9	73
63	The role of KasA and KasB in the biosynthesis of meromycolic acids and isoniazid resistance in Mycobacterium tuberculosis. *Tuberculosis*, **2002**, 82, 149-60	2.6	72
62	Discovery of anti-TB agents that target the cell-division protein FtsZ. *Future Medicinal Chemistry*, **2010**, 2, 1305-23	4.1	66
61	Synthesis and in vitro antimycobacterial activity of B-ring modified diaryl ether InhA inhibitors. *Bioorganic and Medicinal Chemistry Letters*, **2008**, 18, 3029-33	2.9	64
60	FtsZ: a novel target for tuberculosis drug discovery. *Current Topics in Medicinal Chemistry*, **2007**, 7, 527-43	3	57
59	SAR studies on trisubstituted benzimidazoles as inhibitors of Mtb FtsZ for the development of novel antitubercular agents. *Journal of Medicinal Chemistry*, **2013**, 56, 9756-70	8.3	55
58	Targeting fatty acid biosynthesis for the development of novel chemotherapeutics against Mycobacterium tuberculosis: evaluation of A-ring-modified diphenyl ethers as high-affinity InhA inhibitors. *Antimicrobial Agents and Chemotherapy*, **2007**, 51, 3562-7	5.9	48
57	Cell wall structure of a mutant of Mycobacterium smegmatis defective in the biosynthesis of mycolic acids. *Journal of Biological Chemistry*, **2000**, 275, 7224-9	5.4	48
56	Analysis of the Lipids of Mycobacterium tuberculosis. *Methods in Molecular Medicine*, **2001**, 54, 229-45		43
55	Time-dependent diaryl ether inhibitors of InhA: structure-activity relationship studies of enzyme inhibition, antibacterial activity, and in vivo efficacy. *ChemMedChem*, **2014**, 9, 776-91	3.7	40
54	Toxin-antitoxin systems and regulatory mechanisms in Mycobacterium tuberculosis. *Pathogens and Disease*, **2018**, 76,	4.2	39
53	Rational design of broad spectrum antibacterial activity based on a clinically relevant enoyl-acyl carrier protein (ACP) reductase inhibitor. *Journal of Biological Chemistry*, **2014**, 289, 15987-6005	5.4	39
52	CoA Adducts of 4-Oxo-4-Phenylbut-2-enoates: Inhibitors of MenB from the M. tuberculosis Menaquinone Biosynthesis Pathway. *ACS Medicinal Chemistry Letters*, **2011**, 2, 818-823	4.3	38
51	Evaluating the Contribution of Transition-State Destabilization to Changes in the Residence Time of Triazole-Based InhA Inhibitors. *Journal of the American Chemical Society*, **2017**, 139, 3417-3429	16.4	37
50	Development of modern InhA inhibitors to combat drug resistant strains of Mycobacterium tuberculosis. *Current Topics in Medicinal Chemistry*, **2007**, 7, 489-98	3	37
49	Design, synthesis and evaluation of novel 2,5,6-trisubstituted benzimidazoles targeting FtsZ as antitubercular agents. *Bioorganic and Medicinal Chemistry*, **2014**, 22, 2602-12	3.4	35

48	Implications of high level pseudogene transcription in Mycobacterium leprae. *BMC Genomics*, **2009**, 10, 397	4.5	32
47	A specific interaction of small molecule entry inhibitors with the envelope glycoprotein complex of the Junín hemorrhagic fever arenavirus. *Journal of Biological Chemistry*, **2011**, 286, 6192-200	5.4	32
46	Immune response to Mycobacterium tuberculosis and identification of molecular markers of disease. *American Journal of Respiratory Cell and Molecular Biology*, **2009**, 40, 398-409	5.7	31
45	Benzimidazole-based antibacterial agents against Francisella tularensis. *Bioorganic and Medicinal Chemistry*, **2013**, 21, 3318-26	3.4	28
44	Mycobacterium tuberculosis septum site determining protein, Ssd encoded by rv3660c, promotes filamentation and elicits an alternative metabolic and dormancy stress response. *BMC Microbiology*, **2011**, 11, 79	4.5	27
43	Substituted diphenyl ethers as a broad-spectrum platform for the development of chemotherapeutics for the treatment of tularaemia. *Journal of Antimicrobial Chemotherapy*, **2009**, 64, 1052-61	5.1	27
42	Characterizing septum inhibition in Mycobacterium tuberculosis for novel drug discovery. *Tuberculosis*, **2008**, 88, 420-9	2.6	25
41	Thermal and Photoinduced Copper-Promoted C-Se Bond Formation: Synthesis of 2-Alkyl-1,2-benzisoselenazol-3(2H)-ones and Evaluation against Mycobacterium tuberculosis. *Journal of Organic Chemistry*, **2017**, 82, 3844-3854	4.2	24
40	Synthesis and evaluation of new 2-aminothiophenes against Mycobacterium tuberculosis. *Organic and Biomolecular Chemistry*, **2016**, 14, 6119-6133	3.9	24
39	The ly49 gene family. A brief guide to the nomenclature, genetics, and role in intracellular infection. *Frontiers in Immunology*, **2013**, 4, 90	8.4	23
38	Updating and curating metabolic pathways of TB. *Tuberculosis*, **2013**, 93, 47-59	2.6	22
37	Morphological features and signature gene response elicited by inactivation of FtsI in Mycobacterium tuberculosis. *Journal of Antimicrobial Chemotherapy*, **2009**, 63, 451-7	5.1	22
36	Discovery, synthesis, and biological evaluation of piperidinol analogs with anti-tuberculosis activity. *Bioorganic and Medicinal Chemistry*, **2009**, 17, 3588-94	3.4	22
35	Mechanism and inhibition of the FabI enoyl-ACP reductase from Burkholderia pseudomallei. *Journal of Antimicrobial Chemotherapy*, **2011**, 66, 564-73	5.1	22
34	Thiolactomycin-Based Inhibitors of Bacterial β-Ketoacyl-ACP Synthases with in Vivo Activity. *Journal of Medicinal Chemistry*, **2016**, 59, 5377-90	8.3	22
33	In vitro-in´vivo activity relationship of substituted benzimidazole cell division inhibitors with activity against Mycobacterium tuberculosis. *Tuberculosis*, **2014**, 94, 271-6	2.6	21
32	Mechanisms of isoniazid resistance in Mycobacterium tuberculosis. *Drug Resistance Updates*, **1998**, 1, 128-34	23.2	20
31	Isothermal amplification and molecular typing of the obligate intracellular pathogen Mycobacterium leprae isolated from tissues of unknown origins. *Journal of Clinical Microbiology*, **2006**, 44, 1502-8	9.7	20

30	Use of protein microarrays to define the humoral immune response in leprosy patients and identification of disease-state-specific antigenic profiles. *Infection and Immunity*, **2006**, 74, 6458-66	3.7	20
29	Rational design of a new antibiotic class for drug-resistant infections. *Nature*, **2021**, 597, 698-702	50.4	20
28	Cell division inhibitors with efficacy equivalent to isoniazid in the acute murine Mycobacterium tuberculosis infection model. *Journal of Antimicrobial Chemotherapy*, **2015**, 70, 3070-3	5.1	18
27	A trisubstituted benzimidazole cell division inhibitor with efficacy against Mycobacterium tuberculosis. *PLoS ONE*, **2014**, 9, e93953	3.7	18
26	The Francisella tularensis FabI enoyl-acyl carrier protein reductase gene is essential to bacterial viability and is expressed during infection. *Journal of Bacteriology*, **2013**, 195, 351-8	3.5	18
25	MazF6 toxin of Mycobacterium tuberculosis demonstrates antitoxin specificity and is coupled to regulation of cell growth by a Soj-like protein. *BMC Microbiology*, **2013**, 13, 240	4.5	13
24	Genetic identification of unique immunological responses in mice infected with virulent and attenuated Francisella tularensis. *Microbes and Infection*, **2011**, 13, 261-75	9.3	13
23	Transient In Vivo Resistance Mechanisms of Burkholderia pseudomallei to Ceftazidime and Molecular Markers for Monitoring Treatment Response. *PLoS Neglected Tropical Diseases*, **2017**, 11, e0005209	4.8	12
22	Substituted diphenyl ethers as a novel chemotherapeutic platform against Burkholderia pseudomallei. *Antimicrobial Agents and Chemotherapy*, **2014**, 58, 1646-51	5.9	12
21	The Burkholderia pseudomallei enoyl-acyl carrier protein reductase FabI1 is essential for in vivo growth and is the target of a novel chemotherapeutic with efficacy. *Antimicrobial Agents and Chemotherapy*, **2014**, 58, 931-5	5.9	12
20	Immune Modulation as an Effective Adjunct Post-exposure Therapeutic for B. pseudomallei. *PLoS Neglected Tropical Diseases*, **2016**, 10, e0005065	4.8	12
19	Waveguide biosensor with integrated detector array for tuberculosis testing. *Applied Physics Letters*, **2011**, 98, 013702	3.4	11
18	Iterative feature removal yields highly discriminative pathways. *BMC Genomics*, **2013**, 14, 832	4.5	9
17	Adeno-associated virus gene therapy vector scAAVIGF-I for transduction of equine articular chondrocytes and RNA-seq analysis. *Osteoarthritis and Cartilage*, **2016**, 24, 902-11	6.2	8
16	Anomaly Detection in Host Signaling Pathways for the Early Prognosis of Acute Infection. *PLoS ONE* , **2016**, 11, e0160919	3.7	7
15	Rationalizing the Binding Kinetics for the Inhibition of the Burkholderia pseudomallei FabI1 Enoyl-ACP Reductase. *Biochemistry*, **2017**, 56, 1865-1878	3.2	5
14	MadR1, a Mycobacterium tuberculosis cell cycle stress response protein that is a member of a widely conserved protein class of prokaryotic, eukaryotic and archeal origin. *Tuberculosis*, **2015**, 95, 251-8	2.6	4
13	Formulation studies of InhA inhibitors and combination therapy to improve efficacy against Mycobacterium tuberculosis. *Tuberculosis*, **2016**, 101, 8-14	2.6	4

12	Detection of virus-like nanoparticles via scattering using a chip-scale optical biosensor. *Applied Physics Letters*, **2012**, 101, 161111	3.4	3
11	Optimization of TopoIV Potency, ADMET Properties, and hERG Inhibition of 5-Amino-1,3-dioxane-Linked Novel Bacterial Topoisomerase Inhibitors: Identification of a Lead with Efficacy against MRSA. *Journal of Medicinal Chemistry*, **2021**, 64, 15214-15249	8.3	3
10	Structure-activity relationship studies on 2,5,6-trisubstituted benzimidazoles targeting -FtsZ as antitubercular agents. *RSC Medicinal Chemistry*, **2021**, 12, 78-94	3.5	3
9	Manganese exposure in juvenile C57BL/6 mice increases glial inflammatory responses in the substantia nigra following infection with H1N1 influenza virus. *PLoS ONE*, **2021**, 16, e0245171	3.7	3
8	Application of Genomics to the Discovery of New Drugs Against Tuberculosis **2003**, 111-133		2
7	TPR1, a novel rifampicin derivative, demonstrates efficacy alone and in combination with doxycycline against the NIAID Category A priority pathogen. *JAC-Antimicrobial Resistance*, **2021**, 3, dlab058	2.9	1
6	A Novel Glucocorticoid and Androgen Receptor Modulator Reduces Viral Entry and Innate Immune Inflammatory Responses in the Syrian Hamster Model of SARS-CoV-2 Infection.. *Frontiers in Immunology*, **2022**, 13, 811430	8.4	1
5	Improved non-redundant species screening panels for benchmarking the performance of new investigational antibacterial candidates against Category A and B priority pathogens.. *JAC-Antimicrobial Resistance*, **2022**, 4, dlac028	2.9	0
4	Targeting the Enoyl-Reductase Enzyme (FabI): Modern Drug Discovery Effects to Combat Tularemia. *FASEB Journal*, **2008**, 22, 791.6	0.9	
3	Residence Time and in vivo Antibacterial Activity - A Critical Aspect of Lead Compound Optimization. *FASEB Journal*, **2010**, 24, 680.3	0.9	
2	SAR Studies of Diphenyl Ethers, Potential Anti-tuberculosis Drugs as InhA Inhibitors. *FASEB Journal*, **2010**, 24, 907.11	0.9	
1	Slow Onset Inhibitors of Bacterial Fatty Acid Biosynthesis: Residence Time, In Vivo Activity and In Vivo Imaging. *FASEB Journal*, **2010**, 24, 71.3	0.9	