Catherine Vilcheze

List of Publications by Year
in descending order

78	6,583	66343	79698
papers	citations	42 h-index	73 g-index

79	79	79	7142
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sterilization by Adaptive Immunity of a Conditionally Persistent Mutant of Mycobacterium tuberculosis. MBio, 2021, 12, .	4.1	1
2	The Promises and Limitations of N -Acetylcysteine as a Potentiator of First-Line and Second-Line Tuberculosis Drugs. Antimicrobial Agents and Chemotherapy, 2021, 65, .	3.2	7
3	Elimination of PknL and MSMEG_4242 in Mycobacterium smegmatis alters the character of the outer cell envelope and selects for mutations in Lsr2. Cell Surface, 2021, 7, 100060.	3.0	3
4	Characterization of Large Deletion Mutants of Mycobacterium tuberculosis Selected for Isoniazid Resistance. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	3
5	3-(Phenethylamino)demethyl(oxy)aaptamine as an anti-dormant mycobacterial substance: Isolation, evaluation and total synthesis. Tetrahedron Letters, 2020, 61, 151924.	1.4	11
6	Mycobacterial Cell Wall: A Source of Successful Targets for Old and New Drugs. Applied Sciences (Switzerland), 2020, 10, 2278.	2.5	44
7	The Isoniazid Paradigm of Killing, Resistance, and Persistence in Mycobacterium tuberculosis. Journal of Molecular Biology, 2019, 431, 3450-3461.	4.2	98
8	Small Molecules Targeting Mycobacterium tuberculosis Type II NADH Dehydrogenase Exhibit Antimycobacterial Activity. Angewandte Chemie, 2018, 130, 3536-3540.	2.0	6
9	Plasticity of Mycobacterium tuberculosis NADH dehydrogenases and their role in virulence. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1599-1604.	7.1	58
10	Small Molecules Targeting Mycobacterium tuberculosis Type II NADH Dehydrogenase Exhibit Antimycobacterial Activity. Angewandte Chemie - International Edition, 2018, 57, 3478-3482.	13.8	42
11	Vitamin C Potentiates the Killing of Mycobacterium tuberculosis by the First-Line Tuberculosis Drugs Isoniazid and Rifampin in Mice. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	39
12	Reply to Yew et al., â€œVitamin C and Mycobacterium tuberculosis Persistersâ€• Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	0
13	Rational Design of Biosafety Level 2-Approved, Multidrug-Resistant Strains of Mycobacterium tuberculosis through Nutrient Auxotrophy. MBio, 2018, 9, .	4.1	50
14	Arginine-deprivationâ€“induced oxidative damage sterilizes Mycobacterium tuberculosis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9779-9784.	7.1	97
15	Enhanced respiration prevents drug tolerance and drug resistance in Mycobacterium tuberculosis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4495-4500.	7.1	157
16	Defining a temporal order of genetic requirements for development of mycobacterial biofilms. Molecular Microbiology, 2017, 105, 794-809.	2.5	48
17	Acid-Fast Positive and Acid-Fast Negative Mycobacterium tuberculosis : The Koch Paradox. Microbiology Spectrum, 2017, 5, .	3.0	53
18	Addressing the Metabolic Stability of Antituberculars through Machine Learning. ACS Medicinal Chemistry Letters, 2017, 8, 1099-1104.	2.8	13

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19	Determinants of the Inhibition of DprE1 and CYP2C9 by Antitubercular Thiophenes. Angewandte Chemie, 2017, 129, 13191-13195.	2.0	1
20	Determinants of the Inhibition of DprE1 and CYP2C9 by Antitubercular Thiophenes. Angewandte Chemie - International Edition, 2017, 56, 13011-13015.	13.8	36
21	Deletion of a dehydratase important for intracellular growth and cording renders rough Mycobacterium abscessus avirulent. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4228-37.	7.1	67
22	Dual-Reporter Mycobacteriophages (Î¦ ² DRMs) Reveal Preexisting Mycobacterium tuberculosis Persistent Cells in Human Sputum. MBio, 2016, 7, .	4.1	67
23	Targeting Mycobacterium tuberculosis Tumor Necrosis Factor Alpha-Downregulating Genes for the Development of Antituberculous Vaccines. MBio, 2016, 7, .	4.1	52
24	Separable roles for Mycobacterium tuberculosis ESX-3 effectors in iron acquisition and virulence. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E348-57.	7.1	166
25	Synthesis and biological activity of alkynoic acids derivatives against mycobacteria. Chemistry and Physics of Lipids, 2016, 194, 125-138.	3.2	4
26	The Complete Genome Sequence of the Emerging Pathogen Mycobacterium haemophilum Explains Its Unique Culture Requirements. MBio, 2015, 6, e01313-15.	4.1	30
27	Evolution of a thienopyrimidine antitubercular relying on medicinal chemistry and metabolomics insights. Tetrahedron Letters, 2015, 56, 3246-3250.	1.4	27
28	Auranofin exerts broad-spectrum bactericidal activities by targeting thiol-redox homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4453-4458.	7.1	259
29	Succinate Dehydrogenase is the Regulator of Respiration in Mycobacterium tuberculosis. PLoS Pathogens, 2014, 10, e1004510.	4.7	87
30	Phosphorylation of KasB Regulates Virulence and Acid-Fastness in Mycobacterium tuberculosis. PLoS Pathogens, 2014, 10, e1004115.	4.7	63
31	Energetics of Respiration and Oxidative Phosphorylation in Mycobacteria. Microbiology Spectrum, 2014, 2, .	3.0	164
32	Measurements of the in vitro anti-mycobacterial activity of ivermectin are method-dependent--authors' response. Journal of Antimicrobial Chemotherapy, 2014, 69, 1725-1726.	3.0	0
33	Enhanced Specialized Transduction Using Recombineering in Mycobacterium tuberculosis. MBio, 2014, 5, e01179-14.	4.1	25
34	Measurements of the in vitro anti-mycobacterial activity of ivermectin are method-dependent. Journal of Antimicrobial Chemotherapy, 2014, 69, 1723-1724.	3.0	4
35	Biological Evaluation of Potent Triclosanâ€Derived Inhibitors of the Enoylâ€“Acyl Carrier Protein Reductase InhA in Drugâ€Sensitive and Drugâ€Resistant Strains of Mycobacterium tuberculosis. ChemMedChem, 2014, 9, 2528-2537.	3.2	26
36	Resistance to Isoniazid and Ethionamide in Mycobacterium tuberculosis : Genes, Mutations, and Causalities. Microbiology Spectrum, 2014, 2, MGM2-0014-2013.	3.0	204

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37	Anthelmintic Avermectins Kill Mycobacterium tuberculosis, Including Multidrug-Resistant Clinical Strains. Antimicrobial Agents and Chemotherapy, 2013, 57, 1040-1046.	3.2	114
38	Mycobacterium tuberculosis is extraordinarily sensitive to killing by a vitamin C-induced Fenton reaction. Nature Communications, 2013, 4, 1881.	12.8	261
39	Antituberculosis thiophenes define a requirement for Pks13 in mycolic acid biosynthesis. Nature Chemical Biology, 2013, 9, 499-506.	8.0	129
40	Keto-Mycolic Acid-Dependent Pellicle Formation Confers Tolerance to Drug-Sensitive Mycobacterium tuberculosis. MBio, 2013, 4, e00222-13.	4.1	103
41	The Combination of Sulfamethoxazole, Trimethoprim, and Isoniazid or Rifampin Is Bactericidal and Prevents the Emergence of Drug Resistance in Mycobacterium tuberculosis. Antimicrobial Agents and Chemotherapy, 2012, 56, 5142-5148.	3.2	58
42	Einstein Contained Aerosol Pulmonizer (ECAP): Improved Biosafety for Multi-Drug Resistant (MDR) and Extensively Drug Resistant (XDR)Mycobacterium tuberculosisAerosol Infection Studies. Applied Biosafety, 2011, 16, 134-138.	0.5	4
43	Novel Inhibitors of InhA Efficiently Kill Mycobacterium tuberculosis under Aerobic and Anaerobic Conditions. Antimicrobial Agents and Chemotherapy, 2011, 55, 3889-3898.	3.2	60
44	Coresistance to Isoniazid and Ethionamide Maps to Mycothiol Biosynthetic Genes in Mycobacterium bovis. Antimicrobial Agents and Chemotherapy, 2011, 55, 4422-4423.	3.2	31
45	Precise Null Deletion Mutations of the Mycothiol Synthesis Genes Reveal Their Role in Isoniazid and Ethionamide Resistance in Mycobacterium smegmatis. Antimicrobial Agents and Chemotherapy, 2011, 55, 3133-3139.	3.2	44
46	Trichoderins, novel aminolipopeptides from a marine sponge-derived Trichoderma sp., are active against dormant mycobacteria. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 3658-3663.	2.2	146
47	NAD⁺ auxotrophy is bacteriocidal for the tubercle bacilli. Molecular Microbiology, 2010, 76, 365-377.	2.5	49
48	Phosphorylation of InhA inhibits mycolic acid biosynthesis and growth of Mycobacterium tuberculosis. Molecular Microbiology, 2010, 78, 1591-1605.	2.5	60
49	Mutually Exclusive Genotypes for Pyrazinamide and 5-Chloropyrazinamide Resistance Reveal a Potential Resistance-Proofing Strategy. Antimicrobial Agents and Chemotherapy, 2010, 54, 5323-5328.	3.2	23
50	Mycobacterium tuberculosis Dihydrofolate Reductase Is Not a Target Relevant to the Antitubercular Activity of Isoniazid. Antimicrobial Agents and Chemotherapy, 2010, 54, 3776-3782.	3.2	67
51	An Anaerobic-Type Î±-Ketoglutarate Ferredoxin Oxidoreductase Completes the Oxidative Tricarboxylic Acid Cycle of Mycobacterium tuberculosis. PLoS Pathogens, 2009, 5, e1000662.	4.7	70
52	Triclosan Derivatives: Towards Potent Inhibitors of Drugâ€Sensitive and Drugâ€Resistant Mycobacterium tuberculosis. ChemMedChem, 2009, 4, 241-248.	3.2	130
53	Halicyclamine A, a marine spongean alkaloid as a lead for anti-tuberculosis agent. Bioorganic and Medicinal Chemistry, 2008, 16, 6732-6736.	3.0	58
54	Mycothiol biosynthesis is essential for ethionamide susceptibility in Mycobacterium tuberculosis. Molecular Microbiology, 2008, 69, 1316-1329.	2.5	155

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55	Transcriptional Regulation of Multi-Drug Tolerance and Antibiotic-Induced Responses by the Histone-Like Protein Lsr2 in M. tuberculosis. PLoS Pathogens, 2007, 3, e87.	4.7	113
56	Pyrazinoic Acid and Its n -Propyl Ester Inhibit Fatty Acid Synthase Type I in Replicating Tubercle Bacilli. Antimicrobial Agents and Chemotherapy, 2007, 51, 752-754.	3.2	88
57	Isolation and Analysis of Mycobacterium tuberculosis Mycolic Acids. Current Protocols in Microbiology, 2007, 5, Unit 10A.3.	6.5	24
58	The Mechanism of Isoniazid Killing: Clarity Through the Scope of Genetics. Annual Review of Microbiology, 2007, 61, 35-50.	7.3	269
59	Transfer of a point mutation in Mycobacterium tuberculosisÂinhA resolves the target of isoniazid. Nature Medicine, 2006, 12, 1027-1029.	30.7	281
60	Dual Inhibition of Mycobacterial Fatty Acid Biosynthesis and Degradation by 2-Alkynoic Acids. Chemistry and Biology, 2006, 13, 297-307.	6.0	50
61	Altered NADH/NAD + Ratio Mediates Coresistance to Isoniazid and Ethionamide in Mycobacteria. Antimicrobial Agents and Chemotherapy, 2005, 49, 708-720.	3.2	263
62	Characterization of Mycobacterium smegmatis Expressing the Mycobacterium tuberculosis Fatty Acid Synthase I (fas1) Gene. Journal of Bacteriology, 2004, 186, 4051-4055.	2.2	68
63	Bxz1, a new generalized transducing phage for mycobacteria. FEMS Microbiology Letters, 2004, 241, 271-276.	1.8	55
64	Inhibition of InhA Activity, but Not KasA Activity, Induces Formation of a KasA-containing Complex in Mycobacteria. Journal of Biological Chemistry, 2003, 278, 20547-20554.	3.4	66
65	Overexpression ofinhA, but notkasA, confers resistance to isoniazid and ethionamide inMycobacterium smegmatis,M. bovisBCG andM. tuberculosis. Molecular Microbiology, 2002, 46, 453-466.	2.5	176
66	Effect of the Structure of Natural Sterols and Sphingolipids on the Formation of Ordered Sphingolipid/Sterol Domains (Rafts). Journal of Biological Chemistry, 2001, 276, 33540-33546.	3.4	472
67	Pyrazinamide inhibits the eukaryotic-like fatty acid synthetase I (FASI) of Mycobacterium tuberculosis. Nature Medicine, 2000, 6, 1043-1047.	30.7	232
68	Crystal Structure of the Mycobacterium tuberculosis Enoyl-ACP Reductase, InhA, in Complex with NAD+ and a C16 Fatty Acyl Substrate. Journal of Biological Chemistry, 1999, 274, 15582-15589.	3.4	248
69	Sterol side chain length and structure affect the clearance of chylomicron-like lipid emulsions in rats and mice. Journal of Lipid Research, 1998, 39, 302-312.	4.2	25
70	The effect of side-chain analogues of cholesterol on the thermotropic phase behavior of 1-stearoyl-2-oleoylphosphatidylcholine bilayers: a differential scanning calorimetric study. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1279, 235-242.	2.6	60
71	Lateral domain formation in cholesterol/phospholipid monolayers as affected by the sterol side chain conformation. Biochimica Et Biophysica Acta - Biomembranes, 1995, 1240, 237-247.	2.6	39
72	Enzymic Characterization of the Target for Isoniazid in Mycobacterium tuberculosis. Biochemistry, 1995, 34, 8235-8241.	2.5	390

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73	Effect of sterol side-chain structure on sterol-phosphatidylcholine interactions in monolayers and small unilamellar vesicles. Biochimica Et Biophysica Acta - Biomembranes, 1994, 1190, 435-443.	2.6	36
74	Interactions of cholesterol and synthetic sterols with phosphatidylcholines as deduced from infrared CH2 wagging progression intensities. Journal of the American Chemical Society, 1993, 115, 12050-12055.	13.7	35
75	Acid-Fast Positive and Acid-Fast NegativeMycobacterium tuberculosis: The Koch Paradox. , 0, , 517-532.		2
76	Energetics of Respiration and Oxidative Phosphorylation in Mycobacteria. , 0, , 389-409.		5
77	Resistance to Isoniazid and Ethionamide inMycobacterium tuberculosis: Genes, Mutations, and Causalities. , 0, , 431-453.		4
78	Commonalities of Mycobacterium tuberculosis Transcriptomes in Response to Defined Persisting Macrophage Stresses. Frontiers in Immunology, 0, 13, .	4.8	7