Deborah T Hung

List of Publications by Year
in descending order

81 papers	10,531 citations	76322 40 h-index	69246 77 g-index
94 all docs	94 docs citations	94 times ranked	15315 citing authors

#	Article	IF	Citations
1	The Use of Tn-Seq and the FiTnEss Analysis to Define the Core Essential Genome of Pseudomonas aeruginosa. Methods in Molecular Biology, 2022, 2377, 179-197.	0.9	0
2	Multiplexed CRISPR-based microfluidic platform for clinical testing of respiratory viruses and identification of SARS-CoV-2 variants. Nature Medicine, 2022, 28, 1083-1094.	30.7	127
3	Early administration of <scp>COVID</scp>â€19 convalescent plasma with high titer antibody content by live viral neutralization assay is associated with modest clinical efficacy. American Journal of Hematology, 2022, 97, 770-779.	4.1	9
4	Preclinical Development of Pentamidine Analogs Identifies a Potent and Nontoxic Antibiotic Adjuvant. ACS Infectious Diseases, 2022, 8, 768-777.	3.8	13
5	Multiplexed detection of bacterial nucleic acids using Cas13 in droplet microarrays. , 2022, 1, pgac021.		15
6	Integrated genomics and chemical biology herald an era of sophisticated antibacterial discovery, from defining essential genes to target elucidation. Cell Chemical Biology, 2022, , .	5.2	2
7	Feasibility and lessons learned on remote trial implementation from TestBoston, a fully remote, longitudinal, large-scale COVID-19 surveillance study. PLoS ONE, 2022, 17, e0269127.	2.5	4
8	Using Proteolytic Hypomorphs to Detect Small Molecule Mechanism of Action. Methods in Molecular Biology, 2021, 2314, 323-342.	0.9	1
9	SARS-CoV-2 hijacks folate and one-carbon metabolism for viral replication. Nature Communications, 2021, 12, 1676.	12.8	102
10	Selective Permeabilization of Gram-Negative Bacterial Membranes Using Multivalent Peptide Constructs for Antibiotic Sensitization. ACS Infectious Diseases, 2021, 7, 721-732.	3.8	17
11	Genetic determinants facilitating the evolution of resistance to carbapenem antibiotics. ELife, 2021, 10, .	6.0	15
12	Dual transcriptional analysis reveals adaptation of host and pathogen to intracellular survival of Pseudomonas aeruginosa associated with urinary tract infection. PLoS Pathogens, 2021, 17, e1009534.	4.7	29
13	COVID-19 tissue atlases reveal SARS-CoV-2 pathology and cellular targets. Nature, 2021, 595, 107-113.	27.8	537
14	Chemical Screen for Vancomycin Antagonism Uncovers Probes of the Gram-Negative Outer Membrane. ACS Chemical Biology, 2021, 16, 929-942.	3.4	29
15	<scp>SARSâ€CoV</scp>â€2 antibody persistence in <scp>COVID</scp>â€19 convalescent plasma donors: Dependency on assay format and applicability to serosurveillance. Transfusion, 2021, 61, 2677-2687.	1.6	46
16	Catalytically impaired TrpA subunit of tryptophan synthase from Chlamydia trachomatis is an allosteric regulator of TrpB. Protein Science, 2021, 30, 1904-1918.	7.6	5
17	Plasma from patients with bacterial sepsis or severe COVID-19 induces suppressive myeloid cell production from hematopoietic progenitors in vitro. Science Translational Medicine, 2021, 13, .	12.4	64
18	B cell genomics behind cross-neutralization of SARS-CoV-2 variants and SARS-CoV. Cell, 2021, 184, 3205-3221.e24.	28.9	73

#	Article	IF	Citations
19	Large-Scale Chemical-Genetic Strategy Enables the Design of Antimicrobial Combination Chemotherapy in Mycobacteria. ACS Infectious Diseases, 2020, 6, 56-63.	3.8	16
20	Detection of SARS-CoV-2 with SHERLOCK One-Pot Testing. New England Journal of Medicine, 2020, 383, 1492-1494.	27.0	506
21	Massively multiplexed nucleic acid detection with Cas13. Nature, 2020, 582, 277-282.	27.8	492
22	An immune-cell signature of bacterial sepsis. Nature Medicine, 2020, 26, 333-340.	30.7	261
23	Adaptive evolution of virulence and persistence in carbapenem-resistant Klebsiella pneumoniae. Nature Medicine, 2020, 26, 705-711.	30.7	148
24	LB-11. Comparison of Viral Loads in Individuals With or Without Symptoms At Time of COVID-19 Testing Among 32,480 Residents and Staff of Nursing Homes and Assisted Living Facilities in Massachusetts. Open Forum Infectious Diseases, 2020, 7, S848-S849.	0.9	7
25	A Point of Inflection and Reflection on Systems Chemical Biology. ACS Chemical Biology, 2019, 14, 2497-2511.	3.4	8
26	Single-Cell RNA Sequencing to Understand Hostâ€“Pathogen Interactions. ACS Infectious Diseases, 2019, 5, 336-344.	3.8	36
27	Large-scale chemicalâ€“genetics yields new M. tuberculosis inhibitor classes. Nature, 2019, 571, 72-78.	27.8	119
28	Mutations in pmrB Confer Cross-Resistance between the LptD Inhibitor POL7080 and Colistin in Pseudomonas aeruginosa. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	26
29	Defining the core essential genome of Pseudomonas aeruginosa. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 10072-10080.	7.1	132
30	Rapid identification and phylogenetic classification of diverse bacterial pathogens in a multiplexed hybridization assay targeting ribosomal RNA. Scientific Reports, 2019, 9, 4516.	3.3	11
31	Hybridization-based capture of pathogen mRNA enables paired host-pathogen transcriptional analysis. Scientific Reports, 2019, 9, 19244.	3.3	27
32	Simultaneous detection of genotype and phenotype enables rapid and accurate antibiotic susceptibility determination. Nature Medicine, 2019, 25, 1858-1864.	30.7	85
33	The Expanding Diversity of Mycobacterium tuberculosis Drug Targets. ACS Infectious Diseases, 2018, 4, 696-714.	3.8	60
34	Whole-organism phenotypic screening for anti-infectives promoting host health. Nature Chemical Biology, 2018, 14, 331-341.	8.0	14
35	Generation of mouse-zebrafish hematopoietic tissue chimeric embryos for hematopoiesis and host-pathogen interaction studies. DMM Disease Models and Mechanisms, 2018, 11, .	2.4	19
36	Discovery of heterocyclic replacements for the coumarin core of anti-tubercular FadD32 inhibitors. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 3529-3533.	2.2	13

#	Article	IF	Citations
37	Harnessing CRISPR Effectors for Infectious Disease Diagnostics. ACS Infectious Diseases, 2018, 4, 1278-1282.	3.8	58
38	Carbapenem Resistance Caused by High-Level Expression of OXA-663 Î²-Lactamase in an OmpK36-Deficient Klebsiella pneumoniae Clinical Isolate. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	14
39	Multi-institute analysis of carbapenem resistance reveals remarkable diversity, unexplained mechanisms, and limited clonal outbreaks. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1135-1140.	7.1	158
40	Nucleic acid detection with CRISPR-Cas13a/C2c2. Science, 2017, 356, 438-442.	12.6	2,275
41	A small-molecule allosteric inhibitor of Mycobacterium tuberculosis tryptophan synthase. Nature Chemical Biology, 2017, 13, 943-950.	8.0	100
42	Ribosomal mutations promote the evolution of antibiotic resistance in a multidrug environment. ELife, 2017, 6, .	6.0	53
43	scDual-Seq: mapping the gene regulatory program of Salmonella infection by host and pathogen single-cell RNA-sequencing. Genome Biology, 2017, 18, 200.	8.8	82
44	Metagenomic Sequencing of an Echovirus 30 Genome From Cerebrospinal Fluid of a Patient With Aseptic Meningitis and Orchitis. Open Forum Infectious Diseases, 2017, 4, ofx138.	0.9	13
45	Systematic, multiparametric analysis of Mycobacterium tuberculosis intracellular infection offers insight into coordinated virulence. PLoS Pathogens, 2017, 13, e1006363.	4.7	94
46	Structural Insight into Allosteric Inhibition of Mycobacterium tuberculosis Tryptophan Synthase. FASEB Journal, 2017, 31, 765.12.	0.5	1
47	A perspective on single cell behavior during infection. Gut Microbes, 2016, 7, 518-525.	9.8	11
48	Genomic Analysis of the Evolution of Fluoroquinolone Resistance in Mycobacterium tuberculosis Prior to Tuberculosis Diagnosis. Antimicrobial Agents and Chemotherapy, 2016, 60, 6600-6608.	3.2	19
49	A highly multiplexed and sensitive RNA-seq protocol for simultaneous analysis of host and pathogen transcriptomes. Nature Protocols, 2016, 11, 1477-1491.	12.0	46
50	Baeyer-Villiger Monooxygenases EthA and MymA Are Required for Activation of Replicating and Non-replicating Mycobacterium tuberculosis Inhibitors. Cell Chemical Biology, 2016, 23, 666-677.	5.2	46
51	Loss of a Class A Penicillin-Binding Protein Alters Î²-Lactam Susceptibilities inMycobacterium tuberculosis. ACS Infectious Diseases, 2016, 2, 104-110.	3.8	19
52	Direct detection and drug-resistance profiling of bacteremias using inertial microfluidics. Lab on A Chip, 2015, 15, 2297-2307.	6.0	119
53	Simultaneous generation of many RNA-seq libraries in a single reaction. Nature Methods, 2015, 12, 323-325.	19.0	256
54	Pathogen Cell-to-Cell Variability Drives Heterogeneity in Host Immune Responses. Cell, 2015, 162, 1309-1321.	28.9	255

#	Article	IF	Citations
55	Identification of Host-Targeted Small Molecules That Restrict Intracellular Mycobacterium tuberculosis Growth. PLoS Pathogens, 2014, 10, e1003946.	4.7	234
56	Bacterial toxins and small molecules elucidate endosomal trafficking. Trends in Microbiology, 2014, 22, 53-55.	7.7	0
57	Mechanisms of Î²-lactam killing and resistance in the context of Mycobacterium tuberculosis. Journal of Antibiotics, 2014, 67, 645-654.	2.0	61
58	Identification of Novel Inhibitors of Nonreplicating Mycobacterium tuberculosis Using a Carbon Starvation Model. ACS Chemical Biology, 2013, 8, 2224-2234.	3.4	79
59	Synthesis and structureâ€“activity relationships of phenyl-substituted coumarins with anti-tubercular activity that target FadD32. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 6052-6059.	2.2	56
60	Diarylcoumarins inhibit mycolic acid biosynthesis and kill Mycobacterium tuberculosis by targeting FadD32. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11565-11570.	7.1	89
61	Persistent bacterial infections, antibiotic tolerance, and the oxidative stress response. Virulence, 2013, 4, 273-283.	4.4	287
62	RNA signatures allow rapid identification of pathogens and antibiotic susceptibilities. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6217-6222.	7.1	94
63	The Two-Component Sensor KinB Acts as a Phosphatase To Regulate Pseudomonas aeruginosa Virulence. Journal of Bacteriology, 2012, 194, 6537-6547.	2.2	23
64	Identification of Novel Inhibitors of M. tuberculosis Growth Using Whole Cell Based High-Throughput Screening. ACS Chemical Biology, 2012, 7, 1377-1384.	3.4	232
65	Eradication of bacterial persisters with antibiotic-generated hydroxyl radicals. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12147-12152.	7.1	226
66	Probing bacterial pathogenesis with genetics, genomics, and chemical biology: past, present, and future approaches. Critical Reviews in Biochemistry and Molecular Biology, 2011, 46, 41-66.	5.2	4
67	The Sensor Kinase KinB Regulates Virulence in Acute Pseudomonas aeruginosa Infection. Journal of Bacteriology, 2011, 193, 2989-2999.	2.2	37
68	The two-component sensor kinase KinB acts as a non-canonical switch between acute and chronic infection. Virulence, 2011, 2, 553-558.	4.4	6
69	Pseudomonas aeruginosa Infection of Zebrafish Involves both Host and Pathogen Determinants. Infection and Immunity, 2009, 77, 1293-1303.	2.2	157
70	Chemical Tools for Dissecting Bacterial Physiology and Virulence. Biochemistry, 2009, 48, 8776-8786.	2.5	11
71	Sensitive, specific polymorphism discovery in bacteria using massively parallel sequencing. Nature Methods, 2009, 6, 67-69.	19.0	58
72	Productive steps toward an antimicrobial targeting virulence. Current Opinion in Microbiology, 2009, 12, 490-496.	5.1	93

#	Article	IF	Citations
73	Virstatin inhibits dimerization of the transcriptional activator ToxT. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2372-2377.	7.1	135
74	Targeting virulence: a new paradigm for antimicrobial therapy. Nature Chemical Biology, 2007, 3, 541-548.	8.0	1,159
75	Antiâ€virulence appraoches to antimicrobial therapy. FASEB Journal, 2007, 21, .	0.5	0
76	Bile acids stimulate biofilm formation in Vibrio cholerae. Molecular Microbiology, 2006, 59, 193-201.	2.5	147
77	Chemical biology and bacteria: not simply a matter of life or death. Current Opinion in Chemical Biology, 2006, 10, 321-326.	6.1	9
78	Bile acids induce cholera toxin expression in Vibrio cholerae in a ToxT-independent manner. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3028-3033.	7.1	151
79	Small-Molecule Inhibitor of Vibrio cholerae Virulence and Intestinal Colonization. Science, 2005, 310, 670-674.	12.6	325
80	A new era for sepsis treatment? Understanding sepsis as a consequence of host immune response. Expert Opinion on Therapeutic Patents, 2002, 12, 181-192.	5.0	0
81	Syntheses of Discodermolides Useful for Investigating Microtubule Binding and Stabilization. Journal of the American Chemical Society, 1996, 118, 11054-11080.	13.7	141