Kim Lewis

List of Publications by Year
in descending order

73 papers	18,769 citations	66343 42 h-index	76900 74 g-index
161 all docs	161 docs citations	161 times ranked	17701 citing authors

#	Article	IF	Citations
1	The Role of Integration Host Factor in Escherichia coli Persister Formation. MBio, 2022, 13, e0342021.	4.1	7
2	An <i>in vitro</i> intestinal model captures immunomodulatory properties of the microbiota in inflammation. Gut Microbes, 2022, 14, 2039002.	9.8	3
3	A Silent Operon of Photorhabdus luminescens Encodes a Prodrug Mimic of GTP. MBio, 2022, 13, e0070022.	4.1	7
4	Predicting antimicrobial mechanism-of-action from transcriptomes: A generalizable explainable artificial intelligence approach. PLoS Computational Biology, 2021, 17, e1008857.	3.2	16
5	The antibiotic darobactin mimics a Î^{2}-strand to inhibit outer membrane insertase. Nature, 2021, 593, 125-129.	27.8	112
6	Bacterial persisters are a stochastically formed subpopulation of low-energy cells. PLoS Biology, 2021, 19, e3001194.	5.6	85
7	Biosynthesis and Mechanism of Action of the Cell Wall Targeting Antibiotic Hypeptin. Angewandte Chemie, 2021, 133, 13691-13698.	2.0	3
8	Biosynthesis and Mechanism of Action of the Cell Wall Targeting Antibiotic Hypeptin. Angewandte Chemie - International Edition, 2021, 60, 13579-13586.	13.8	19
9	Optimization of heterologous Darobactin A expression and identification of the minimal biosynthetic gene cluster. Metabolic Engineering, 2021, 66, 123-136.	7.0	27
10	Recent Progress in Lyme Disease and Remaining Challenges. Frontiers in Medicine, 2021, 8, 666554.	2.6	55
11	A selective antibiotic for Lyme disease. Cell, 2021, 184, 5405-5418.e16.	28.9	33
12	Mutasynthetic Production and Antimicrobial Characterization of Darobactin Analogs. Microbiology Spectrum, 2021, 9, e0153521.	3.0	26
13	Pulse Dosing of Antibiotic Enhances Killing of a Staphylococcus aureus Biofilm. Frontiers in Microbiology, 2020, 11, 596227.	3.5	10
14	A Distinct Microbiome Signature in Posttreatment Lyme Disease Patients. MBio, 2020, 11, .	4.1	19
15	Novel Antimicrobials from Uncultured Bacteria Acting against Mycobacterium tuberculosis. MBio, 2020, 11, .	4.1	16
16	The Science of Antibiotic Discovery. Cell, 2020, 181, 29-45.	28.9	402
17	A Fluorescent Teixobactin Analogue. ACS Chemical Biology, 2020, 15, 1222-1231.	3.4	12
18	Mechanism-of-Action Classification of Antibiotics by Global Transcriptome Profiling. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	56

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19	Bacterial persisters in long-term infection: Emergence and fitness in a complex host environment. PLoS Pathogens, 2020, 16, e1009112.	4.7	53
20	Gram-scale total synthesis of teixobactin promoting binding mode study and discovery of more potent antibiotics. Nature Communications, 2019, 10, 3268.	12.8	32
21	Ureadepsipeptides as ClpP Activators. ACS Infectious Diseases, 2019, 5, 1915-1925.	3.8	27
22	Cranberry extracts promote growth of Bacteroidaceae and decrease abundance of Enterobacteriaceae in a human gut simulator model. PLoS ONE, 2019, 14, e0224836.	2.5	25
23	Definitions and guidelines for research on antibiotic persistence. Nature Reviews Microbiology, 2019, 17, 441-448.	28.6	748
24	Stochastic Variation in Expression of the Tricarboxylic Acid Cycle Produces Persister Cells. MBio, 2019, 10, .	4.1	84
25	A new antibiotic selectively kills Gram-negative pathogens. Nature, 2019, 576, 459-464.	27.8	456
26	GABA-modulating bacteria of the human gut microbiota. Nature Microbiology, 2019, 4, 396-403.	13.3	590
27	Persister Formation and Antibiotic Tolerance of Chronic Infections. , 2019, , 59-75.		9
28	Developing Equipotent Teixobactin Analogues against Drug-Resistant Bacteria and Discovering a Hydrophobic Interaction between Lipid II and Teixobactin. Journal of Medicinal Chemistry, 2018, 61, 3409-3421.	6.4	35
29	Structural studies suggest aggregation as one of the modes of action for teixobactin. Chemical Science, 2018, 9, 8850-8859.	7.4	24
30	A Genetic Determinant of Persister Cell Formation in Bacterial Pathogens. Journal of Bacteriology, 2018, 200, .	2.2	61
31	Identifying Vancomycin as an Effective Antibiotic for Killing Borrelia burgdorferi. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	18
32	Why tolerance invites resistance. Science, 2017, 355, 796-796.	12.6	33
33	ATP-Dependent Persister Formation in <i>Escherichia coli</i>. MBio, 2017, 8, .	4.1	371
34	Reducing the Bottleneck in Discovery of Novel Antibiotics. Microbial Ecology, 2017, 73, 658-667.	2.8	24
35	The Making of a Pathogen. Cell Host and Microbe, 2017, 21, 653-654.	11.0	3
36	New approaches to antimicrobial discovery. Biochemical Pharmacology, 2017, 134, 87-98.	4.4	88

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37	Quinones are growth factors for the human gut microbiota. Microbiome, 2017, 5, 161.	11.1	73
38	Dual Targeting of Cell Wall Precursors by Teixobactin Leads to Cell Lysis. Antimicrobial Agents and Chemotherapy, 2016, 60, 6510-6517.	3.2	74
39	Antibiotics right under our nose. Nature, 2016, 535, 501-502.	27.8	9
40	Persister Awakening. Molecular Cell, 2016, 63, 3-4.	9.7	14
41	Persister formation in Staphylococcus aureus is associated with ATP depletion. Nature Microbiology, 2016, 1, .	13.3	508
42	Persisters: Methods for Isolation and Identifying Contributing Factorsâ€"A Review. Methods in Molecular Biology, 2016, 1333, 17-28.	0.9	30
43	High Persister Mutants in Mycobacterium tuberculosis. PLoS ONE, 2016, 11, e0155127.	2.5	123
44	A new antibiotic kills pathogens without detectable resistance. Nature, 2015, 517, 455-459.	27.8	1,991
45	Borrelia burgdorferi, the Causative Agent of Lyme Disease, Forms Drug-Tolerant Persister Cells. Antimicrobial Agents and Chemotherapy, 2015, 59, 4616-4624.	3.2	149
46	HipBAâ€"promoter structures reveal the basis of heritable multidrug tolerance. Nature, 2015, 524, 59-64.	27.8	206
47	Genetic Basis of Persister Tolerance to Aminoglycosides in Escherichia coli. MBio, 2015, 6, .	4.1	127
48	<i>In Vitro</i> and <i>In Vivo</i> Activities of HPi1, a Selective Antimicrobial against Helicobacter pylori. Antimicrobial Agents and Chemotherapy, 2014, 58, 3255-3260.	3.2	9
49	Lassomycin, a Ribosomally Synthesized Cyclic Peptide, Kills Mycobacterium tuberculosis by Targeting the ATP-Dependent Protease ClpC1P1P2. Chemistry and Biology, 2014, 21, 509-518.	6.0	344
50	Diarylacylhydrazones: Clostridium-selective antibacterials with activity against stationary-phase cells. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 595-600.	2.2	14
51	On the Mechanism of Berberineâ€"INF55 (5-Nitro-2-phenylindole) Hybrid Antibacterials. Australian Journal of Chemistry, 2014, 67, 1471.	0.9	14
52	Platforms for antibiotic discovery. Nature Reviews Drug Discovery, 2013, 12, 371-387.	46.4	1,135
53	Persisterâ€promoting bacterial toxin TisB produces anionâ€selective pores in planar lipid bilayers. FEBS Letters, 2012, 586, 2529-2534.	2.8	87
54	Persister Cells: Molecular Mechanisms Related to Antibiotic Tolerance. Handbook of Experimental Pharmacology, 2012, , 121-133.	1.8	161

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55	Recover the lost art of drug discovery. Nature, 2012, 485, 439-440.	27.8	211
56	Siderophores from Neighboring Organisms Promote the Growth of Uncultured Bacteria. Chemistry and Biology, 2010, 17, 254-264.	6.0	378
57	Uncultured microorganisms as a source of secondary metabolites. Journal of Antibiotics, 2010, 63, 468-476.	2.0	166
58	Ciprofloxacin Causes Persister Formation by Inducing the TisB toxin in Escherichia coli. PLoS Biology, 2010, 8, e1000317.	5.6	636
59	Persister Cells. Annual Review of Microbiology, 2010, 64, 357-372.	7.3	1,768
60	Emergence of <i>Pseudomonas aeruginosa</i> Strains Producing High Levels of Persister Cells in Patients with Cystic Fibrosis. Journal of Bacteriology, 2010, 192, 6191-6199.	2.2	516
61	Intact DNA in ancient permafrost. Trends in Microbiology, 2008, 16, 92-94.	7.7	13
62	Role of Global Regulators and Nucleotide Metabolism in Antibiotic Tolerance in <i>Escherichia coli</i>. Antimicrobial Agents and Chemotherapy, 2008, 52, 2718-2726.	3.2	272
63	Persister cells, dormancy and infectious disease. Nature Reviews Microbiology, 2007, 5, 48-56.	28.6	1,653
64	Prospects for plant-derived antibacterials. Nature Biotechnology, 2006, 24, 1504-1507.	17.5	324
65	Persisters: a distinct physiological state of E. coli. BMC Microbiology, 2006, 6, 53.	3.3	528
66	Kinase Activity of Overexpressed HipA Is Required for Growth Arrest and Multidrug Tolerance in <i>Escherichia coli</i>. Journal of Bacteriology, 2006, 188, 8360-8367.	2.2	181
67	GlpD and PlsB Participate in Persister Cell Formation in Escherichia coli. Journal of Bacteriology, 2006, 188, 5136-5144.	2.2	188
68	Identification of novel antimicrobials using a live-animal infection model. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10414-10419.	7.1	260
69	Surpassing nature: rational design of sterile-surface materials. Trends in Biotechnology, 2005, 23, 343-348.	9.3	281
70	Specialized Persister Cells and the Mechanism of Multidrug Tolerance in <i>Escherichia coli</i>. Journal of Bacteriology, 2004, 186, 8172-8180.	2.2	753
71	Persister cells and tolerance to antimicrobials. FEMS Microbiology Letters, 2004, 230, 13-18.	1.8	926
72	Insights into bactericidal action of surface-attached poly(vinyl-N-hexylpyridinium) chains. Biotechnology Letters, 2002, 24, 801-805.	2.2	135

#	Article	IF	Citations
73	Biofilms and Planktonic Cells of <i>Pseudomonas aeruginosa</i> Have Similar Resistance to Killing by Antimicrobials. Journal of Bacteriology, 2001, 183, 6746-6751.	2.2	792