Karen Bush

List of Publications by Year
in descending order

87 papers	17,029 citations	53794 45 h-index	56724 83 g-index
100 all docs	100 docs citations	100 times ranked	13275 citing authors

#	Article	IF	Citations
1	In vitro antibacterial activity of cefiderocol against recent multidrug-resistant carbapenem-nonsusceptible Enterobacterales isolates. Diagnostic Microbiology and Infectious Disease, 2022, 103, 115651.	1.8	8
2	Success and Challenges Associated with Large-Scale Collaborative Surveillance for Carbapenemase Genes in Gram-Negative Bacteria. Antimicrobial Agents and Chemotherapy, 2022, 66, aac0229921.	3.2	1
3	Consensus on Î²-Lactamase Nomenclature. Antimicrobial Agents and Chemotherapy, 2022, 66, e0033322.	3.2	11
4	A Tribute to George A. Jacoby. Antimicrobial Agents and Chemotherapy, 2022, , e0049822.	3.2	0
5	A Standard Numbering Scheme for Class C Î²-Lactamases. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	50
6	Epidemiology of Î²-Lactamase-Producing Pathogens. Clinical Microbiology Reviews, 2020, 33, .	13.6	425
7	Critical analysis of antibacterial agents in clinical development. Nature Reviews Microbiology, 2020, 18, 286-298.	28.6	204
8	Activity of imipenem/relebactam against carbapenemase-producing Enterobacteriaceae with high colistin resistance. Journal of Antimicrobial Chemotherapy, 2019, 74, 3260-3263.	3.0	29
9	Interplay between Î²-lactamases and new Î²-lactamase inhibitors. Nature Reviews Microbiology, 2019, 17, 295-306.	28.6	322
10	A Meandering Path from Biochemist to Microbiologist. ACS Infectious Diseases, 2019, 5, 1-3.	3.8	1
11	Selection of hyperproduction of AmpC and SME-1 in a carbapenem-resistant Serratia marcescens isolate during antibiotic therapy. Journal of Antimicrobial Chemotherapy, 2018, 73, 1256-1262.	3.0	13
12	Unusual carbapenem resistant but ceftriaxone and cefepime susceptible Klebsiella oxytoca isolated from a blood culture: Case report and whole-genome sequencing investigation. IDCases, 2018, 11, 9-11.	0.9	8
13	Game Changers: New Î²-Lactamase Inhibitor Combinations Targeting Antibiotic Resistance in Gram-Negative Bacteria. ACS Infectious Diseases, 2018, 4, 84-87.	3.8	56
14	Past and Present Perspectives on Î²-Lactamases. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	554
15	What we may expect from novel antibacterial agents in the pipeline with respect to resistance and pharmacodynamic principles. Journal of Pharmacokinetics and Pharmacodynamics, 2017, 44, 113-132.	1.8	62
16	Reply to Furlan et al., â€œImportance of Sequencing To Determine Functional bla TEM Variantsâ€• Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	0
17	Unusual Escherichia coli PBP 3 Insertion Sequence Identified from a Collection of Carbapenem-Resistant Enterobacteriaceae Tested In Vitro with a Combination of Ceftazidime-, Ceftaroline-, or Aztreonam-Avibactam. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	64
18	Synergistic Antibiotic Combinations. Topics in Medicinal Chemistry, 2017, , 69-88.	0.8	11

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19	In vitro activity of plazomicin against Î²-lactamase-producing carbapenem-resistant Enterobacteriaceae (CRE). Journal of Antimicrobial Chemotherapy, 2017, 72, 2792-2795.	3.0	42
20	Forgotten antibiotics: a follow-up inventory study in Europe, the USA, Canada and Australia. International Journal of Antimicrobial Agents, 2017, 49, 98-101.	2.5	31
21	The Importance of Î²-Lactamases to the Development of New Î²-Lactams. , 2017, , 165-175.		3
22	In vitro susceptibility of Î²-lactamase-producing carbapenem-resistant Enterobacteriaceae (CRE) to eravacycline. Journal of Antibiotics, 2016, 69, 600-604.	2.0	39
23	Î²-Lactams and Î²-Lactamase Inhibitors: An Overview. Cold Spring Harbor Perspectives in Medicine, 2016, 6, a025247.	6.2	663
24	Cathelicidin Antimicrobial Peptides with Reduced Activation of Toll-Like Receptor Signaling Have Potent Bactericidal Activity against Colistin-Resistant Bacteria. MBio, 2016, 7, .	4.1	17
25	The Curious Case of TEM-116. Antimicrobial Agents and Chemotherapy, 2016, 60, 7000-7000.	3.2	19
26	Comment on: Resistance gene naming and numbering: is it a new gene or not?. Journal of Antimicrobial Chemotherapy, 2016, 71, 2677-2678.	3.0	10
27	Overcoming Î²-lactam resistance in Gram-negative pathogens. Future Medicinal Chemistry, 2016, 8, 921-924.	2.3	23
28	In Vitro Susceptibility of Characterized Î²-Lactamase-Producing Strains Tested with Avibactam Combinations. Antimicrobial Agents and Chemotherapy, 2015, 59, 1789-1793.	3.2	114
29	A resurgence of Î²-lactamase inhibitor combinations effective against multidrug-resistant Gram-negative pathogens. International Journal of Antimicrobial Agents, 2015, 46, 483-493.	2.5	166
30	Synergistic MRSA combinations. Nature Chemical Biology, 2015, 11, 832-833.	8.0	8
31	Investigational Agents for the Treatment of Gram-Negative Bacterial Infections: A Reality Check. ACS Infectious Diseases, 2015, 1, 509-511.	3.8	48
32	In Vitro Activity of Ceftolozane-Tazobactam as Determined by Broth Dilution and Agar Diffusion Assays against Recent U.S. Escherichia coli Isolates from 2010 to 2011 Carrying CTX-M-Type Extended-Spectrum Î²-Lactamases. Journal of Clinical Microbiology, 2014, 52, 4049-4052.	3.9	26
33	Discovery and development of new antibacterial agents targeting Gram-negative bacteria in the era of pandrug resistance: is the future promising?. Current Opinion in Pharmacology, 2014, 18, 91-97.	3.5	49
34	Introduction to Antimicrobial Therapeutics Reviews: Infectious Diseases of Current and Emerging Concern. Annals of the New York Academy of Sciences, 2014, 1323, v-vi.	3.8	5
35	Cautious Optimism for the Antibacterial Pipeline. Microbe Magazine, 2014, 9, 147-152.	0.4	8
36	The ABCDâ€™s of Î²-lactamase nomenclature. Journal of Infection and Chemotherapy, 2013, 19, 549-559.	1.7	191

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37	Investigational Antimicrobial Agents of 2013. Clinical Microbiology Reviews, 2013, 26, 792-821.	13.6	90
38	Proliferation and significance of clinically relevant Î²â€lactamases. Annals of the New York Academy of Sciences, 2013, 1277, 84-90.	3.8	271
39	Introduction to Antimicrobial Therapeutics Reviews: The bacterial cell wall as an antimicrobial target. Annals of the New York Academy of Sciences, 2013, 1277, v-vii.	3.8	6
40	Carbapenemases: Partners in crime. Journal of Global Antimicrobial Resistance, 2013, 1, 7-16.	2.2	76
41	Detection systems for carbapenemase gene identification should include the SME serine carbapenemase. International Journal of Antimicrobial Agents, 2013, 41, 1-4.	2.5	33
42	Epidemiology and Risk Factors for Isolation of Escherichia coli Producing CTX-M-Type Extended-Spectrum Î²-Lactamase in a Large U.S. Medical Center. Antimicrobial Agents and Chemotherapy, 2013, 57, 4010-4018.	3.2	62
43	Improving known classes of antibiotics: an optimistic approach for the future. Current Opinion in Pharmacology, 2012, 12, 527-534.	3.5	82
44	Forgotten Antibiotics: An Inventory in Europe, the United States, Canada, and Australia. Clinical Infectious Diseases, 2012, 54, 268-274.	5.8	81
45	Evolution of Î²-Lactamases: Past, Present, and Future. , 2012, , 427-453.		5
46	Tackling antibiotic resistance. Nature Reviews Microbiology, 2011, 9, 894-896.	28.6	919
47	Introduction toâ€,Antimicrobial Therapeutics Reviews. Annals of the New York Academy of Sciences, 2011, 1241, vii-ix.	3.8	1
48	New antimicrobial agents on the horizon. Biochemical Pharmacology, 2011, 82, 1528-1539.	4.4	45
49	Epidemiological Expansion, Structural Studies, and Clinical Challenges of New Î²-Lactamases from Gram-Negative Bacteria. Annual Review of Microbiology, 2011, 65, 455-478.	7.3	367
50	Inhibition of metallo-Î²-lactamases by pyridine monothiocarboxylic acid analogs. Journal of Antibiotics, 2010, 63, 255-257.	2.0	18
51	The coming of age of antibiotics: discovery and therapeutic value. Annals of the New York Academy of Sciences, 2010, 1213, 1-4.	3.8	34
52	Impact of Different Carbapenems and Regimens of Administration on Resistance Emergence for Three Isogenic Pseudomonas aeruginosa Strains with Differing Mechanisms of Resistance. Antimicrobial Agents and Chemotherapy, 2010, 54, 2638-2645.	3.2	42
53	Hydrolysis and Inhibition Profiles of Î²-Lactamases from Molecular Classes A to D with Doripenem, Imipenem, and Meropenem. Antimicrobial Agents and Chemotherapy, 2010, 54, 565-569.	3.2	89
54	In Vitro Antibacterial Activities of JNJ-Q2, a New Broad-Spectrum Fluoroquinolone. Antimicrobial Agents and Chemotherapy, 2010, 54, 1955-1964.	3.2	58

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55	Bench-to-bedside review: The role of Î²-lactamases in antibiotic-resistant Gram-negative infections. Critical Care, 2010, 14, 224.	5.8	160
56	New Î²-lactam antibiotics and Î²-lactamase inhibitors. Expert Opinion on Therapeutic Patents, 2010, 20, 1277-1293.	5.0	103
57	Alarming Î²-lactamase-mediated resistance in multidrug-resistant Enterobacteriaceae. Current Opinion in Microbiology, 2010, 13, 558-564.	5.1	341
58	Updated Functional Classification of Î²-Lactamases. Antimicrobial Agents and Chemotherapy, 2010, 54, 969-976.	3.2	1,817
59	Comment on: Redefining extended-spectrum Â-lactamases: balancing science and clinical need. Journal of Antimicrobial Chemotherapy, 2009, 64, 212-213.	3.0	18
60	Casting a broader net for approaches to antibacterial research and development. Current Opinion in Biotechnology, 2008, 19, 606-607.	6.6	2
61	New agents in development for the treatment of bacterial infections. Current Opinion in Pharmacology, 2008, 8, 582-592.	3.5	35
62	Novel Carbapenem-Hydrolyzing Î²-Lactamase, KPC-1, from a Carbapenem-Resistant Strain of Klebsiella pneumoniae. Antimicrobial Agents and Chemotherapy, 2008, 52, 809-809.	3.2	31
63	A Randomized, Double-Blind Trial Comparing Ceftobiprole Medocaril with Vancomycin plus Ceftazidime for the Treatment of Patients with Complicated Skin and Skin-Structure Infections. Clinical Infectious Diseases, 2008, 46, 647-655.	5.8	245
64	In Vitro Activity of Ceftobiprole against Pathogens from Two Phase 3 Clinical Trials of Complicated Skin and Skin Structure Infections. Antimicrobial Agents and Chemotherapy, 2008, 52, 3418-3423.	3.2	36
65	Interactions of Ceftobiprole with Î²-Lactamases from Molecular Classes A to D. Antimicrobial Agents and Chemotherapy, 2007, 51, 3089-3095.	3.2	84
66	Anti-MRSA Î²-lactams in development, with a focus on ceftobiprole: the first anti-MRSA Î²-lactam to demonstrate clinical efficacy. Expert Opinion on Investigational Drugs, 2007, 16, 419-429.	4.1	64
67	Carbapenemases: the Versatile Î²-Lactamases. Clinical Microbiology Reviews, 2007, 20, 440-458.	13.6	2,068
68	Fluoroquinolone-modifying enzyme: a new adaptation of a common aminoglycoside acetyltransferase. Nature Medicine, 2006, 12, 83-88.	30.7	827
69	SME-3, a Novel Member of the Serratia marcescens SME Family of Carbapenem-Hydrolyzing Î²-Lactamases. Antimicrobial Agents and Chemotherapy, 2006, 50, 3485-3487.	3.2	42
70	Is it necessary to change the classification of Î²-lactamases?. Journal of Antimicrobial Chemotherapy, 2005, 55, 1051-1053.	3.0	47
71	Effects of Inoculum and Î²-Lactamase Activity in AmpC- and Extended-Spectrum Î²-Lactamase (ESBL)-Producing Escherichia coli and Klebsiella pneumoniae Clinical Isolates Tested by Using NCCLS ESBL Methodology. Journal of Clinical Microbiology, 2004, 42, 269-275.	3.9	123
72	Novel antibacterial agents for the treatment of serious Gram-positive infections. Expert Opinion on Investigational Drugs, 2003, 12, 379-399.	4.1	118

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73	Biochemical Characterization of Î²-Lactamases Bla1 and Bla2 from Bacillus anthracis. Antimicrobial Agents and Chemotherapy, 2003, 47, 2040-2042.	3.2	60
74	Carbapenem-Resistant Strain of Klebsiella oxytoca Harboring Carbapenem-HydrolyzingÎ² -Lactamase KPC-2. Antimicrobial Agents and Chemotherapy, 2003, 47, 3881-3889.	3.2	172
75	Molecular Correlation for the Treatment Outcomes in Bloodstream Infections Caused byEscherichia coliandKlebsiella pneumoniaewith Reduced Susceptibility to Ceftazidime. Clinical Infectious Diseases, 2002, 34, 135-146.	5.8	131
76	New Â-Lactamases in Gram-Negative Bacteria: Diversity and Impact on the Selection of Antimicrobial Therapy. Clinical Infectious Diseases, 2001, 32, 1085-1089.	5.8	348
77	Novel Carbapenem-Hydrolyzing Î²-Lactamase, KPC-1, from a Carbapenem-Resistant Strain ofKlebsiella pneumoniae. Antimicrobial Agents and Chemotherapy, 2001, 45, 1151-1161.	3.2	1,415
78	Cloning and Biochemical Characterization of FOX-5, an AmpC-Type Plasmid-Encoded Î²-Lactamase from a New York City Klebsiella pneumoniae Clinical Isolate. Antimicrobial Agents and Chemotherapy, 2001, 45, 3189-3194.	3.2	42
79	SME-Type Carbapenem-Hydrolyzing Class A Î²-Lactamases from Geographically Diverse Serratia marcescens Strains. Antimicrobial Agents and Chemotherapy, 2000, 44, 3035-3039.	3.2	123
80	Crystal structure of the wide-spectrum binuclear zinc Î²-lactamase from Bacteroides fragilis. Structure, 1996, 4, 823-836.	3.3	402
81	Biochemical characterization of the carbapenem-hydrolyzing ÃŽÂ²-lactamase AsbM1 fromAeromonas sobriaAER 14M: a member of a novel subgroup of metallo-ÃŽÂ²-lactamases. FEMS Microbiology Letters, 1996, 137, 193-200.	1.8	43
82	A functional classification scheme for beta-lactamases and its correlation with molecular structure. Antimicrobial Agents and Chemotherapy, 1995, 39, 1211-1233.	3.2	2,271
83	Biochemical comparison of imipenem, meropenem and biapenem: permeability, binding to penicillin-binding proteins, and stability to hydrolysis by Î²-lactamases. Journal of Antimicrobial Chemotherapy, 1995, 35, 75-84.	3.0	123
84	Substitution of lysine at position 104 or 240 of TEM-1pTZ18R .beta.-lactamase enhances the effect of serine-164 substitution on hydrolysis or affinity for cephalosporins and the monobactam aztreonam. Biochemistry, 1991, 30, 3179-3188.	2.5	114
85	Recent Developments in Â-Lactamase Research and Their Implications for the Future. Clinical Infectious Diseases, 1988, 10, 681-690.	5.8	48
86	Î²-Lactamases: Historical Perspectives. , 0, , 65-79.		3
87	Antibacterial Agents. , 0, , 1169-1211.		4