

Karen Bush

List of Publications by Year in descending order

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87
papers

17,029
citations

61687

45
h-index

64407

83
g-index

100
all docs

100
docs citations

100
times ranked

14366
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | In vitro antibacterial activity of cefiderocol against recent multidrug-resistant carbapenem-nonsusceptible Enterobacterales isolates. <i>Diagnostic Microbiology and Infectious Disease</i> , 2022, 103, 115651. | 0.8 | 8 |
| 2 | Success and Challenges Associated with Large-Scale Collaborative Surveillance for Carbapenemase Genes in Gram-Negative Bacteria. <i>Antimicrobial Agents and Chemotherapy</i> , 2022, 66, aac0229921. | 1.4 | 1 |
| 3 | Consensus on $\hat{\beta}$ -Lactamase Nomenclature. <i>Antimicrobial Agents and Chemotherapy</i> , 2022, 66, e0033322. | 1.4 | 11 |
| 4 | A Tribute to George A. Jacoby. <i>Antimicrobial Agents and Chemotherapy</i> , 2022, , e0049822. | 1.4 | 0 |
| 5 | A Standard Numbering Scheme for Class C $\hat{\beta}$ -Lactamases. <i>Antimicrobial Agents and Chemotherapy</i> , 2020, 64, . | 1.4 | 50 |
| 6 | Epidemiology of $\hat{\beta}$ -Lactamase-Producing Pathogens. <i>Clinical Microbiology Reviews</i> , 2020, 33, . | 5.7 | 425 |
| 7 | Critical analysis of antibacterial agents in clinical development. <i>Nature Reviews Microbiology</i> , 2020, 18, 286-298. | 13.6 | 204 |
| 8 | Activity of imipenem/relebactam against carbapenemase-producing Enterobacteriaceae with high colistin resistance. <i>Journal of Antimicrobial Chemotherapy</i> , 2019, 74, 3260-3263. | 1.3 | 29 |
| 9 | Interplay between $\hat{\beta}$ -lactamases and new $\hat{\beta}$ -lactamase inhibitors. <i>Nature Reviews Microbiology</i> , 2019, 17, 295-306. | 13.6 | 322 |
| 10 | A Meandering Path from Biochemist to Microbiologist. <i>ACS Infectious Diseases</i> , 2019, 5, 1-3. | 1.8 | 1 |
| 11 | Selection of hyperproduction of AmpC and SME-1 in a carbapenem-resistant <i>Serratia marcescens</i> isolate during antibiotic therapy. <i>Journal of Antimicrobial Chemotherapy</i> , 2018, 73, 1256-1262. | 1.3 | 13 |
| 12 | Unusual carbapenem resistant but ceftriaxone and cefepime susceptible <i>Klebsiella oxytoca</i> isolated from a blood culture: Case report and whole-genome sequencing investigation. <i>IDCases</i> , 2018, 11, 9-11. | 0.4 | 8 |
| 13 | Game Changers: New $\hat{\beta}$ -Lactamase Inhibitor Combinations Targeting Antibiotic Resistance in Gram-Negative Bacteria. <i>ACS Infectious Diseases</i> , 2018, 4, 84-87. | 1.8 | 56 |
| 14 | Past and Present Perspectives on $\hat{\beta}$ -Lactamases. <i>Antimicrobial Agents and Chemotherapy</i> , 2018, 62, . | 1.4 | 554 |
| 15 | What we may expect from novel antibacterial agents in the pipeline with respect to resistance and pharmacodynamic principles. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2017, 44, 113-132. | 0.8 | 62 |
| 16 | Reply to Furlan et al., "Importance of Sequencing To Determine Functional bla _{TEM} Variants". <i>Antimicrobial Agents and Chemotherapy</i> , 2017, 61, . | 1.4 | 0 |
| 17 | Unusual <i>Escherichia coli</i> PBP 3 Insertion Sequence Identified from a Collection of Carbapenem-Resistant Enterobacteriaceae Tested <i>In Vitro</i> with a Combination of Ceftazidime-, Ceftaroline-, or Aztreonam-Avibactam. <i>Antimicrobial Agents and Chemotherapy</i> , 2017, 61, . | 1.4 | 64 |
| 18 | Synergistic Antibiotic Combinations. <i>Topics in Medicinal Chemistry</i> , 2017, , 69-88. | 0.4 | 11 |

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|----|---|-----|-----------|
| 19 | In vitro activity of plazomicin against β -lactamase-producing carbapenem-resistant Enterobacteriaceae (CRE). <i>Journal of Antimicrobial Chemotherapy</i> , 2017, 72, 2792-2795. | 1.3 | 42 |
| 20 | Forgotten antibiotics: a follow-up inventory study in Europe, the USA, Canada and Australia. <i>International Journal of Antimicrobial Agents</i> , 2017, 49, 98-101. | 1.1 | 31 |
| 21 | The Importance of β -Lactamases to the Development of New β -Lactams. , 2017, , 165-175. | | 3 |
| 22 | In vitro susceptibility of β -lactamase-producing carbapenem-resistant Enterobacteriaceae (CRE) to eravacycline. <i>Journal of Antibiotics</i> , 2016, 69, 600-604. | 1.0 | 39 |
| 23 | β -Lactams and β -Lactamase Inhibitors: An Overview. <i>Cold Spring Harbor Perspectives in Medicine</i> , 2016, 6, a025247. | 2.9 | 663 |
| 24 | Cathelicidin Antimicrobial Peptides with Reduced Activation of Toll-Like Receptor Signaling Have Potent Bactericidal Activity against Colistin-Resistant Bacteria. <i>MBio</i> , 2016, 7, . | 1.8 | 17 |
| 25 | The Curious Case of TEM-116. <i>Antimicrobial Agents and Chemotherapy</i> , 2016, 60, 7000-7000. | 1.4 | 19 |
| 26 | Comment on: Resistance gene naming and numbering: is it a new gene or not?. <i>Journal of Antimicrobial Chemotherapy</i> , 2016, 71, 2677-2678. | 1.3 | 10 |
| 27 | Overcoming β -lactam resistance in Gram-negative pathogens. <i>Future Medicinal Chemistry</i> , 2016, 8, 921-924. | 1.1 | 23 |
| 28 | <i>In Vitro</i> Susceptibility of Characterized β -Lactamase-Producing Strains Tested with Avibactam Combinations. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 1789-1793. | 1.4 | 114 |
| 29 | A resurgence of β -lactamase inhibitor combinations effective against multidrug-resistant Gram-negative pathogens. <i>International Journal of Antimicrobial Agents</i> , 2015, 46, 483-493. | 1.1 | 166 |
| 30 | Synergistic MRSA combinations. <i>Nature Chemical Biology</i> , 2015, 11, 832-833. | 3.9 | 8 |
| 31 | Investigational Agents for the Treatment of Gram-Negative Bacterial Infections: A Reality Check. <i>ACS Infectious Diseases</i> , 2015, 1, 509-511. | 1.8 | 48 |
| 32 | <i>In Vitro</i> Activity of Ceftolozane-Tazobactam as Determined by Broth Dilution and Agar Diffusion Assays against Recent U.S. <i>Escherichia coli</i> Isolates from 2010 to 2011 Carrying CTX-M-Type Extended-Spectrum β -Lactamases. <i>Journal of Clinical Microbiology</i> , 2014, 52, 4049-4052. | 1.8 | 26 |
| 33 | Discovery and development of new antibacterial agents targeting Gram-negative bacteria in the era of pandrug resistance: is the future promising?. <i>Current Opinion in Pharmacology</i> , 2014, 18, 91-97. | 1.7 | 49 |
| 34 | Introduction to <i>Antimicrobial Therapeutics Reviews: Infectious Diseases of Current and Emerging Concern</i> . <i>Annals of the New York Academy of Sciences</i> , 2014, 1323, v-vi. | 1.8 | 5 |
| 35 | Cautious Optimism for the Antibacterial Pipeline. <i>Microbe Magazine</i> , 2014, 9, 147-152. | 0.4 | 8 |
| 36 | The ABCD™s of β -lactamase nomenclature. <i>Journal of Infection and Chemotherapy</i> , 2013, 19, 549-559. | 0.8 | 191 |

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|----|--|------|-----------|
| 37 | Investigational Antimicrobial Agents of 2013. <i>Clinical Microbiology Reviews</i> , 2013, 26, 792-821. | 5.7 | 90 |
| 38 | Proliferation and significance of clinically relevant β -lactamases. <i>Annals of the New York Academy of Sciences</i> , 2013, 1277, 84-90. | 1.8 | 271 |
| 39 | Introduction to <i>Antimicrobial Therapeutics Reviews</i> : The bacterial cell wall as an antimicrobial target. <i>Annals of the New York Academy of Sciences</i> , 2013, 1277, v-vii. | 1.8 | 6 |
| 40 | Carbapenemases: Partners in crime. <i>Journal of Global Antimicrobial Resistance</i> , 2013, 1, 7-16. | 0.9 | 76 |
| 41 | Detection systems for carbapenemase gene identification should include the SME serine carbapenemase. <i>International Journal of Antimicrobial Agents</i> , 2013, 41, 1-4. | 1.1 | 33 |
| 42 | Epidemiology and Risk Factors for Isolation of Escherichia coli Producing CTX-M-Type Extended-Spectrum β -Lactamase in a Large U.S. Medical Center. <i>Antimicrobial Agents and Chemotherapy</i> , 2013, 57, 4010-4018. | 1.4 | 62 |
| 43 | Improving known classes of antibiotics: an optimistic approach for the future. <i>Current Opinion in Pharmacology</i> , 2012, 12, 527-534. | 1.7 | 82 |
| 44 | Forgotten Antibiotics: An Inventory in Europe, the United States, Canada, and Australia. <i>Clinical Infectious Diseases</i> , 2012, 54, 268-274. | 2.9 | 81 |
| 45 | Evolution of β -Lactamases: Past, Present, and Future. , 2012, , 427-453. | | 5 |
| 46 | Tackling antibiotic resistance. <i>Nature Reviews Microbiology</i> , 2011, 9, 894-896. | 13.6 | 919 |
| 47 | Introduction to <i>Antimicrobial Therapeutics Reviews</i> . <i>Annals of the New York Academy of Sciences</i> , 2011, 1241, vii-ix. | 1.8 | 1 |
| 48 | New antimicrobial agents on the horizon. <i>Biochemical Pharmacology</i> , 2011, 82, 1528-1539. | 2.0 | 45 |
| 49 | Epidemiological Expansion, Structural Studies, and Clinical Challenges of New β -Lactamases from Gram-Negative Bacteria. <i>Annual Review of Microbiology</i> , 2011, 65, 455-478. | 2.9 | 367 |
| 50 | Inhibition of metallo- β -lactamases by pyridine monothiocarboxylic acid analogs. <i>Journal of Antibiotics</i> , 2010, 63, 255-257. | 1.0 | 18 |
| 51 | The coming of age of antibiotics: discovery and therapeutic value. <i>Annals of the New York Academy of Sciences</i> , 2010, 1213, 1-4. | 1.8 | 34 |
| 52 | Impact of Different Carbapenems and Regimens of Administration on Resistance Emergence for Three Isogenic <i>Pseudomonas aeruginosa</i> Strains with Differing Mechanisms of Resistance. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 2638-2645. | 1.4 | 42 |
| 53 | Hydrolysis and Inhibition Profiles of β -Lactamases from Molecular Classes A to D with Doripenem, Imipenem, and Meropenem. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 565-569. | 1.4 | 89 |
| 54 | <i>In Vitro</i> Antibacterial Activities of JNJ-Q2, a New Broad-Spectrum Fluoroquinolone. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 1955-1964. | 1.4 | 58 |

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|----|--|------|-----------|
| 55 | Bench-to-bedside review: The role of β -lactamases in antibiotic-resistant Gram-negative infections. <i>Critical Care</i> , 2010, 14, 224. | 2.5 | 160 |
| 56 | New β -lactam antibiotics and β -lactamase inhibitors. <i>Expert Opinion on Therapeutic Patents</i> , 2010, 20, 1277-1293. | 2.4 | 103 |
| 57 | Alarming β -lactamase-mediated resistance in multidrug-resistant Enterobacteriaceae. <i>Current Opinion in Microbiology</i> , 2010, 13, 558-564. | 2.3 | 341 |
| 58 | Updated Functional Classification of β -Lactamases. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 969-976. | 1.4 | 1,817 |
| 59 | Comment on: Redefining extended-spectrum β -lactamases: balancing science and clinical need. <i>Journal of Antimicrobial Chemotherapy</i> , 2009, 64, 212-213. | 1.3 | 18 |
| 60 | Casting a broader net for approaches to antibacterial research and development. <i>Current Opinion in Biotechnology</i> , 2008, 19, 606-607. | 3.3 | 2 |
| 61 | New agents in development for the treatment of bacterial infections. <i>Current Opinion in Pharmacology</i> , 2008, 8, 582-592. | 1.7 | 35 |
| 62 | Novel Carbapenem-Hydrolyzing β -Lactamase, KPC-1, from a Carbapenem-Resistant Strain of <i>Klebsiella pneumoniae</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2008, 52, 809-809. | 1.4 | 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. <i>Clinical Infectious Diseases</i> , 2008, 46, 647-655. | 2.9 | 245 |
| 64 | In Vitro Activity of Ceftobiprole against Pathogens from Two Phase 3 Clinical Trials of Complicated Skin and Skin Structure Infections. <i>Antimicrobial Agents and Chemotherapy</i> , 2008, 52, 3418-3423. | 1.4 | 36 |
| 65 | Interactions of Ceftobiprole with β -Lactamases from Molecular Classes A to D. <i>Antimicrobial Agents and Chemotherapy</i> , 2007, 51, 3089-3095. | 1.4 | 84 |
| 66 | Anti-MRSA β -lactams in development, with a focus on ceftobiprole: the first anti-MRSA β -lactam to demonstrate clinical efficacy. <i>Expert Opinion on Investigational Drugs</i> , 2007, 16, 419-429. | 1.9 | 64 |
| 67 | Carbapenemases: the Versatile β -Lactamases. <i>Clinical Microbiology Reviews</i> , 2007, 20, 440-458. | 5.7 | 2,068 |
| 68 | Fluoroquinolone-modifying enzyme: a new adaptation of a common aminoglycoside acetyltransferase. <i>Nature Medicine</i> , 2006, 12, 83-88. | 15.2 | 827 |
| 69 | SME-3, a Novel Member of the <i>Serratia marcescens</i> SME Family of Carbapenem-Hydrolyzing β -Lactamases. <i>Antimicrobial Agents and Chemotherapy</i> , 2006, 50, 3485-3487. | 1.4 | 42 |
| 70 | Is it necessary to change the classification of β -lactamases?. <i>Journal of Antimicrobial Chemotherapy</i> , 2005, 55, 1051-1053. | 1.3 | 47 |
| 71 | Effects of Inoculum and β -Lactamase Activity in AmpC- and Extended-Spectrum β -Lactamase (ESBL)-Producing <i>Escherichia coli</i> and <i>Klebsiella pneumoniae</i> Clinical Isolates Tested by Using NCCLS ESBL Methodology. <i>Journal of Clinical Microbiology</i> , 2004, 42, 269-275. | 1.8 | 123 |
| 72 | Novel antibacterial agents for the treatment of serious Gram-positive infections. <i>Expert Opinion on Investigational Drugs</i> , 2003, 12, 379-399. | 1.9 | 118 |

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|----|---|-----|-----------|
| 73 | Biochemical Characterization of $\hat{\text{I}}^2$ -Lactamases Bla1 and Bla2 from Bacillus anthracis. Antimicrobial Agents and Chemotherapy, 2003, 47, 2040-2042. | 1.4 | 60 |
| 74 | Carbapenem-Resistant Strain of Klebsiella oxytoca Harboring Carbapenem-Hydrolyzing $\hat{\text{I}}^2$ -Lactamase KPC-2. Antimicrobial Agents and Chemotherapy, 2003, 47, 3881-3889. | 1.4 | 172 |
| 75 | Molecular Correlation for the Treatment Outcomes in Bloodstream Infections Caused by Escherichia coli and Klebsiella pneumoniae with Reduced Susceptibility to Ceftazidime. Clinical Infectious Diseases, 2002, 34, 135-146. | 2.9 | 131 |
| 76 | New $\hat{\text{A}}$ -Lactamases in Gram-Negative Bacteria: Diversity and Impact on the Selection of Antimicrobial Therapy. Clinical Infectious Diseases, 2001, 32, 1085-1089. | 2.9 | 348 |
| 77 | Novel Carbapenem-Hydrolyzing $\hat{\text{I}}^2$ -Lactamase, KPC-1, from a Carbapenem-Resistant Strain of Klebsiella pneumoniae. Antimicrobial Agents and Chemotherapy, 2001, 45, 1151-1161. | 1.4 | 1,415 |
| 78 | Cloning and Biochemical Characterization of FOX-5, an AmpC-Type Plasmid-Encoded $\hat{\text{I}}^2$ -Lactamase from a New York City Klebsiella pneumoniae Clinical Isolate. Antimicrobial Agents and Chemotherapy, 2001, 45, 3189-3194. | 1.4 | 42 |
| 79 | SME-Type Carbapenem-Hydrolyzing Class A $\hat{\text{I}}^2$ -Lactamases from Geographically Diverse Serratia marcescens Strains. Antimicrobial Agents and Chemotherapy, 2000, 44, 3035-3039. | 1.4 | 123 |
| 80 | Crystal structure of the wide-spectrum binuclear zinc $\hat{\text{I}}^2$ -lactamase from Bacteroides fragilis. Structure, 1996, 4, 823-836. | 1.6 | 402 |
| 81 | Biochemical characterization of the carbapenem-hydrolyzing $\hat{\text{A}}^2$ -lactamase AsbM1 from Aeromonas sobria AER 14M: a member of a novel subgroup of metallo- $\hat{\text{A}}^2$ -lactamases. FEMS Microbiology Letters, 1996, 137, 193-200. | 0.7 | 43 |
| 82 | A functional classification scheme for beta-lactamases and its correlation with molecular structure. Antimicrobial Agents and Chemotherapy, 1995, 39, 1211-1233. | 1.4 | 2,271 |
| 83 | Biochemical comparison of imipenem, meropenem and biapenem: permeability, binding to penicillin-binding proteins, and stability to hydrolysis by $\hat{\text{I}}^2$ -lactamases. Journal of Antimicrobial Chemotherapy, 1995, 35, 75-84. | 1.3 | 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. | 1.2 | 114 |
| 85 | Recent Developments in $\hat{\text{A}}$ -Lactamase Research and Their Implications for the Future. Clinical Infectious Diseases, 1988, 10, 681-690. | 2.9 | 48 |
| 86 | $\hat{\text{I}}^2$ -Lactamases: Historical Perspectives. , 0, , 65-79. | | 3 |
| 87 | Antibacterial Agents. , 0, , 1169-1211. | | 4 |