

Krisztina M Papp-Wallace

List of Publications by Year in descending order

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83
papers

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87888

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Editorial: Structural and Biochemical Aspects of the Interaction of \hat{I}^2 -Lactamases With State-of-the-Art Inhibitors. <i>Frontiers in Microbiology</i> , 2022, 13, 849324.	3.5	1
2	Structural Characterization of the D179N and D179Y Variants of KPC-2 \hat{I}^2 -Lactamase: \hat{I}^{\odot} -Loop Destabilization as a Mechanism of Resistance to Ceftazidime-Avibactam. <i>Antimicrobial Agents and Chemotherapy</i> , 2022, 66, e0241421.	3.2	22
3	Different Conformations Revealed by NMR Underlie Resistance to Ceftazidime/Avibactam and Susceptibility to Meropenem and Imipenem among D179Y Variants of KPC \hat{I}^2 -Lactamase. <i>Antimicrobial Agents and Chemotherapy</i> , 2022, 66, e0212421.	3.2	11
4	The Class A \hat{I}^2 -Lactamase Produced by <i>Burkholderia</i> Species Compromises the Potency of Tebipenem against a Panel of Isolates from the United States. <i>Antibiotics</i> , 2022, 11, 674.	3.7	1
5	In Vitro Antibacterial Activity and In Vivo Efficacy of Sulbactam-Durlobactam against Pathogenic <i>Burkholderia</i> Species. <i>Antimicrobial Agents and Chemotherapy</i> , 2021, 65, .	3.2	5
6	Cerebrospinal fluid (CSF) augments metabolism and virulence expression factors in <i>Acinetobacter baumannii</i> . <i>Scientific Reports</i> , 2021, 11, 4737.	3.3	16
7	Structural Characterization of Diazabicyclooctane \hat{I}^2 -Lactam $\hat{\epsilon}$ -Enhancers $\hat{\epsilon}$ in Complex with Penicillin-Binding Proteins PBP2 and PBP3 of <i>Pseudomonas aeruginosa</i> . <i>MBio</i> , 2021, 12, .	4.1	19
8	<i>Staphylococcus aureus</i> Potentiates the Hemolytic Activity of <i>Burkholderia cepacia</i> Complex (Bcc) Bacteria. <i>Current Microbiology</i> , 2021, 78, 1864-1870.	2.2	3
9	Structural and Biochemical Characterization of the Novel CTX-M-151 Extended-Spectrum \hat{I}^2 -Lactamase and Its Inhibition by Avibactam. <i>Antimicrobial Agents and Chemotherapy</i> , 2021, 65, .	3.2	5
10	Assessing the Potency of \hat{I}^2 -Lactamase Inhibitors with Diverse Inactivation Mechanisms against the PenA1 Carbapenemase from <i>Burkholderia multivorans</i> . <i>ACS Infectious Diseases</i> , 2021, 7, 826-837.	3.8	6
11	Human Pleural Fluid and Human Serum Albumin Modulate the Behavior of a Hypervirulent and Multidrug-Resistant (MDR) <i>Acinetobacter baumannii</i> Representative Strain. <i>Pathogens</i> , 2021, 10, 471.	2.8	17
12	Interaction of <i>Acinetobacter baumannii</i> with Human Serum Albumin: Does the Host Determine the Outcome?. <i>Antibiotics</i> , 2021, 10, 833.	3.7	5
13	Activity of Imipenem-Relebactam against Multidrug- and Extensively Drug-Resistant <i>Burkholderia cepacia</i> Complex and <i>Burkholderia gladioli</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2021, 65, e0133221.	3.2	11
14	A \hat{I}^3 -lactam siderophore antibiotic effective against multidrug-resistant <i>Pseudomonas aeruginosa</i> , <i>Klebsiella pneumoniae</i> , and <i>Acinetobacter</i> spp.. <i>European Journal of Medicinal Chemistry</i> , 2021, 220, 113436.	5.5	14
15	Effect of Serum Albumin, a Component of Human Pleural Fluid, on Transcriptional and Phenotypic Changes on <i>Acinetobacter baumannii</i> A118. <i>Current Microbiology</i> , 2021, 78, 3829-3834.	2.2	2
16	Interplay between Meropenem and Human Serum Albumin on Expression of Carbapenem Resistance Genes and Natural Competence in <i>Acinetobacter baumannii</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2021, 65, e0101921.	3.2	10
17	A Standard Numbering Scheme for Class C \hat{I}^2 -Lactamases. <i>Antimicrobial Agents and Chemotherapy</i> , 2020, 64, .	3.2	50
18	Resistance to Novel \hat{I}^2 -Lactam $\hat{\epsilon}$ \hat{I}^2 -Lactamase Inhibitor Combinations. <i>Infectious Disease Clinics of North America</i> , 2020, 34, 773-819.	5.1	76

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19	Structural Insights into Ceftobiprole Inhibition of <i>Pseudomonas aeruginosa</i> Penicillin-Binding Protein 3. <i>Antimicrobial Agents and Chemotherapy</i> , 2020, 64, .	3.2	9
20	A β -Lactam Siderophore Antibiotic Effective against Multidrug-Resistant Gram-Negative Bacilli. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 5990-6002.	6.4	20
21	Structures of FOX-4 Cephamycinase in Complex with Transition-State Analog Inhibitors. <i>Biomolecules</i> , 2020, 10, 671.	4.0	4
22	Structural Insights into the Inhibition of the Extended-Spectrum β -Lactamase PER-2 by Avibactam. <i>Antimicrobial Agents and Chemotherapy</i> , 2019, 63, .	3.2	11
23	Population Structure, Molecular Epidemiology, and β -Lactamase Diversity among <i>Stenotrophomonas maltophilia</i> Isolates in the United States. <i>MBio</i> , 2019, 10, .	4.1	52
24	The latest advances in β -lactam/ β -lactamase inhibitor combinations for the treatment of Gram-negative bacterial infections. <i>Expert Opinion on Pharmacotherapy</i> , 2019, 20, 2169-2184.	1.8	89
25	Structural Analysis of The OXA-48 Carbapenemase Bound to A "Poor" Carbapenem Substrate, Doripenem. <i>Antibiotics</i> , 2019, 8, 145.	3.7	9
26	Resurrecting Old β -Lactams: Potent Inhibitory Activity of Temocillin against Multidrug-Resistant <i>Burkholderia</i> Species Isolates from the United States. <i>Antimicrobial Agents and Chemotherapy</i> , 2019, 63, .	3.2	10
27	"Switching Partners" Piperacillin-Avibactam Is a Highly Potent Combination against Multidrug-Resistant <i>Burkholderia cepacia</i> Complex and <i>Burkholderia gladioli</i> Cystic Fibrosis Isolates. <i>Journal of Clinical Microbiology</i> , 2019, 57, .	3.9	24
28	Nacubactam Enhances Meropenem Activity against Carbapenem-Resistant <i>Klebsiella pneumoniae</i> Producing KPC. <i>Antimicrobial Agents and Chemotherapy</i> , 2019, 63, .	3.2	26
29	Ceftazidime-Avibactam in Combination With Fosfomycin: A Novel Therapeutic Strategy Against Multidrug-Resistant <i>Pseudomonas aeruginosa</i> . <i>Journal of Infectious Diseases</i> , 2019, 220, 666-676.	4.0	51
30	Targeting Multidrug-Resistant <i>Acinetobacter</i> spp.: Sulbactam and the Diazabicyclooctenone β -Lactamase Inhibitor ETX2514 as a Novel Therapeutic Agent. <i>MBio</i> , 2019, 10, .	4.1	64
31	Beyond Piperacillin-Tazobactam: Cefepime and AAI101 as a Potent β -Lactam β -Lactamase Inhibitor Combination. <i>Antimicrobial Agents and Chemotherapy</i> , 2019, 63, .	3.2	65
32	Whole Genome Sequence Analysis of <i>Burkholderia contaminans</i> FFH2055 Strain Reveals the Presence of Putative β -Lactamases. <i>Current Microbiology</i> , 2019, 76, 485-494.	2.2	2
33	687. In vitro Activity of a New Generation Oxopyrazole Antibiotic Against <i>Acinetobacter</i> spp.. <i>Open Forum Infectious Diseases</i> , 2019, 6, S312-S312.	0.9	0
34	Human pleural fluid triggers global changes in the transcriptional landscape of <i>Acinetobacter baumannii</i> as an adaptive response to stress. <i>Scientific Reports</i> , 2019, 9, 17251.	3.3	27
35	Relebactam Is a Potent Inhibitor of the KPC-2 β -Lactamase and Restores Imipenem Susceptibility in KPC-Producing Enterobacteriaceae. <i>Antimicrobial Agents and Chemotherapy</i> , 2018, 62, .	3.2	74
36	Strategic Approaches to Overcome Resistance against Gram-Negative Pathogens Using β -Lactamase Inhibitors and β -Lactam Enhancers: Activity of Three Novel Diazabicyclooctanes WCK 5153, Zidebactam (WCK 5107), and WCK 4234. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 4067-4086.	6.4	117

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37	Inactivation of the Pseudomonas-Derived Cephalosporinase-3 (PDC-3) by Relebactam. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	28
38	698. Nacubactam Inhibits Class A β -lactamases. Open Forum Infectious Diseases, 2018, 5, S251-S252.	0.9	0
39	2385. Ceftazidime- β -lactamase Inhibitor Avibactam in Combination With Fosfomycin: A Novel Therapeutic Strategy Against Multidrug-Resistant <i>Pseudomonas aeruginosa</i> . Open Forum Infectious Diseases, 2018, 5, S711-S711.	0.9	1
40	Deciphering the Evolution of Cephalosporin Resistance to Ceftolozane-Tazobactam in <i>Pseudomonas aeruginosa</i> . MBio, 2018, 9, .	4.1	61
41	Sequence heterogeneity of the PenA carbapenemase in clinical isolates of <i>Burkholderia multivorans</i> . Diagnostic Microbiology and Infectious Disease, 2018, 92, 253-258.	1.8	10
42	Characterization of the AmpC β -lactamase from <i>Burkholderia multivorans</i> . Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	16
43	Overcoming an Extremely Drug Resistant (XDR) Pathogen: Avibactam Restores Susceptibility to Ceftazidime for <i>Burkholderia cepacia</i> Complex Isolates from Cystic Fibrosis Patients. ACS Infectious Diseases, 2017, 3, 502-511.	3.8	62
44	Exploring the Landscape of Diazabicyclooctane (DBO) Inhibition: Avibactam Inactivation of PER-2 β -lactamase. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	14
45	WCK 5107 (Zidebactam) and WCK 5153 Are Novel Inhibitors of PBP2 Showing Potent β -lactam Enhancer Activity against <i>Pseudomonas aeruginosa</i> , Including Multidrug-Resistant Metallo- β -lactamase-Producing High-Risk Clones. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	92
46	<i>Klebsiella pneumoniae</i> Carbapenemase-2 (KPC-2), Substitutions at Ambler Position Asp179, and Resistance to Ceftazidime-Avibactam: Unique Antibiotic-Resistant Phenotypes Emerge from β -lactamase Protein Engineering. MBio, 2017, 8, .	4.1	93
47	Potent β -lactam Enhancer Activity of Zidebactam and WCK 5153 against <i>Acinetobacter baumannii</i> , Including Carbapenemase-Producing Clinical Isolates. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	57
48	Avibactam Restores the Susceptibility of Clinical Isolates of <i>Stenotrophomonas maltophilia</i> to Aztreonam. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	52
49	Exploring the Role of the β -Loop in the Evolution of Ceftazidime Resistance in the PenA β -lactamase from <i>Burkholderia multivorans</i> , an Important Cystic Fibrosis Pathogen. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	10
50	New β -lactamase Inhibitors in the Clinic. Infectious Disease Clinics of North America, 2016, 30, 441-464.	5.1	138
51	Treatment options for infections caused by carbapenem-resistant <i>Enterobacteriaceae</i> : can we apply "precision medicine" to antimicrobial chemotherapy?. Expert Opinion on Pharmacotherapy, 2016, 17, 761-781.	1.8	135
52	Boronic Acid Transition State Inhibitors Active against KPC and Other Class A β -lactamases: Structure-Activity Relationships as a Guide to Inhibitor Design. Antimicrobial Agents and Chemotherapy, 2016, 60, 1751-1759.	3.2	49
53	Exposing a β -lactamase "twist": the Mechanistic Basis for the High Level of Ceftazidime Resistance in the C69F Variant of the <i>Burkholderia pseudomallei</i> Pen1 β -lactamase. Antimicrobial Agents and Chemotherapy, 2016, 60, 777-788.	3.2	24
54	Inhibition of <i>Klebsiella</i> β -lactamases (SHV-1 and KPC-2) by Avibactam: A Structural Study. PLoS ONE, 2015, 10, e0136813.	2.5	67

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55	Avibactam and Inhibitor-Resistant SHV β -Lactamases. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 3700-3709.	3.2	66
56	Variants of β -Lactamase KPC-2 That Are Resistant to Inhibition by Avibactam. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 3710-3717.	3.2	85
57	Activities of ceftazidime, ceftaroline, and aztreonam alone and combined with avibactam against isogenic <i>Escherichia coli</i> strains expressing selected single β -lactamases. <i>Diagnostic Microbiology and Infectious Disease</i> , 2015, 82, 65-69.	1.8	38
58	Activity of ceftazidime/avibactam against isogenic strains of <i>Escherichia coli</i> containing KPC and SHV β -lactamases with single amino acid substitutions in the Ω -loop. <i>Journal of Antimicrobial Chemotherapy</i> , 2015, 70, 2279-2286.	3.0	105
59	Unexpected Challenges in Treating Multidrug-Resistant Gram-Negative Bacteria: Resistance to Ceftazidime-Avibactam in Archived Isolates of <i>Pseudomonas aeruginosa</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 1020-1029.	3.2	121
60	New β -Lactamase Inhibitors: a Therapeutic Renaissance in an MDR World. <i>Antimicrobial Agents and Chemotherapy</i> , 2014, 58, 1835-1846.	3.2	258
61	A kinetic analysis of the inhibition of FOX-4 β -lactamase, a plasmid-mediated AmpC cephalosporinase, by monocyclic β -lactams and carbapenems. <i>Journal of Antimicrobial Chemotherapy</i> , 2014, 69, 682-690.	3.0	24
62	Reclaiming the Efficacy of β -Lactamase Inhibitor Combinations: Avibactam Restores the Susceptibility of CMY-2-Producing <i>Escherichia coli</i> to Ceftazidime. <i>Antimicrobial Agents and Chemotherapy</i> , 2014, 58, 4290-4297.	3.2	35
63	Non-phenotypic tests to detect and characterize antibiotic resistance mechanisms in Enterobacteriaceae. <i>Diagnostic Microbiology and Infectious Disease</i> , 2013, 77, 179-194.	1.8	74
64	Design and Exploration of Novel Boronic Acid Inhibitors Reveals Important Interactions with a Clavulanic Acid-Resistant Sulfhydryl-Variable (SHV) β -Lactamase. <i>Journal of Medicinal Chemistry</i> , 2013, 56, 1084-1097.	6.4	40
65	Insights into β -Lactamases from Burkholderia Species, Two Phylogenetically Related yet Distinct Resistance Determinants. <i>Journal of Biological Chemistry</i> , 2013, 288, 19090-19102.	3.4	47
66	Reply to Frère: Covalent Trapping and Bacterial Resistance to Ceftazidime. <i>Journal of Biological Chemistry</i> , 2013, 288, 26968.	3.4	1
67	Novel β -lactamase inhibitors: a therapeutic hope against the scourge of multidrug resistance. <i>Frontiers in Microbiology</i> , 2013, 4, 392.	3.5	59
68	Understanding the Molecular Determinants of Substrate and Inhibitor Specificities in the Carbapenemase KPC-2: Exploring the Roles of Arg220 and Glu276. <i>Antimicrobial Agents and Chemotherapy</i> , 2012, 56, 4428-4438.	3.2	51
69	Exploring the Role of a Conserved Class A Residue in the Ω -Loop of KPC-2 β -Lactamase. <i>Journal of Biological Chemistry</i> , 2012, 287, 31783-31793.	3.4	84
70	Crystal Structures of KPC-2 β -Lactamase in Complex with 3-Nitrophenyl Boronic Acid and the Penam Sulfone PSR-3-226. <i>Antimicrobial Agents and Chemotherapy</i> , 2012, 56, 2713-2718.	3.2	46
71	Early Insights into the Interactions of Different β -Lactam Antibiotics and β -Lactamase Inhibitors against Soluble Forms of <i>Acinetobacter baumannii</i> PBP1a and <i>Acinetobacter</i> sp. PBP3. <i>Antimicrobial Agents and Chemotherapy</i> , 2012, 56, 5687-5692.	3.2	33
72	Inactivation of a class A and a class C β -lactamase by 6 β -(hydroxymethyl)penicillanic acid sulfone. <i>Biochemical Pharmacology</i> , 2012, 83, 462-471.	4.4	16

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73	Carbapenems: Past, Present, and Future. <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 4943-4960.	3.2	1,053
74	Molecular Investigations of PenA-mediated β -lactam Resistance in <i>Burkholderia pseudomallei</i> . <i>Frontiers in Microbiology</i> , 2011, 2, 139.	3.5	76
75	Exploring the Inhibition of CTX-M-9 by β -Lactamase Inhibitors and Carbapenems. <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 3465-3475.	3.2	31
76	Elucidating the role of Trp105 in the KPC-2 β -Lactamase. <i>Protein Science</i> , 2010, 19, 1714-1727.	7.6	57
77	Inhibitor Resistance in the KPC-2 β -Lactamase, a Preeminent Property of This Class A β -Lactamase. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 890-897.	3.2	161
78	Substrate Selectivity and a Novel Role in Inhibitor Discrimination by Residue 237 in the KPC-2 β -Lactamase. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 2867-2877.	3.2	53
79	Regulation of CorA Mg ²⁺ Channel Function Affects the Virulence of <i>Salmonella enterica</i> Serovar Typhimurium. <i>Journal of Bacteriology</i> , 2008, 190, 6509-6516.	2.2	36
80	The CorA Mg ²⁺ Channel Is Required for the Virulence of <i>Salmonella enterica</i> Serovar Typhimurium. <i>Journal of Bacteriology</i> , 2008, 190, 6517-6523.	2.2	40
81	Bacterial homologs of eukaryotic membrane proteins: the 2-TM-GxN family of Mg ²⁺ transporters (Review). <i>Molecular Membrane Biology</i> , 2007, 24, 351-356.	2.0	22
82	Manganese Transport and the Role of Manganese in Virulence. <i>Annual Review of Microbiology</i> , 2006, 60, 187-209.	7.3	270
83	Penicillanic Acid Sulfones Inactivate the Extended-Spectrum β -Lactamase CTX-M-15 through Formation of a Serine-Lysine Cross-Link: an Alternative Mechanism of β -Lactamase Inhibition. <i>MBio</i> , 0, , .	4.1	2