Arnold S Bayer

List of Publications by Year
in descending order

93 papers	10,165 citations	44069 48 h-index	43889 91 g-index
95 all docs	95 docs citations	95 times ranked	8735 citing authors

#	Article	IF	Citations
1	Synergy Mechanisms of Daptomycin-Fosfomycin Combinations in Daptomycin-Susceptible and -Resistant Methicillin-Resistant Staphylococcus aureus: <i>In Vitro</i> , <i>Ex Vivo</i> , and <i>In Vivo</i> Metrics. Antimicrobial Agents and Chemotherapy, 2022, 66, AAC0164921.	3.2	10
2	Proteomic Correlates of Enhanced Daptomycin Activity Following Î²-Lactam Pre-Conditioning in Daptomycin-Resistant Methicillin-Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2022, , AAC0201721.	3.2	0
3	Impacts of NaHCO3 on Î²-Lactam Binding to PBP2a Protein Variants Associated with the NaHCO3-Responsive versus NaHCO3-Non-Responsive Phenotypes. Antibiotics, 2022, 11, 462.	3.7	4
4	The NaHCO ₃ -Responsive Phenotype in Methicillin-Resistant Staphylococcus aureus (MRSA) Is Influenced by <i>mecA</i> Genotype. Antimicrobial Agents and Chemotherapy, 2022, 66, e0025222.	3.2	3
5	Mechanistic Fingerprinting Reveals Kinetic Signatures of Resistance to Daptomycin and Host Defense Peptides in Streptococcus mitis-oralis. Antibiotics, 2021, 10, 404.	3.7	1
6	Impact of Bicarbonate on PBP2a Production, Maturation, and Functionality in Methicillin-Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2021, 65, .	3.2	9
7	Cell Membrane Adaptations Mediate Î²-Lactam-Induced Resensitization of Daptomycin-Resistant (DAP-R) Staphylococcus aureus In Vitro. Microorganisms, 2021, 9, 1028.	3.6	5
8	Î²-Lactam-Induced Cell Envelope Adaptations, Not Solely Enhanced Daptomycin Binding, Underlie Daptomycin-Î²-Lactam Synergy in Methicillin-Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2021, 65, e0035621.	3.2	5
9	A Combined Phenotypic-Genotypic Predictive Algorithm for In Vitro Detection of Bicarbonate: Î²-Lactam Sensitization among Methicillin-Resistant Staphylococcus aureus (MRSA). Antibiotics, 2021, 10, 1089.	3.7	7
10	Impact of Bicarbonate-Î²-Lactam Exposures on Methicillin-Resistant Staphylococcus aureus (MRSA) Gene Expression in Bicarbonate-Î²-Lactam-Responsive vs. Non-Responsive Strains. Genes, 2021, 12, 1650.	2.4	7
11	New Mechanistic Insights into Purine Biosynthesis with Second Messenger c-di-AMP in Relation to Biofilm-Related Persistent Methicillin-Resistant Staphylococcus aureus Infections. MBio, 2021, 12, e0208121.	4.1	12
12	Case Commentary: Daptomycin Resistance in Staphylococcus argenteusâ€"from Northern Australia to San Francisco. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	1
13	Native-Valve Infective Endocarditis. New England Journal of Medicine, 2020, 383, 567-576.	27.0	85
14	Strain-Specific Adaptations of Streptococcus mitis-oralis to Serial In Vitro Passage in Daptomycin (DAP): Genotypic and Phenotypic Characteristics. Antibiotics, 2020, 9, 520.	3.7	5
15	Effect of the Lysin Exebacase on Cardiac Vegetation Progression in a Rabbit Model of Methicillin-Resistant Staphylococcus aureus Endocarditis as Determined by Echocardiography. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	14
16	Prolonged Exposure to Î²-Lactam Antibiotics Reestablishes Susceptibility of Daptomycin-Nonsusceptible Staphylococcus aureus to Daptomycin. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	11
17	Impact of the Novel Prophage Ï•SA169 on Persistent Methicillin-Resistant Staphylococcus aureus Endovascular Infection. MSystems, 2020, 5, .	3.8	5
18	Ability of Bicarbonate Supplementation To Sensitize Selected Methicillin-Resistant <i>Staphylococcus aureus</i> Strains to Î²-Lactam Antibiotics in an <i>Ex Vivo</i> Simulated Endocardial Vegetation Model. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	16

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19	Scope and Predictive Genetic/Phenotypic Signatures of Bicarbonate (NaHCO ₃) Responsiveness and Î²-Lactam Sensitization in Methicillin-Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	13
20	Proteomic and Membrane Lipid Correlates of Re-duced Host Defense Peptide Susceptibility in a snoD Mutant of Staphylococcus aureus. Antibiotics, 2019, 8, 169.	3.7	3
21	Phenotypic and Genotypic Characteristics of Methicillin-Resistant Staphylococcus aureus (MRSA) Related to Persistent Endovascular Infection. Antibiotics, 2019, 8, 71.	3.7	9
22	Bicarbonate Resensitization of Methicillin-Resistant <i>Staphylococcus aureus</i> to Î²-Lactam Antibiotics. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	27
23	Daptomycin Dose-Ranging Evaluation with Single-Dose versus Multidose Ceftriaxone Combinations against Streptococcus mitis <i>/oralis</i> in an <i>Ex Vivo</i> Simulated Endocarditis Vegetation Model. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	13
24	Genetic variation of DNA methyltransferase-3A contributes to protection against persistent MRSA bacteremia in patients. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 20087-20096.	7.1	20
25	Aspergillus endocarditis diagnosed by fungemia plus serum antigen testing. Medical Mycology Case Reports, 2019, 23, 1-3.	1.3	8
26	Gain-of-Function Mutations in the Phospholipid Flippase MprF Confer Specific Daptomycin Resistance. MBio, 2018, 9, .	4.1	70
27	Role of Purine Biosynthesis in Persistent Methicillin-Resistant Staphylococcus aureus Infection. Journal of Infectious Diseases, 2018, 218, 1367-1377.	4.0	29
28	Phenotypic and genotypic correlates of daptomycin-resistant methicillin-susceptible Staphylococcus aureus clinical isolates. Journal of Microbiology, 2017, 55, 153-159.	2.8	34
29	Dissecting Out the Direct Impacts of Large-Scale Antimicrobial Stewardship Interventions on Clinical Outcomes: Can Confounding Be Overcome?. Clinical Infectious Diseases, 2017, 65, 1956-1957.	5.8	1
30	A Case of Early Prosthetic Valve Endocarditis Caused by <i>Staphylococcus warneri</i> in a Patient Presenting With Congestive Heart Failure. Cardiology Research, 2017, 8, 236-240.	1.1	13
31	Mechanism of Action and Resistance to Daptomycin in<i>Staphylococcus aureus</i>and Enterococci. Cold Spring Harbor Perspectives in Medicine, 2016, 6, a026997.	6.2	162
32	The Global Regulon<i>sarA</i>Regulates Î²-Lactam Antibiotic Resistance in Methicillin-Resistant<i>Staphylococcus aureus</i>In Vitro and in Endovascular Infections. Journal of Infectious Diseases, 2016, 214, 1421-1429.	4.0	37
33	Endovascular Infections Caused by Methicillin-Resistant Staphylococcus aureus Are Linked to Clonal Complex-Specific Alterations in Binding and Invasion Domains of Fibronectin-Binding Protein A as Well as the Occurrence of <i>fnbB</i>. Infection and Immunity, 2015, 83, 4772-4780.	2.2	24
34	Staphylococcus aureus Metabolic Adaptations during the Transition from a Daptomycin Susceptibility Phenotype to a Daptomycin Nonsusceptibility Phenotype. Antimicrobial Agents and Chemotherapy, 2015, 59, 4226-4238.	3.2	75
35	Frequency and Distribution of Single-Nucleotide Polymorphisms within <i>mprF</i> in Methicillin-Resistant Staphylococcus aureus Clinical Isolates and Their Role in Cross-Resistance to Daptomycin and Host Defense Antimicrobial Peptides. Antimicrobial Agents and Chemotherapy, 2015, 59, 4930-4937.	3.2	102
36	Candida Infective Endocarditis: an Observational Cohort Study with a Focus on Therapy. Antimicrobial Agents and Chemotherapy, 2015, 59, 2365-2373.	3.2	68

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37	Early <i>agr</i> activation correlates with vancomycin treatment failure in multi-clonotype MRSA endovascular infections. Journal of Antimicrobial Chemotherapy, 2015, 70, 1443-1452.	3.0	24
38	Evolving Resistance Among Gram-positive Pathogens. Clinical Infectious Diseases, 2015, 61, S48-S57.	5.8	88
39	Editorial Commentary: Surgical Therapy for Staphylococcus aureus Prosthetic Valve Endocarditis: Proceed With Caution (Caveat Emptor). Clinical Infectious Diseases, 2015, 60, 750-752.	5.8	4
40	A liaR Deletion Restores Susceptibility to Daptomycin and Antimicrobial Peptides in Multidrug-Resistant Enterococcus faecalis. Journal of Infectious Diseases, 2015, 211, 1317-1325.	4.0	80
41	Staphylococcus aureus Bacteremia at 5 US Academic Medical Centers, 2008-2011: Significant Geographic Variation in Community-Onset Infections. Clinical Infectious Diseases, 2014, 59, 798-807.	5.8	85
42	Genome Sequences of Sequence Type 45 (ST45) Persistent Methicillin-Resistant Staphylococcus aureus (MRSA) Bacteremia Strain 300-169 and ST45 Resolving MRSA Bacteremia Strain 301-188. Genome Announcements, 2014, 2, .	0.8	7
43	Impact of Vancomycin on sarA-Mediated Biofilm Formation: Role in Persistent Endovascular Infections Due to Methicillin-Resistant Staphylococcus aureus. Journal of Infectious Diseases, 2014, 209, 1231-1240.	4.0	70
44	Nafcillin enhances innate immune-mediated killing of methicillin-resistant Staphylococcus aureus. Journal of Molecular Medicine, 2014, 92, 139-149.	3.9	121
45	Heterogeneity of <i>mprF</i> Sequences in Methicillin-Resistant Staphylococcus aureus Clinical Isolates: Role in Cross-Resistance between Daptomycin and Host Defense Antimicrobial Peptides. Antimicrobial Agents and Chemotherapy, 2014, 58, 7462-7467.	3.2	59
46	Phenotypic and Genotypic Characterization of Daptomycin-Resistant Methicillin-Resistant Staphylococcus aureus Strains: Relative Roles of mprF and dlt Operons. PLoS ONE, 2014, 9, e107426.	2.5	105
47	Mechanisms of daptomycin resistance in <i>Staphylococcus aureus</i>: role of the cell membrane and cell wall. Annals of the New York Academy of Sciences, 2013, 1277, 139-158.	3.8	280
48	Reduced Vancomycin Susceptibility in an <i>In Vitro</i> Catheter-Related Biofilm Model Correlates with Poor Therapeutic Outcomes in Experimental Endocarditis Due to Methicillin-Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2013, 57, 1447-1454.	3.2	61
49	Daptomycin-Resistant Enterococcus faecalis Diverts the Antibiotic Molecule from the Division Septum and Remodels Cell Membrane Phospholipids. MBio, 2013, 4, .	4.1	152
50	Causal Role of Single Nucleotide Polymorphisms within the <i>mprF</i> Gene of Staphylococcus aureus in Daptomycin Resistance. Antimicrobial Agents and Chemotherapy, 2013, 57, 5658-5664.	3.2	76
51	Increased Cell Wall Teichoic Acid Production and D-alanylation Are Common Phenotypes among Daptomycin-Resistant Methicillin-Resistant Staphylococcus aureus (MRSA) Clinical Isolates. PLoS ONE, 2013, 8, e67398.	2.5	86
52	Emergence of Daptomycin Resistance in Daptomycin-NaÃ¯ve Rabbits with Methicillin-Resistant Staphylococcus aureus Prosthetic Joint Infection Is Associated with Resistance to Host Defense Cationic Peptides and mprF Polymorphisms. PLoS ONE, 2013, 8, e71151.	2.5	76
53	Reduced Susceptibility to Host-Defense Cationic Peptides and Daptomycin Coemerge in Methicillin-Resistant Staphylococcus aureus From Daptomycin-Naive Bacteremic Patients. Journal of Infectious Diseases, 2012, 206, 1160-1167.	4.0	55
54	Telavancin in Therapy of Experimental Aortic Valve Endocarditis in Rabbits Due to Daptomycin-Nonsusceptible Methicillin-Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2012, 56, 5528-5533.	3.2	20

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55	Clinical Practice Guidelines by the Infectious Diseases Society of America for the Treatment of Methicillin-Resistant Staphylococcus aureus Infections in Adults and Children. Clinical Infectious Diseases, 2011, 52, e18-e55.	5.8	2,673
56	In vitro endothelial cell damage is positively correlated with enhanced virulence and poor vancomycin responsiveness in experimental endocarditis due to methicillin-resistant Staphylococcus aureus. Cellular Microbiology, 2011, 13, 1530-1541.	2.1	46
57	Daptomycin resistance mechanisms in clinically derived Staphylococcus aureus strains assessed by a combined transcriptomics and proteomics approach. Journal of Antimicrobial Chemotherapy, 2011, 66, 1696-1711.	3.0	126
58	Combinatorial Phenotypic Signatures Distinguish Persistent from Resolving Methicillin-Resistant <i>Staphylococcus aureus</i> Bacteremia Isolates. Antimicrobial Agents and Chemotherapy, 2011, 55, 575-582.	3.2	56
59	Correlation of Daptomycin Resistance in a Clinical <i>Staphylococcus aureus</i> Strain with Increased Cell Wall Teichoic Acid Production and <scp>d</scp> -Alanylation. Antimicrobial Agents and Chemotherapy, 2011, 55, 3922-3928.	3.2	117
60	<i>In Vitro</i> Cross-Resistance to Daptomycin and Host Defense Cationic Antimicrobial Peptides in Clinical Methicillin-Resistant Staphylococcus aureus Isolates. Antimicrobial Agents and Chemotherapy, 2011, 55, 4012-4018.	3.2	133
61	Relationship of <i>agr</i> Expression and Function with Virulence and Vancomycin Treatment Outcomes in Experimental Endocarditis Due to Methicillin-Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2011, 55, 5631-5639.	3.2	57
62	Carotenoid-Related Alteration of Cell Membrane Fluidity Impacts <i>Staphylococcus aureus</i> Susceptibility to Host Defense Peptides. Antimicrobial Agents and Chemotherapy, 2011, 55, 526-531.	3.2	189
63	Use of Antistaphylococcal Â-Lactams to Increase Daptomycin Activity in Eradicating Persistent Bacteremia Due to Methicillin-Resistant Staphylococcus aureus: Role of Enhanced Daptomycin Binding. Clinical Infectious Diseases, 2011, 53, 158-163.	5.8	229
64	Lysyl-Phosphatidylglycerol Attenuates Membrane Perturbation Rather than Surface Association of the Cationic Antimicrobial Peptide 6W-RP-1 in a Model Membrane System: Implications for Daptomycin Resistance. Antimicrobial Agents and Chemotherapy, 2010, 54, 4476-4479.	3.2	82
65	Cell Wall Thickening Is Not a Universal Accompaniment of the Daptomycin Nonsusceptibility Phenotype in <i>Staphylococcus aureus</i> : Evidence for Multiple Resistance Mechanisms. Antimicrobial Agents and Chemotherapy, 2010, 54, 3079-3085.	3.2	128
66	Factors Influencing Time to Vancomycinâ€Induced Clearance of Nonendocarditis Methicillinâ€ResistantStaphylococcus aureusBacteremia: Role of Platelet Microbicidal Protein Killing andagrGenotypes. Journal of Infectious Diseases, 2010, 201, 233-240.	4.0	25
67	The Bacterial Defensin Resistance Protein MprF Consists of Separable Domains for Lipid Lysinylation and Antimicrobial Peptide Repulsion. PLoS Pathogens, 2009, 5, e1000660.	4.7	283
68	Enhanced Expression of<i>dltABCD</i>Is Associated with the Development of Daptomycin Nonsusceptibility in a Clinical Endocarditis Isolate of<i>Staphylococcus aureus</i>. Journal of Infectious Diseases, 2009, 200, 1916-1920.	4.0	147
69	Phenotypic and Genotypic Characteristics of Persistent Methicillinâ€Resistant<i>Staphylococcus aureus</i>Bacteremia In Vitro and in an Experimental Endocarditis Model. Journal of Infectious Diseases, 2009, 199, 201-208.	4.0	106
70	Analysis of Cell Membrane Characteristics of In Vitro-Selected Daptomycin-Resistant Strains of Methicillin-Resistant <i>Staphylococcus aureus</i>. Antimicrobial Agents and Chemotherapy, 2009, 53, 2312-2318.	3.2	210
71	Regulation of mprF in Daptomycin-Nonsusceptible Staphylococcus aureus Strains. Antimicrobial Agents and Chemotherapy, 2009, 53, 2636-2637.	3.2	117
72	Failures in Clinical Treatment of <i>Staphylococcus aureus</i> Infection with Daptomycin Are Associated with Alterations in Surface Charge, Membrane Phospholipid Asymmetry, and Drug Binding. Antimicrobial Agents and Chemotherapy, 2008, 52, 269-278.	3.2	305

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73	In vitro susceptibility of Staphylococcus aureus to thrombin-induced platelet microbicidal protein-1 (tPMP-1) is influenced by cell membrane phospholipid composition and asymmetry. Microbiology (United Kingdom), 2007, 153, 1187-1197.	1.8	87
74	A Synthetic Congener Modeled on a Microbicidal Domain of Thrombin- Induced Platelet Microbicidal Protein 1 Recapitulates Staphylocidal Mechanisms of the Native Molecule. Antimicrobial Agents and Chemotherapy, 2006, 50, 3786-3792.	3.2	27
75	Regulation of<i>Staphylococcus aureus</i>Î±â€Toxin Gene<i>(hla)</i>Expression by<i>agr, sarA,</i>and<i>sae</i>In Vitro and in Experimental Infective Endocarditis. Journal of Infectious Diseases, 2006, 194, 1267-1275.	4.0	137
76	Transposon Disruption of the Complex I NADH Oxidoreductase Gene (<i>snoD</i>) in <i>Staphylococcus aureus</i> Is Associated with Reduced Susceptibility to the Microbicidal Activity of Thrombin-Induced Platelet Microbicidal Protein 1. Journal of Bacteriology, 2006, 188, 211-222.	2.2	46
77	DltABCD- and MprF-Mediated Cell Envelope Modifications of Staphylococcus aureus Confer Resistance to Platelet Microbicidal Proteins and Contribute to Virulence in a Rabbit Endocarditis Model. Infection and Immunity, 2005, 73, 8033-8038.	2.2	148
78	Staphylococcus aureus Endocarditis. JAMA - Journal of the American Medical Association, 2005, 293, 3012.	7.4	990
79	Impacts of sarA and agr in Staphylococcus aureus Strain Newman on Fibronectin-Binding Protein A Gene Expression and Fibronectin Adherence Capacity In Vitro and in Experimental Infective Endocarditis. Infection and Immunity, 2004, 72, 1832-1836.	2.2	53
80	Persistent Bacteremia Due to Methicillinâ€ResistantStaphylococcus aureusInfection Is Associated withagrDysfunction and Lowâ€Level In Vitro Resistance to Thrombinâ€Induced Platelet Microbicidal Protein. Journal of Infectious Diseases, 2004, 190, 1140-1149.	4.0	327
81	Beneficial Influence of Platelets on Antibiotic Efficacy in an In Vitro Model of Staphylococcus aureus -Induced Endocarditis. Antimicrobial Agents and Chemotherapy, 2004, 48, 2551-2557.	3.2	28
82	In Vitro Susceptibility to Thrombin-Induced Platelet Microbicidal Protein Is Associated With Reduced Disease Progression and Complication Rates in ExperimentalStaphylococcus aureusEndocarditis. Circulation, 2002, 105, 746-752.	1.6	62
83	Regulation of Staphylococcus aureus type 5 capsular polysaccharides by agr and sarA in vitro and in an experimental endocarditis model. Microbial Pathogenesis, 2002, 33, 73-79.	2.9	42
84	Clumping Factor A Mediates Binding ofStaphylococcus aureus to Human Platelets. Infection and Immunity, 2001, 69, 3120-3127.	2.2	116
85	Diversity in Antistaphylococcal Mechanisms among Membrane-Targeting Antimicrobial Peptides. Infection and Immunity, 2001, 69, 4916-4922.	2.2	49
86	In Vitro Resistance of <i>Staphylococcus aureus</i> to Thrombin-Induced Platelet Microbicidal Protein Is Associated with Alterations in Cytoplasmic Membrane Fluidity. Infection and Immunity, 2000, 68, 3548-3553.	2.2	138
87	Treatment of Experimental Staphylococcal Endocarditis Due to a Strain with Reduced Susceptibility In Vitro to Vancomycin: Efficacy of Ampicillin-Sulbactam. Antimicrobial Agents and Chemotherapy, 1999, 43, 2565-2568.	3.2	28
88	Plasmid-Mediated Resistance to Thrombin-Induced Platelet Microbicidal Protein in Staphylococci: Role of the <i>qacA</i> Locus. Antimicrobial Agents and Chemotherapy, 1999, 43, 2395-2399.	3.2	78
89	Antimicrobial peptides from platelets. Drug Resistance Updates, 1999, 2, 116-126.	14.4	76
90	<i>Staphylococcus aureus</i> genetic loci impacting growth and survival in multiple infection environments. Molecular Microbiology, 1998, 30, 393-404.	2.5	272

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91	Favorable ten-year experience with valve procedures for active infective endocarditis. Journal of Thoracic and Cardiovascular Surgery, 1984, 87, 493-502.	0.8	44
92	Tropical pyomyositis. Arthritis and Rheumatism, 1982, 25, 107-110.	6.7	25
93	Treatment of Experimental and Human Bacterial Endocarditis with Quinolone Antimicrobial Agents. , 0, , 259-273.		1