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	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
2	Staphylococcus aureus Endocarditis. JAMA - Journal of the American Medical Association, 2005, 293, 3012.	7.4	990
3	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
4	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
5	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
6	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
7	<i>Staphylococcus aureus</i> genetic loci impacting growth and survival in multiple infection environments. Molecular Microbiology, 1998, 30, 393-404.	2.5	272
8	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
9	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
10	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
11	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
12	Daptomycin-Resistant Enterococcus faecalis Diverts the Antibiotic Molecule from the Division Septum and Remodels Cell Membrane Phospholipids. MBio, 2013, 4, .	4.1	152
13	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
14	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
15	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
16	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
17	<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
18	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

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19	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
20	Nafcillin enhances innate immune-mediated killing of methicillin-resistant Staphylococcus aureus. Journal of Molecular Medicine, 2014, 92, 139-149.	3.9	121
21	Regulation of mprF in Daptomycin-Nonsusceptible Staphylococcus aureus Strains. Antimicrobial Agents and Chemotherapy, 2009, 53, 2636-2637.	3.2	117
22	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
23	Clumping Factor A Mediates Binding ofStaphylococcus aureus to Human Platelets. Infection and Immunity, 2001, 69, 3120-3127.	2.2	116
24	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
25	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
26	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
27	Evolving Resistance Among Gram-positive Pathogens. Clinical Infectious Diseases, 2015, 61, S48-S57.	5.8	88
28	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
29	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
30	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
31	Native-Valve Infective Endocarditis. New England Journal of Medicine, 2020, 383, 567-576.	27.0	85
32	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
33	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
34	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
35	Antimicrobial peptides from platelets. Drug Resistance Updates, 1999, 2, 116-126.	14.4	76
36	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

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37	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
38	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
39	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
40	Gain-of-Function Mutations in the Phospholipid Flippase MprF Confer Specific Daptomycin Resistance. MBio, 2018, 9, .	4.1	70
41	Candida Infective Endocarditis: an Observational Cohort Study with a Focus on Therapy. Antimicrobial Agents and Chemotherapy, 2015, 59, 2365-2373.	3.2	68
42	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
43	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
44	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
45	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
46	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
47	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
48	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
49	Diversity in Antistaphylococcal Mechanisms among Membrane-Targeting Antimicrobial Peptides. Infection and Immunity, 2001, 69, 4916-4922.	2.2	49
50	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
51	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
52	Favorable ten-year experience with valve procedures for active infective endocarditis. Journal of Thoracic and Cardiovascular Surgery, 1984, 87, 493-502.	0.8	44
53	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
54	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

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55	Phenotypic and genotypic correlates of daptomycin-resistant methicillin-susceptible Staphylococcus aureus clinical isolates. Journal of Microbiology, 2017, 55, 153-159.	2.8	34
56	Role of Purine Biosynthesis in Persistent Methicillin-Resistant Staphylococcus aureus Infection. Journal of Infectious Diseases, 2018, 218, 1367-1377.	4.0	29
57	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
58	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
59	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
60	Bicarbonate Resensitization of Methicillin-Resistant <i>Staphylococcus aureus</i> to Î²-Lactam Antibiotics. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	27
61	Tropical pyomyositis. Arthritis and Rheumatism, 1982, 25, 107-110.	6.7	25
62	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
63	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
64	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
65	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
66	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
67	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
68	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
69	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
70	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
71	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
72	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

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73	Prolonged Exposure to Î²-Lactam Antibiotics Reestablishes Susceptibility of Daptomycin-Nonsusceptible Staphylococcus aureus to Daptomycin. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	11
74	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
75	Phenotypic and Genotypic Characteristics of Methicillin-Resistant Staphylococcus aureus (MRSA) Related to Persistent Endovascular Infection. Antibiotics, 2019, 8, 71.	3.7	9
76	Impact of Bicarbonate on PBP2a Production, Maturation, and Functionality in Methicillin-Resistant Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2021, 65, .	3.2	9
77	Aspergillus endocarditis diagnosed by fungemia plus serum antigen testing. Medical Mycology Case Reports, 2019, 23, 1-3.	1.3	8
78	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
79	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
80	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
81	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
82	Impact of the Novel Prophage Ï•SA169 on Persistent Methicillin-Resistant Staphylococcus aureus Endovascular Infection. MSystems, 2020, 5, .	3.8	5
83	Cell Membrane Adaptations Mediate Î²-Lactam-Induced Resensitization of Daptomycin-Resistant (DAP-R) Staphylococcus aureus In Vitro. Microorganisms, 2021, 9, 1028.	3.6	5
84	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
85	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
86	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
87	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
88	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
89	Treatment of Experimental and Human Bacterial Endocarditis with Quinolone Antimicrobial Agents. , 0, , 259-273.		1
90	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

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91	Case Commentary: Daptomycin Resistance in Staphylococcus argenteusâ€"from Northern Australia to San Francisco. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	1
92	Mechanistic Fingerprinting Reveals Kinetic Signatures of Resistance to Daptomycin and Host Defense Peptides in Streptococcus mitis-oralis. Antibiotics, 2021, 10, 404.	3.7	1
93	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