Evolutionary highways to persistent bacterial infection

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Citation Report

#	Article	IF	Citations
1	Adapting to the Airways: Metabolic Requirements of Pseudomonas aeruginosa during the Infection of Cystic Fibrosis Patients. Metabolites, 2019, 9, 234.	1.3	46
2	Evaluation of Structureâ€"Function Relationships of Aggregation-Induced Emission Luminogens for Simultaneous Dual Applications of Specific Discrimination and Efficient Photodynamic Killing of Gram-Positive Bacteria. Journal of the American Chemical Society, 2019, 141, 16781-16789.	6.6	295
3	Ultrasoundâ€mediated therapies for the treatment of biofilms in chronic wounds: a review of present knowledge. Microbial Biotechnology, 2020, 13, 613-628.	2.0	53
4	Bacterial survival: evolve and adapt or perish. Nature Reviews Microbiology, 2020, 18, 5-5.	13.6	6
5	Immunological Effects of Aggregation-Induced Emission Materials. Frontiers in Immunology, 2020, 11, 575816.	2.2	10
6	The Enemy of my Enemy: Bacterial Competition in the Cystic Fibrosis Lung. Cell Host and Microbe, 2020, 28, 502-504.	5.1	1
7	<i>In Vitro</i>Studies of Persister Cells. Microbiology and Molecular Biology Reviews, 2020, 84, .	2.9	42
8	Host Adaptation Predisposes Pseudomonas aeruginosa to Type VI Secretion System-Mediated Predation by the Burkholderia cepacia Complex. Cell Host and Microbe, 2020, 28, 534-547.e3.	5.1	34
9	Evolutionary causes and consequences of bacterial antibiotic persistence. Nature Reviews Microbiology, 2020, 18, 479-490.	13.6	113
10	Pathogen to commensal? Longitudinal within-host population dynamics, evolution, and adaptation during a chronic >16-year Burkholderia pseudomallei infection. PLoS Pathogens, 2020, 16, e1008298.	2.1	12
11	Bacterial biopolymers: from pathogenesis to advanced materials. Nature Reviews Microbiology, 2020, 18, 195-210.	13.6	257
12	Enhanced Synergistic Antibacterial Activity through a Smart Platform Based on UiO-66 Combined with Photodynamic Therapy and Chemotherapy. Langmuir, 2020, 36, 4025-4032.	1.6	33
13	Allelic polymorphism shapes community function in evolving <i>Pseudomonas aeruginosa</i> populations. ISME Journal, 2020, 14, 1929-1942.	4.4	47
14	Common Adaptive Strategies Underlie Within-Host Evolution of Bacterial Pathogens. Molecular Biology and Evolution, 2021, 38, 1101-1121.	3.5	28
15	Persistence as an Optimal Hedging Strategy. Biophysical Journal, 2021, 120, 133-142.	0.2	12
16	Pseudomonas aeruginosa adaptation and evolution in patients with cystic fibrosis. Nature Reviews Microbiology, 2021, 19, 331-342.	13.6	213
17	Omics-based tracking of<i>Pseudomonas aeruginosa</i>persistence in â€œeradicatedâ€•cystic fibrosis patients. European Respiratory Journal, 2021, 57, 2000512.	3.1	20
18	Evolutionary Genomics of Niche-Specific Adaptation to the Cystic Fibrosis Lung in <i>Pseudomonas aeruginosa</i>. Molecular Biology and Evolution, 2021, 38, 663-675.	3.5	18

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19	Within-Host Microevolution of Pseudomonas aeruginosa Urinary Isolates: A Seven-Patient Longitudinal Genomic and Phenotypic Study. Frontiers in Microbiology, 2020, 11, 611246.	1.5	10
20	Evolution of Antibiotic Tolerance Shapes Resistance Development in Chronic Pseudomonas aeruginosa Infections. MBio, 2021, 12, .	1.8	59
21	Comparative genomics of ST5 and ST30 methicillin-resistant Staphylococcus aureus sequential isolates recovered from paediatric patients with cystic fibrosis. Microbial Genomics, 2021, 7, .	1.0	5
22	Pseudomonas aeruginosa: An Audacious Pathogen with an Adaptable Arsenal of Virulence Factors. International Journal of Molecular Sciences, 2021, 22, 3128.	1.8	230
23	Bacterial Biopolymer: Its Role in Pathogenesis to Effective Biomaterials. Polymers, 2021, 13, 1242.	2.0	34
24	Compensatory evolution of Pseudomonas aeruginosaâ€™s slow growth phenotype suggests mechanisms of adaptation in cystic fibrosis. Nature Communications, 2021, 12, 3186.	5.8	33
25	Near-infrared Aza-BODIPY Dyes Through Molecular Surgery for Enhanced Photothermal and Photodynamic Antibacterial Therapy. Chemical Research in Chinese Universities, 2021, 37, 951-959.	1.3	26
26	Rampant prophage movement among transient competitors drives rapid adaptation during infection. Science Advances, 2021, 7, .	4.7	14
27	Highâ€throughput dilutionâ€based growth method enables timeâ€resolved exoâ€metabolomics of <i>Pseudomonas putida</i> and <i>Pseudomonas aeruginosa</i>. Microbial Biotechnology, 2021, 14, 2214-2226.	2.0	14
28	Multidimensional Clinical Surveillance of Pseudomonas aeruginosa Reveals Complex Relationships between Isolate Source, Morphology, and Antimicrobial Resistance. MSphere, 2021, 6, e0039321.	1.3	3
29	Bacterial evolution during human infection: Adapt and live or adapt and die. PLoS Pathogens, 2021, 17, e1009872.	2.1	33
30	Nanogels: A novel approach in antimicrobial delivery systems and antimicrobial coatings. Bioactive Materials, 2021, 6, 3634-3657.	8.6	63
31	Antibiotic resistance in Pseudomonas aeruginosa and adaptation to complex dynamic environments. Microbial Genomics, 2020, 6, .	1.0	14
36	Bacterial persisters in long-term infection: Emergence and fitness in a complex host environment. PLoS Pathogens, 2020, 16, e1009112.	2.1	53
37	Adaptation and genomic erosion in fragmented Pseudomonas aeruginosa populations in the sinuses of people with cystic fibrosis. Cell Reports, 2021, 37, 109829.	2.9	19
38	Inter-species interactions alter antibiotic efficacy in bacterial communities. ISME Journal, 2022, 16, 812-821.	4.4	41
40	Fast Broad-Spectrum Staining and Photodynamic Inhibition of Pathogenic Microorganisms by a Water-Soluble Aggregation-Induced Emission Photosensitizer. Frontiers in Chemistry, 2021, 9, 755419.	1.8	17
43	Comparison of Whole Genome Sequencing and Repetitive Element PCR for Multidrug- Resistant Pseudomonas aeruginosa Strain Typing. Journal of Molecular Diagnostics, 2021, , .	1.2	3

#	Article	IF	Citations
44	Genome evolution drives transcriptomic and phenotypic adaptation in Pseudomonas aeruginosa during 20 years of infection. Microbial Genomics, 2021, 7, .	1.0	14
46	The fast-growing field of photo-driven theranostics based on aggregation-induced emission. Chemical Society Reviews, 2022, 51, 1983-2030.	18.7	168
47	Reactivity Differences Enable ROS for Selective Ablation of Bacteria. Angewandte Chemie - International Edition, 2022, 61, .	7.2	40
48	Evolution of biofilm-adapted gene expression profiles in lasR-deficient clinical Pseudomonas aeruginosa isolates. Npj Biofilms and Microbiomes, 2022, 8, 6.	2.9	17
49	Reactivity Differences Enable ROS for Selective Ablation of Bacteria. Angewandte Chemie, 2022, 134, .	1.6	12
50	Efficient Antibacterial Agent Delivery by Mesoporous Silica Aerogel. ACS Omega, 2022, 7, 7638-7647.	1.6	8
51	Molecular mechanisms and drivers of pathogen emergence. Trends in Microbiology, 2022, 30, 898-911.	3.5	19
52	Surfactantâ€Inspired Coassembly Strategy to Integrate Aggregationâ€Induced Emission Photosensitizer with Organosilica Nanoparticles for Efficient Theranostics. Advanced Functional Materials, 2022, 32, .	7.8	23
53	Persistent Bacterial Infections, Antibiotic Treatment Failure, and Microbial Adaptive Evolution. Antibiotics, 2022, 11, 419.	1.5	11
54	Mutational background influences<i>P. aeruginosa</i>ciprofloxacin resistance evolution but preserves collateral sensitivity robustness. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2109370119.	3.3	18
55	Extensively Drug-Resistant KlebsiellaÂpneumoniae Counteracts Fitness and Virulence Costs That Accompanied Ceftazidime-Avibactam Resistance Acquisition. Microbiology Spectrum, 2022, 10, e0014822.	1.2	18
57	Î²-Lactamase-Responsive Probe for Efficient Photodynamic Therapy of Drug-Resistant Bacterial Infection. ACS Sensors, 2022, 7, 1361-1371.	4.0	6
58	Fluorescent dyes with multiple quaternary ammonium centers for specific image discrimination and Gram-positive antibacterial activity. Organic and Biomolecular Chemistry, 2022, , .	1.5	1
59	Self-assembly CuO-loaded nanocomposite involving functionalized DNA with dihydromyricetin for water-based efficient and controllable antibacterial action. , 2022, 137, 212847.		2
60	Dithienylethene-Bridged Fluoroquinolone Derivatives for Imaging-Guided Reversible Control of Antibacterial Activity. Journal of Organic Chemistry, 2022, 87, 7446-7455.	1.7	15
62	Dipoleâ€Dipole and Anionâ€Ï€⁺ Interaction Manipulation Synergistically Enhance Intrinsic Antibacterial Activities of AIEgens. Chemistry - A European Journal, 2022, 28, .	1.7	4
63	Low Diversity and Instability of the Sinus Microbiota over Time in Adults with Cystic Fibrosis. Microbiology Spectrum, 2022, 10, .	1.2	7
64	Bioactive AIEgens Tailored for Specific and Sensitive Theranostics of Gram-Positive Bacterial Infection. ACS Applied Materials & Interfaces, 2022, 14, 46340-46350.	4.0	6

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65	Multivariate analysis of liquid biopsies for real-time detection of patients with biofilm-associated infections (BAI). Chemical Engineering Journal, 2023, 453, 139595.	6.6	7
66	Antibiotic Resistance in Pseudomonas. Advances in Experimental Medicine and Biology, 2022, , 117-143.	0.8	10
67	Cyclic-di-GMP signaling controls metabolic activity in Pseudomonas aeruginosa. Cell Reports, 2022, 41, 111515.	2.9	17
68	New concepts in antimicrobial resistance in cystic fibrosis respiratory infections. Journal of Cystic Fibrosis, 2022, 21, 937-945.	0.3	9
69	Parallel Evolution of Pseudomonas aeruginosa during a Prolonged ICU-Infection Outbreak. Microbiology Spectrum, 2022, 10, .	1.2	3
70	<i>Pseudomonas aeruginosa</i> Represents a Main Cause of Hospital-Acquired Infections (HAI) and Multidrug Resistance (MDR). , 0, , .		0
71	Rapid Phenotypic Convergence towards Collateral Sensitivity in Clinical Isolates of Pseudomonas aeruginosa Presenting Different Genomic Backgrounds. Microbiology Spectrum, 2023, 11, .	1.2	7
72	NIR-II xanthene dyes with structure-inherent bacterial targeting for efficient photothermal and broad-spectrum antibacterial therapy. Acta Biomaterialia, 2023, 159, 247-258.	4.1	7
73	Membrane-targeting amphiphilic AIE photosensitizer for broad-spectrum bacteria imaging and photodynamic killing of bacteria. Chinese Chemical Letters, 2023, 34, 108160.	4.8	7
74	The <i>Burkholderia contaminans</i> prevalent phenotypes as possible markers of poor clinical outcomes in chronic lung infection of children with cystic fibrosis. Pathogens and Disease, 2023, 81, .	0.8	0
75	Competitive survival of clonal serial Pseudomonas aeruginosa isolates from cystic fibrosis airways in human neutrophils. IScience, 2023, 26, 106475.	1.9	1
76	Photoacidolysis-Mediated Iridium(III) Complex for Photoactive Antibacterial Therapy. Journal of Medicinal Chemistry, 2023, 66, 4840-4848.	2.9	4
77	Convergent Within-Host Adaptation of Pseudomonas aeruginosa through the Transcriptional Regulatory Network. MSystems, 0, , .	1.7	0
78	One population, multiple lifestyles: Commensalism and pathogenesis in the human mycobiome. Cell Host and Microbe, 2023, 31, 539-553.	5.1	13
83	Gut microbiome and nutrition-related predictors of response to immunotherapy in cancer: making sense of the puzzle. , 2023, 1, .		0