

# Kenneth W Bayles

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2165350/publications.pdf>

Version: 2024-02-01

92  
papers

8,492  
citations

61984

43  
h-index

48315

88  
g-index

95  
all docs

95  
docs citations

95  
times ranked

8098  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Genetic Resource for Rapid and Comprehensive Phenotype Screening of Nonessential <i>Staphylococcus aureus</i> Genes. <i>MBio</i> , 2013, 4, e00537-12.	4.1	718
2	The <i>cidA</i> murein hydrolase regulator contributes to DNA release and biofilm development in <i>Staphylococcus aureus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 8113-8118.	7.1	607
3	<i>Staphylococcus aureus</i> Biofilms Prevent Macrophage Phagocytosis and Attenuate Inflammation In Vivo. <i>Journal of Immunology</i> , 2011, 186, 6585-6596.	0.8	563
4	Assembly and Development of the <i>Pseudomonas aeruginosa</i> Biofilm Matrix. <i>PLoS Pathogens</i> , 2009, 5, e1000354.	4.7	515
5	Modulation of eDNA Release and Degradation Affects <i>Staphylococcus aureus</i> Biofilm Maturation. <i>PLoS ONE</i> , 2009, 4, e5822.	2.5	418
6	<i>Staphylococcus aureus</i> biofilm: a complex developmental organism. <i>Molecular Microbiology</i> , 2017, 104, 365-376.	2.5	343
7	Molecular Control of Bacterial Death and Lysis. <i>Microbiology and Molecular Biology Reviews</i> , 2008, 72, 85-109.	6.6	314
8	The biological role of death and lysis in biofilm development. <i>Nature Reviews Microbiology</i> , 2007, 5, 721-726.	28.6	296
9	Bacterial programmed cell death: making sense of a paradox. <i>Nature Reviews Microbiology</i> , 2014, 12, 63-69.	28.6	245
10	The <i>Staphylococcus aureus</i> <i>lrgAB</i> Operon Modulates Murein Hydrolase Activity and Penicillin Tolerance. <i>Journal of Bacteriology</i> , 2000, 182, 1794-1801.	2.2	231
11	Nuclease Modulates Biofilm Formation in Community-Associated Methicillin-Resistant <i>Staphylococcus aureus</i> . <i>PLoS ONE</i> , 2011, 6, e26714.	2.5	210
12	Genetic Tools To Enhance the Study of Gene Function and Regulation in <i>Staphylococcus aureus</i> . <i>Applied and Environmental Microbiology</i> , 2013, 79, 2218-2224.	3.1	176
13	Contribution of the <i>Staphylococcus aureus</i> <i>Atl</i> AM and GL Murein Hydrolase Activities in Cell Division, Autolysis, and Biofilm Formation. <i>PLoS ONE</i> , 2012, 7, e42244.	2.5	166
14	The <i>Staphylococcus aureus</i> <i>cidAB</i> Operon: Evaluation of Its Role in Regulation of Murein Hydrolase Activity and Penicillin Tolerance. <i>Journal of Bacteriology</i> , 2003, 185, 2635-2643.	2.2	163
15	Beta toxin catalyzes formation of nucleoprotein matrix in staphylococcal biofilms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 14407-14412.	7.1	159
16	Death's toolbox: examining the molecular components of bacterial programmed cell death. <i>Molecular Microbiology</i> , 2003, 50, 729-738.	2.5	147
17	Transcriptional profiling of a <i>Staphylococcus aureus</i> clinical isolate and its isogenic <i>agr</i> and <i>sarA</i> mutants reveals global differences in comparison to the laboratory strain RN6390. <i>Microbiology (United Kingdom)</i> , 2006, 152, 3075-3090.	1.8	146
18	Temporal and Stochastic Control of <i>Staphylococcus aureus</i> Biofilm Development. <i>MBio</i> , 2014, 5, e01341-14.	4.1	140

#	ARTICLE	IF	CITATIONS
19	Staphylococcus aureus Agr and Sar Global Regulators Influence Internalization and Induction of Apoptosis. Infection and Immunity, 1998, 66, 5238-5243.	2.2	138
20	Staphylococcus aureus Biofilms Induce Macrophage Dysfunction Through Leukocidin AB and Alpha-Toxin. MBio, 2015, 6, .	4.1	130
21	Staphylococcus aureus CidA and LrgA Proteins Exhibit Holin-Like Properties. Journal of Bacteriology, 2011, 193, 2468-2476.	2.2	121
22	The <i>Staphylococcus aureus</i> LytSR Two-Component Regulatory System Affects Biofilm Formation. Journal of Bacteriology, 2009, 191, 4767-4775.	2.2	112
23	Identification of Extracellular DNA-Binding Proteins in the Biofilm Matrix. MBio, 2019, 10, .	4.1	108
24	The bactericidal action of penicillin: new clues to an unsolved mystery. Trends in Microbiology, 2000, 8, 274-278.	7.7	102
25	A Central Role for Carbon-Overflow Pathways in the Modulation of Bacterial Cell Death. PLoS Pathogens, 2014, 10, e1004205.	4.7	99
26	Acetic Acid Induces Expression of the Staphylococcus aureus cidABC and lrgAB Murein Hydrolase Regulator Operons. Journal of Bacteriology, 2005, 187, 813-821.	2.2	98
27	Use of Microfluidic Technology To Analyze Gene Expression during Staphylococcus aureus Biofilm Formation Reveals Distinct Physiological Niches. Applied and Environmental Microbiology, 2013, 79, 3413-3424.	3.1	93
28	CcpA Regulates Arginine Biosynthesis in Staphylococcus aureus through Repression of Proline Catabolism. PLoS Pathogens, 2012, 8, e1003033.	4.7	91
29	Are the molecular strategies that control apoptosis conserved in bacteria?. Trends in Microbiology, 2003, 11, 306-311.	7.7	85
30	The <i>Staphylococcus aureus cidC</i> gene encodes a pyruvate oxidase that affects acetate metabolism and cell death in stationary phase. Molecular Microbiology, 2005, 56, 1664-1674.	2.5	82
31	The role of proton motive force in expression of the Staphylococcus aureus cid and lrg operons. Molecular Microbiology, 2006, 59, 1395-1404.	2.5	80
32	Characterization of the Staphylococcus aureus CidR regulon: elucidation of a novel role for acetoin metabolism in cell death and lysis. Molecular Microbiology, 2006, 60, 458-468.	2.5	72
33	A LysR-Type Regulator, CidR, Is Required for Induction of the Staphylococcus aureus cidABC Operon. Journal of Bacteriology, 2005, 187, 5893-5900.	2.2	71
34	The Streptococcus mutans Cid and Lrg systems modulate virulence traits in response to multiple environmental signals. Microbiology (United Kingdom), 2010, 156, 3136-3147.	1.8	69
35	The control of death and lysis in staphylococcal biofilms: a coordination of physiological signals. Current Opinion in Microbiology, 2012, 15, 211-215.	5.1	68
36	Inactivation of the Pta-AckA Pathway Causes Cell Death in Staphylococcus aureus. Journal of Bacteriology, 2013, 195, 3035-3044.	2.2	68

#	ARTICLE	IF	CITATIONS
37	Identification and characterization of a family of toxin-antitoxin systems related to the Enterococcus faecalis plasmid pAD1 par addiction module. Microbiology (United Kingdom), 2009, 155, 2930-2940.	1.8	65
38	Effects of Low-Dose Amoxicillin on Staphylococcus aureus USA300 Biofilms. Antimicrobial Agents and Chemotherapy, 2016, 60, 2639-2651.	3.2	62
39	The Ktr potassium transport system in Staphylococcus aureus and its role in cell physiology, antimicrobial resistance and pathogenesis. Molecular Microbiology, 2013, 89, 760-773.	2.5	61
40	Transcription of the Staphylococcus aureus cid and lrg Murein Hydrolase Regulators Is Affected by Sigma Factor B. Journal of Bacteriology, 2004, 186, 3029-3037.	2.2	50
41	Triclosan-Loaded Tooth-Binding Micelles for Prevention and Treatment of Dental Biofilm. Pharmaceutical Research, 2010, 27, 2356-2364.	3.5	50
42	A Dysfunctional Tricarboxylic Acid Cycle Enhances Fitness of Staphylococcus epidermidis During $\beta$ -Lactam Stress. MBio, 2013, 4, .	4.1	48
43	Ratiometric Fluorescent Sensor Array as a Versatile Tool for Bacterial Pathogen Identification and Analysis. ACS Sensors, 2018, 3, 700-708.	7.8	47
44	Programmed cell death in plants: lessons from bacteria?. Trends in Plant Science, 2013, 18, 133-139.	8.8	46
45	Role of the LytSR Two-Component Regulatory System in Adaptation to Cationic Antimicrobial Peptides in Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2013, 57, 3875-3882.	3.2	46
46	Tooth-Binding Micelles for Dental Caries Prevention. Antimicrobial Agents and Chemotherapy, 2009, 53, 4898-4902.	3.2	40
47	The Staphylococcus aureus scdA gene: a novel locus that affects cell division and morphogenesis. Microbiology (United Kingdom), 1997, 143, 2877-2882.	1.8	37
48	Characterization of CidR-mediated regulation in Bacillus anthracis reveals a previously undetected role of S-layer proteins as murein hydrolases. Molecular Microbiology, 2006, 62, 1158-1169.	2.5	36
49	Analysis of Genetic Elements Controlling Staphylococcus aureus lrgAB Expression: Potential Role of DNA Topology in SarA Regulation. Journal of Bacteriology, 2000, 182, 4822-4828.	2.2	35
50	Identification of the amino acids essential for LytSR-mediated signal transduction in Staphylococcus aureus and their roles in biofilm-specific gene expression. Molecular Microbiology, 2015, 95, 723-737.	2.5	33
51	Nutritional Regulation of the Sae Two-Component System by CodY in Staphylococcus aureus. Journal of Bacteriology, 2018, 200, .	2.2	31
52	Active Bax and Bak are functional holins. Genes and Development, 2011, 25, 2278-2290.	5.9	30
53	The Lys-type transcriptional regulator, CidR, regulates stationary phase cell death in Staphylococcus aureus. Molecular Microbiology, 2016, 101, 942-953.	2.5	29
54	SrrAB Modulates Staphylococcus aureus Cell Death through Regulation of cidABC Transcription. Journal of Bacteriology, 2016, 198, 1114-1122.	2.2	29

#	ARTICLE	IF	CITATIONS
55	The Development of Dentotropic Micelles with Biodegradable Tooth-Binding Moieties. <i>Pharmaceutical Research</i> , 2013, 30, 2808-2817.	3.5	28
56	Redox Imbalance Underlies the Fitness Defect Associated with Inactivation of the Pta-AckA Pathway in <i>Staphylococcus aureus</i> . <i>Journal of Proteome Research</i> , 2016, 15, 1205-1212.	3.7	26
57	Genetic and Biochemical Analysis of CodY-Mediated Cell Aggregation in <i>Staphylococcus aureus</i> Reveals an Interaction between Extracellular DNA and Polysaccharide in the Extracellular Matrix. <i>Journal of Bacteriology</i> , 2020, 202, .	2.2	26
58	Identification of inhibitors for single-stranded DNA-binding proteins in eubacteria. <i>Journal of Antimicrobial Chemotherapy</i> , 2016, 71, 3432-3440.	3.0	23
59	Potassium Uptake Modulates <i>Staphylococcus aureus</i> Metabolism. <i>MSphere</i> , 2016, 1, .	2.9	22
60	Simpler Procedure and Improved Performance for Pathogenic Bacteria Analysis with a Paper-Based Ratiometric Fluorescent Sensor Array. <i>Analytical Chemistry</i> , 2022, 94, 2615-2624.	6.5	20
61	Simple synthesis of endophenazine G and other phenazines and their evaluation as anti-methicillin-resistant <i>Staphylococcus aureus</i> agents. <i>European Journal of Medicinal Chemistry</i> , 2017, 125, 710-721.	5.5	19
62	An Overlap between the Control of Programmed Cell Death in <i>Bacillus anthracis</i> and Sporulation. <i>Journal of Bacteriology</i> , 2009, 191, 4103-4110.	2.2	18
63	Resistance to Acute Macrophage Killing Promotes Airway Fitness of Prevalent Community-Acquired <i>Staphylococcus aureus</i> Strains. <i>Journal of Immunology</i> , 2016, 196, 4196-4203.	0.8	18
64	Stochastic Expression of Sae-Dependent Virulence Genes during <i>Staphylococcus aureus</i> Biofilm Development Is Dependent on SaeS. <i>MBio</i> , 2020, 11, .	4.1	18
65	Bromelain inhibits SARS-CoV-2 infection via targeting ACE2, TMPRSS2, and spike protein. <i>Clinical and Translational Medicine</i> , 2021, 11, e281.	4.0	18
66	Accumulation of Succinyl Coenzyme A Perturbs the Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) Succinylome and Is Associated with Increased Susceptibility to Beta-Lactam Antibiotics. <i>MBio</i> , 2021, 12, e0053021.	4.1	16
67	CyDisCo production of functional recombinant SARS-CoV-2 spike receptor binding domain. <i>Protein Science</i> , 2021, 30, 1983-1990.	7.6	16
68	The major autolysin is redundant for <i>Staphylococcus aureus</i> USA300 LAC JE2 virulence in a murine device-related infection model. <i>FEMS Microbiology Letters</i> , 2016, 363, fnw087.	1.8	15
69	<i>Staphylococcus aureus</i> CidC Is a Pyruvate:Menaquinone Oxidoreductase. <i>Biochemistry</i> , 2017, 56, 4819-4829.	2.5	14
70	CidR and CcpA Synergistically Regulate <i>Staphylococcus aureus</i> <i>cidABC</i> Expression. <i>Journal of Bacteriology</i> , 2019, 201, .	2.2	14
71	Poly( $\gamma$ -hydroxybutyrate) fuels the tricarboxylic acid cycle and <i>de novo</i> lipid biosynthesis during <i>Bacillus anthracis</i> sporulation. <i>Molecular Microbiology</i> , 2017, 104, 793-803.	2.5	12
72	Observations of Shear Stress Effects on <i>Staphylococcus aureus</i> Biofilm Formation. <i>MSphere</i> , 2019, 4, .	2.9	12

#	ARTICLE	IF	CITATIONS
73	An integrated computational and experimental study to investigate <i>Staphylococcus aureus</i> metabolism. <i>Npj Systems Biology and Applications</i> , 2020, 6, 3.	3.0	12
74	Allelic Exchange. <i>Methods in Molecular Biology</i> , 2014, 1373, 89-96.	0.9	11
75	Staphylococcal Fibronectin Binding Protein Interacts with Heat Shock Protein 60 and Integrins: Role in Internalization by Epithelial Cells. <i>Infection and Immunity</i> , 2000, 68, 6321-6328.	2.2	11
76	Guanine Limitation Results in CodY-Dependent and -Independent Alteration of <i>Staphylococcus aureus</i> Physiology and Gene Expression. <i>Journal of Bacteriology</i> , 2018, 200, .	2.2	9
77	The <i>Staphylococcus aureus</i> CidA and LrgA Proteins Are Functional Holins Involved in the Transport of By-Products of Carbohydrate Metabolism. <i>MBio</i> , 2022, 13, e0282721.	4.1	9
78	Interplay of CodY and CcpA in Regulating Central Metabolism and Biofilm Formation in <i>Staphylococcus aureus</i> . <i>Journal of Bacteriology</i> , 2022, 204, .	2.2	9
79	Methods to Generate a Sequence-Defined Transposon Mutant Library in <i>Staphylococcus epidermidis</i> Strain 1457. <i>Methods in Molecular Biology</i> , 2014, 1106, 135-142.	0.9	8
80	Electron Paramagnetic Resonance (EPR) Spectroscopy to Detect Reactive Oxygen Species in <i>Staphylococcus aureus</i> . <i>Bio-protocol</i> , 2015, 5, .	0.4	8
81	The Evolution and Future of Targeted Cancer Therapy: From Nanoparticles, Oncolytic Viruses, and Oncolytic Bacteria to the Treatment of Solid Tumors. <i>Nanomaterials</i> , 2021, 11, 3018.	4.1	8
82	Staphylococcal ClpXP protease targets the cellular antioxidant system to eliminate fitness-compromised cells in stationary phase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	7
83	Generation of a Transposon Mutant Library in <i>Staphylococcus aureus</i> and <i>Staphylococcus epidermidis</i> Using <i>bursa aurealis</i> . <i>Methods in Molecular Biology</i> , 2014, 1373, 103-110.	0.9	5
84	Fluorescent Sensor Arrays Can Predict and Quantify the Composition of Multicomponent Bacterial Samples. <i>Frontiers in Chemistry</i> , 2019, 7, 916.	3.6	5
85	Insect cell expression and purification of recombinant SARS-CoV-2 spike proteins that demonstrate ACE2 binding. <i>Protein Science</i> , 2022, 31, e4300.	7.6	5
86	Searching for Smart Durable Coatings to Promote Bone Marrow Stromal Cell Growth While Preventing Biofilm Formation. <i>Materials Research Society Symposia Proceedings</i> , 2006, 954, 4.	0.1	4
87	Integrative network analyses of transcriptomics data reveal potential drug targets for acute radiation syndrome. <i>Scientific Reports</i> , 2021, 11, 5585.	3.3	4
88	Inactivation of the Pta-AckA Pathway Impairs Fitness of <i>Bacillus anthracis</i> during Overflow Metabolism. <i>Journal of Bacteriology</i> , 2021, 203, .	2.2	4
89	Construction of a Sequence-Defined Transposon Mutant Library in <i>Staphylococcus aureus</i> . <i>Methods in Molecular Biology</i> , 2019, 2016, 29-37.	0.9	2
90	Two-Component Regulation. , 0, , 349-359.		0

#	ARTICLE	IF	CITATIONS
91	Identification and Quantification of Bacterial Pathogens with a Ratiometric Fluorescent Sensor Array. ECS Meeting Abstracts, 2020, MA2020-01, 1985-1985.	0.0	0
92	Abstract PO-037: Development of an RGD CRISPR-modified Clostridium novyi NT spores as an intravenous oncotherapy. , 2021, , .		0