Kenneth W Bayles

List of Publications by Year
in descending order

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	Simpler Procedure and Improved Performance for Pathogenic Bacteria Analysis with a Paper-Based Ratiometric Fluorescent Sensor Array. Analytical Chemistry, 2022, 94, 2615-2624.	6.5	20
2	The Staphylococcus aureus CidA and LrgA Proteins Are Functional Holins Involved in the Transport of By-Products of Carbohydrate Metabolism. MBio, 2022, 13, e0282721.	4.1	9
3	Insect cell expression and purification of recombinant <scp>SARSâ€COV</scp>â€2 spike proteins that demonstrate <scp>ACE2</scp> binding. Protein Science, 2022, 31, e4300.	7.6	5
4	Interplay of CodY and CcpA in Regulating Central Metabolism and Biofilm Formation in Staphylococcus aureus. Journal of Bacteriology, 2022, 204, .	2.2	9
5	Bromelain inhibits SARSâ€CoVâ€2 infection via targeting ACEâ€2, TMPRSS2, and spike protein. Clinical and Translational Medicine, 2021, 11, e281.	4.0	18
6	Integrative network analyses of transcriptomics data reveal potential drug targets for acute radiation syndrome. Scientific Reports, 2021, 11, 5585.	3.3	4
7	Inactivation of the Pta-AckA Pathway Impairs Fitness of Bacillus anthracis during Overflow Metabolism. Journal of Bacteriology, 2021, 203, .	2.2	4
8	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. MBio, 2021, 12, e0053021.	4.1	16
9	CyDisCo production of functional recombinant SARSâ€CoV â€2 spike receptor binding domain. Protein Science, 2021, 30, 1983-1990.	7.6	16
10	Staphylococcal ClpXP protease targets the cellular antioxidant system to eliminate fitness-compromised cells in stationary phase. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	7
11	Abstract PO-037: Development of an RGD CRISPR-modified Clostridium novyi NT spores as an intravenous oncotherapy. , 2021, , .		0
12	The Evolution and Future of Targeted Cancer Therapy: From Nanoparticles, Oncolytic Viruses, and Oncolytic Bacteria to the Treatment of Solid Tumors. Nanomaterials, 2021, 11, 3018.	4.1	8
13	An integrated computational and experimental study to investigate Staphylococcus aureus metabolism. Npj Systems Biology and Applications, 2020, 6, 3.	3.0	12
14	Genetic and Biochemical Analysis of CodY-Mediated Cell Aggregation in Staphylococcus aureus Reveals an Interaction between Extracellular DNA and Polysaccharide in the Extracellular Matrix. Journal of Bacteriology, 2020, 202, .	2.2	26
15	Stochastic Expression of Sae-Dependent Virulence Genes during Staphylococcus aureus Biofilm Development Is Dependent on SaeS. MBio, 2020, 11, .	4.1	18
16	Identification and Quantification of Bacterial Pathogens with a Ratiometric Fluorescent Sensor Array. ECS Meeting Abstracts, 2020, MA2020-01, 1985-1985.	0.0	0
17	Observations of Shear Stress Effects on Staphylococcus aureus Biofilm Formation. MSphere, 2019, 4, .	2.9	12
18	CidR and CcpA Synergistically Regulate Staphylococcus aureus <i>cidABC</i> Expression. Journal of Bacteriology, 2019, 201, .	2.2	14

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19	Construction of a Sequence-Defined Transposon Mutant Library in Staphylococcus aureus. Methods in Molecular Biology, 2019, 2016, 29-37.	0.9	2
20	Identification of Extracellular DNA-Binding Proteins in the Biofilm Matrix. MBio, 2019, 10, .	4.1	108
21	Fluorescent Sensor Arrays Can Predict and Quantify the Composition of Multicomponent Bacterial Samples. Frontiers in Chemistry, 2019, 7, 916.	3.6	5
22	Ratiometric Fluorescent Sensor Array as a Versatile Tool for Bacterial Pathogen Identification and Analysis. ACS Sensors, 2018, 3, 700-708.	7.8	47
23	Nutritional Regulation of the Sae Two-Component System by CodY in Staphylococcus aureus. Journal of Bacteriology, 2018, 200, .	2.2	31
24	Guanine Limitation Results in CodY-Dependent and -Independent Alteration of Staphylococcus aureus Physiology and Gene Expression. Journal of Bacteriology, 2018, 200, .	2.2	9
25	<i>Staphylococcus aureus</i> biofilm: a complex developmental organism. Molecular Microbiology, 2017, 104, 365-376.	2.5	343
26	Poly(3â€hydroxybutyrate) fuels the tricarboxylic acid cycle and <i>de novo</i> lipid biosynthesis during <i>Bacillus anthracis</i> sporulation. Molecular Microbiology, 2017, 104, 793-803.	2.5	12
27	<i>Staphylococcus aureus</i> CidC Is a Pyruvate:Menaquinone Oxidoreductase. Biochemistry, 2017, 56, 4819-4829.	2.5	14
28	Simple synthesis of endophenazine G and other phenazines and their evaluation as anti-methicillin-resistant Staphylococcus aureus agents. European Journal of Medicinal Chemistry, 2017, 125, 710-721.	5.5	19
29	The LysRâ€type transcriptional regulator, CidR, regulates stationary phase cell death in <i>Staphylococcus aureus</i>. Molecular Microbiology, 2016, 101, 942-953.	2.5	29
30	Resistance to Acute Macrophage Killing Promotes Airway Fitness of Prevalent Community-Acquired <i>Staphylococcus aureus</i> Strains. Journal of Immunology, 2016, 196, 4196-4203.	0.8	18
31	The major autolysin is redundant for<i>Staphylococcus aureus</i>USA300 LAC JE2 virulence in a murine device-related infection model. FEMS Microbiology Letters, 2016, 363, fnw087.	1.8	15
32	Identification of inhibitors for single-stranded DNA-binding proteins in eubacteria. Journal of Antimicrobial Chemotherapy, 2016, 71, 3432-3440.	3.0	23
33	SrrAB Modulates Staphylococcus aureus Cell Death through Regulation of <i>cidABC</i> Transcription. Journal of Bacteriology, 2016, 198, 1114-1122.	2.2	29
34	Potassium Uptake Modulates Staphylococcus aureus Metabolism. MSphere, 2016, 1, .	2.9	22
35	Redox Imbalance Underlies the Fitness Defect Associated with Inactivation of the Pta-AckA Pathway in <i>Staphylococcus aureus</i>. Journal of Proteome Research, 2016, 15, 1205-1212.	3.7	26
36	Effects of Low-Dose Amoxicillin on Staphylococcus aureus USA300 Biofilms. Antimicrobial Agents and Chemotherapy, 2016, 60, 2639-2651.	3.2	62

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37	Identification of the amino acids essential for <scp>LytSR</scp>â€mediated signal transduction in <scp><i>S</i></scp><i>taphylococcus aureus</i> and their roles in biofilmâ€specific gene expression. Molecular Microbiology, 2015, 95, 723-737.	2.5	33
38	Staphylococcus aureus Biofilms Induce Macrophage Dysfunction Through Leukocidin AB and Alpha-Toxin. MBio, 2015, 6, .	4.1	130
39	Electron Paramagnetic Resonance (EPR) Spectroscopy to Detect Reactive Oxygen Species in Staphylococcus aureus. Bio-protocol, 2015, 5, .	0.4	8
40	A Central Role for Carbon-Overflow Pathways in the Modulation of Bacterial Cell Death. PLoS Pathogens, 2014, 10, e1004205.	4.7	99
41	Allelic Exchange. Methods in Molecular Biology, 2014, 1373, 89-96.	0.9	11
42	Generation of a Transposon Mutant Library in Staphylococcus aureus and Staphylococcus epidermidis Using bursa aurealis. Methods in Molecular Biology, 2014, 1373, 103-110.	0.9	5
43	Temporal and Stochastic Control of Staphylococcus aureus Biofilm Development. MBio, 2014, 5, e01341-14.	4.1	140
44	Bacterial programmed cell death: making sense of a paradox. Nature Reviews Microbiology, 2014, 12, 63-69.	28.6	245
45	Methods to Generate a Sequence-Defined Transposon Mutant Library in Staphylococcus epidermidis Strain 1457. Methods in Molecular Biology, 2014, 1106, 135-142.	0.9	8
46	The Development of Dentotropic Micelles with Biodegradable Tooth-Binding Moieties. Pharmaceutical Research, 2013, 30, 2808-2817.	3.5	28
47	Programmed cell death in plants: lessons from bacteria?. Trends in Plant Science, 2013, 18, 133-139.	8.8	46
48	The <scp>Ktr</scp> potassium transport system in <i><scp>S</scp>taphylococcus aureus</i> and its role in cell physiology, antimicrobial resistance and pathogenesis. Molecular Microbiology, 2013, 89, 760-773.	2.5	61
49	A Dysfunctional Tricarboxylic Acid Cycle Enhances Fitness of Staphylococcus epidermidis During Î²-Lactam Stress. MBio, 2013, 4, .	4.1	48
50	A Genetic Resource for Rapid and Comprehensive Phenotype Screening of Nonessential Staphylococcus aureus Genes. MBio, 2013, 4, e00537-12.	4.1	718
51	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
52	Inactivation of the Pta-AckA Pathway Causes Cell Death in Staphylococcus aureus. Journal of Bacteriology, 2013, 195, 3035-3044.	2.2	68
53	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
54	Genetic Tools To Enhance the Study of Gene Function and Regulation in Staphylococcus aureus. Applied and Environmental Microbiology, 2013, 79, 2218-2224.	3.1	176

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55	CcpA Regulates Arginine Biosynthesis in Staphylococcus aureus through Repression of Proline Catabolism. PLoS Pathogens, 2012, 8, e1003033.	4.7	91
56	Contribution of the Staphylococcus aureus Atl AM and GL Murein Hydrolase Activities in Cell Division, Autolysis, and Biofilm Formation. PLoS ONE, 2012, 7, e42244.	2.5	166
57	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
58	Nuclease Modulates Biofilm Formation in Community-Associated Methicillin-Resistant Staphylococcus aureus. PLoS ONE, 2011, 6, e26714.	2.5	210
59	<i>Staphylococcus aureus</i>Biofilms Prevent Macrophage Phagocytosis and Attenuate Inflammation In Vivo. Journal of Immunology, 2011, 186, 6585-6596.	0.8	563
60	Active Bax and Bak are functional holins. Genes and Development, 2011, 25, 2278-2290.	5.9	30
61	Staphylococcus aureus CidA and LrgA Proteins Exhibit Holin-Like Properties. Journal of Bacteriology, 2011, 193, 2468-2476.	2.2	121
62	Triclosan-Loaded Tooth-Binding Micelles for Prevention and Treatment of Dental Biofilm. Pharmaceutical Research, 2010, 27, 2356-2364.	3.5	50
63	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
64	Beta toxin catalyzes formation of nucleoprotein matrix in staphylococcal biofilms. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14407-14412.	7.1	159
65	Assembly and Development of the Pseudomonas aeruginosa Biofilm Matrix. PLoS Pathogens, 2009, 5, e1000354.	4.7	515
66	Identification and characterization of a family of toxinâ€"antitoxin systems related to the Enterococcus faecalis plasmid pAD1 par addiction module. Microbiology (United Kingdom), 2009, 155, 2930-2940.	1.8	65
67	An Overlap between the Control of Programmed Cell Death in <i>Bacillus anthracis</i> and Sporulation. Journal of Bacteriology, 2009, 191, 4103-4110.	2.2	18
68	Tooth-Binding Micelles for Dental Caries Prevention. Antimicrobial Agents and Chemotherapy, 2009, 53, 4898-4902.	3.2	40
69	The <i>Staphylococcus aureus</i> LytSR Two-Component Regulatory System Affects Biofilm Formation. Journal of Bacteriology, 2009, 191, 4767-4775.	2.2	112
70	Modulation of eDNA Release and Degradation Affects Staphylococcus aureus Biofilm Maturation. PLoS ONE, 2009, 4, e5822.	2.5	418
71	Molecular Control of Bacterial Death and Lysis. Microbiology and Molecular Biology Reviews, 2008, 72, 85-109.	6.6	314
72	The <i>cidA</i> murein hydrolase regulator contributes to DNA release and biofilm development in <i>Staphylococcus aureus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8113-8118.	7.1	607

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73	The biological role of death and lysis in biofilm development. Nature Reviews Microbiology, 2007, 5, 721-726.	28.6	296
74	The role of proton motive force in expression of theStaphylococcus aureus cidandlrgoperons. Molecular Microbiology, 2006, 59, 1395-1404.	2.5	80
75	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
76	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
77	Searching for Smart Durable Coatings to Promote Bone Marrow Stromal Cell Growth While Preventing Biofilm Formation. Materials Research Society Symposia Proceedings, 2006, 954, 4.	0.1	4
78	Transcriptional profiling of a Staphylococcus aureus clinical isolate and its isogenic agr and sarA mutants reveals global differences in comparison to the laboratory strain RN6390. Microbiology (United Kingdom), 2006, 152, 3075-3090.	1.8	146
79	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
80	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
81	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
82	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
83	Death's toolbox: examining the molecular components of bacterial programmed cell death. Molecular Microbiology, 2003, 50, 729-738.	2.5	147
84	Are the molecular strategies that control apoptosis conserved in bacteria?. Trends in Microbiology, 2003, 11, 306-311.	7.7	85
85	The Staphylococcus aureus cidAB Operon: Evaluation of Its Role in Regulation of Murein Hydrolase Activity and Penicillin Tolerance. Journal of Bacteriology, 2003, 185, 2635-2643.	2.2	163
86	The Staphylococcus aureus lrgAB Operon Modulates Murein Hydrolase Activity and Penicillin Tolerance. Journal of Bacteriology, 2000, 182, 1794-1801.	2.2	231
87	Analysis of Genetic Elements ControllingStaphylococcus aureus lrgAB Expression: Potential Role of DNA Topology in SarA Regulation. Journal of Bacteriology, 2000, 182, 4822-4828.	2.2	35
88	The bactericidal action of penicillin: new clues to an unsolved mystery. Trends in Microbiology, 2000, 8, 274-278.	7.7	102
89	Staphylococcal Fibronectin Binding Protein Interacts with Heat Shock Protein 60 and Integrins: Role in Internalization by Epithelial Cells. Infection and Immunity, 2000, 68, 6321-6328.	2.2	11
90	Staphylococcus aureus Agr and Sar Global Regulators Influence Internalization and Induction of Apoptosis. Infection and Immunity, 1998, 66, 5238-5243.	2.2	138

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91	The Staphylococcus aureus scdA gene: a novel locus that affects cell division and morphogenesis. Microbiology (United Kingdom), 1997, 143, 2877-2882.	1.8	37
92	Two-Component Regulation. , 0, , 349-359.		0