

Michael J Franklin

List of Publications by Year in descending order

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Version: 2024-02-01

42
papers

6,842
citations

186265

28
h-index

276875

41
g-index

42
all docs

42
docs citations

42
times ranked

7577
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Physiological heterogeneity in biofilms. <i>Nature Reviews Microbiology</i> , 2008, 6, 199-210. | 28.6 | 1,860 |
| 2 | Contributions of Antibiotic Penetration, Oxygen Limitation, and Low Metabolic Activity to Tolerance of <i>Pseudomonas aeruginosa</i> Biofilms to Ciprofloxacin and Tobramycin. <i>Antimicrobial Agents and Chemotherapy</i> , 2003, 47, 317-323. | 3.2 | 839 |
| 3 | Role of Antibiotic Penetration Limitation in <i>Klebsiella pneumoniae</i> Biofilm Resistance to Ampicillin and Ciprofloxacin. <i>Antimicrobial Agents and Chemotherapy</i> , 2000, 44, 1818-1824. | 3.2 | 811 |
| 4 | Biosynthesis of the <i>Pseudomonas aeruginosa</i> Extracellular Polysaccharides, Alginate, Pel, and Psl. <i>Frontiers in Microbiology</i> , 2011, 2, 167. | 3.5 | 432 |
| 5 | Role of Alginate and Its O Acetylation in Formation of <i>Pseudomonas aeruginosa</i> Microcolonies and Biofilms. <i>Journal of Bacteriology</i> , 2001, 183, 1047-1057. | 2.2 | 386 |
| 6 | Compromised Host Defense on <i>Pseudomonas aeruginosa</i> Biofilms: Characterization of Neutrophil and Biofilm Interactions. <i>Journal of Immunology</i> , 2003, 171, 4329-4339. | 0.8 | 339 |
| 7 | Stratified Growth in <i>Pseudomonas aeruginosa</i> Biofilms. <i>Applied and Environmental Microbiology</i> , 2004, 70, 6188-6196. | 3.1 | 322 |
| 8 | Heterogeneity in <i>Pseudomonas aeruginosa</i> Biofilms Includes Expression of Ribosome Hibernation Factors in the Antibiotic-Tolerant Subpopulation and Hypoxia-Induced Stress Response in the Metabolically Active Population. <i>Journal of Bacteriology</i> , 2012, 194, 2062-2073. | 2.2 | 219 |
| 9 | Localized Gene Expression in <i>Pseudomonas aeruginosa</i> Biofilms. <i>Applied and Environmental Microbiology</i> , 2008, 74, 4463-4471. | 3.1 | 143 |
| 10 | Contribution of Stress Responses to Antibiotic Tolerance in <i>Pseudomonas aeruginosa</i> Biofilms. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 3838-3847. | 3.2 | 115 |
| 11 | Mutant Analysis and Cellular Localization of the AlgI, AlgJ, and AlgF Proteins Required for O Acetylation of Alginate in <i>Pseudomonas aeruginosa</i> . <i>Journal of Bacteriology</i> , 2002, 184, 3000-3007. | 2.2 | 100 |
| 12 | Tolerance of dormant and active cells in <i>Pseudomonas aeruginosa</i> PA01 biofilm to antimicrobial agents. <i>Journal of Antimicrobial Chemotherapy</i> , 2009, 63, 129-135. | 3.0 | 97 |
| 13 | Microsensor and transcriptomic signatures of oxygen depletion in biofilms associated with chronic wounds. <i>Wound Repair and Regeneration</i> , 2016, 24, 373-383. | 3.0 | 96 |
| 14 | Heterogeneous rpoS and rhlR mRNA Levels and 16S rRNA/rDNA (rRNA Gene) Ratios within <i>Pseudomonas aeruginosa</i> Biofilms, Sampled by Laser Capture Microdissection. <i>Journal of Bacteriology</i> , 2010, 192, 2991-3000. | 2.2 | 84 |
| 15 | New Technologies for Studying Biofilms. <i>Microbiology Spectrum</i> , 2015, 3, . | 3.0 | 83 |
| 16 | Biofilms formed by the archaeon <i>Haloferax volcanii</i> exhibit cellular differentiation and social motility, and facilitate horizontal gene transfer. <i>BMC Biology</i> , 2014, 12, 65. | 3.8 | 81 |
| 17 | Pitting corrosion by bacteria on carbon steel, determined by the scanning vibrating electrode technique. <i>Corrosion Science</i> , 1991, 32, 945-952. | 6.6 | 79 |
| 18 | Strain-specific proteome responses of <i>Pseudomonas aeruginosa</i> to biofilm-associated growth and to calcium. <i>Microbiology (United Kingdom)</i> , 2007, 153, 3838-3851. | 1.8 | 76 |

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|----|---|-----|-----------|
| 19 | The dual roles of AlgG in C-5-epimerization and secretion of alginate polymers in <i>Pseudomonas aeruginosa</i> . <i>Molecular Microbiology</i> , 2003, 47, 1123-1133. | 2.5 | 61 |
| 20 | Resuscitation of <i>Pseudomonas aeruginosa</i> from dormancy requires hibernation promoting factor (PA4463) for ribosome preservation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 3204-3209. | 7.1 | 61 |
| 21 | Gene expression and protein levels of the stationary phase sigma factor, RpoS, in continuously-fed <i>Pseudomonas aeruginosa</i> biofilms. <i>FEMS Microbiology Letters</i> , 2001, 199, 67-71. | 1.8 | 59 |
| 22 | Conceptual Model of Biofilm Antibiotic Tolerance That Integrates Phenomena of Diffusion, Metabolism, Gene Expression, and Physiology. <i>Journal of Bacteriology</i> , 2019, 201, . | 2.2 | 57 |
| 23 | Metagenomic Profiling of Microbial Pathogens in the Little Bighorn River, Montana. <i>International Journal of Environmental Research and Public Health</i> , 2019, 16, 1097. | 2.6 | 49 |
| 24 | The <i>Pseudomonas aeruginosa</i> PAO1 Two-Component Regulator CarSR Regulates Calcium Homeostasis and Calcium-Induced Virulence Factor Production through Its Regulatory Targets CarO and CarP. <i>Journal of Bacteriology</i> , 2016, 198, 951-963. | 2.2 | 44 |
| 25 | Evidence that the <i>algI/algJ</i> Gene Cassette, Required for O Acetylation of <i>Pseudomonas aeruginosa</i> Alginate, Evolved by Lateral Gene Transfer. <i>Journal of Bacteriology</i> , 2004, 186, 4759-4773. | 2.2 | 43 |
| 26 | A <i>Pseudomonas aeruginosa</i> EF-Hand Protein, EfhP (PA4107), Modulates Stress Responses and Virulence at High Calcium Concentration. <i>PLoS ONE</i> , 2014, 9, e98985. | 2.5 | 39 |
| 27 | Calcium Regulation of Bacterial Virulence. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1131, 827-855. | 1.6 | 39 |
| 28 | Genotypic and Phenotypic Variation in <i>Pseudomonas aeruginosa</i> Reveals Signatures of Secondary Infection and Mutator Activity in Certain Cystic Fibrosis Patients with Chronic Lung Infections. <i>Infection and Immunity</i> , 2011, 79, 4802-4818. | 2.2 | 31 |
| 29 | Epimerase Active Domain of <i>Pseudomonas aeruginosa</i> AlgG, a Protein That Contains a Right-Handed β -Helix. <i>Journal of Bacteriology</i> , 2005, 187, 4573-4583. | 2.2 | 30 |
| 30 | Biocorrosion. <i>Current Opinion in Biotechnology</i> , 1991, 2, 450-456. | 6.6 | 25 |
| 31 | DropSOAC: Stabilizing Microfluidic Drops for Time-Lapse Quantification of Single-Cell Bacterial Physiology. <i>Frontiers in Microbiology</i> , 2019, 10, 2112. | 3.5 | 24 |
| 32 | Determination of Proton Flux and Conductance at pH 6.8 through Single Fo Sectors from <i>Escherichia coli</i> . <i>Biophysical Journal</i> , 2004, 87, 3594-3599. | 0.5 | 20 |
| 33 | Microbial and algal alginate gelation characterized by magnetic resonance. <i>Journal of Biotechnology</i> , 2012, 161, 320-327. | 3.8 | 19 |
| 34 | Characterization of <i>algG</i> encoding C5-epimerase in the alginate biosynthetic gene cluster of <i>Pseudomonas fluorescens</i> . <i>Gene</i> , 2001, 278, 107-114. | 2.2 | 16 |
| 35 | Genome Sequence of <i>Janthinobacterium</i> sp. CG23_2, a Violacein-Producing Isolate from an Antarctic Supraglacial Stream. <i>Genome Announcements</i> , 2016, 4, . | 0.8 | 16 |
| 36 | Expression and regulation of the <i>Pseudomonas aeruginosa</i> hibernation promoting factor. <i>Molecular Microbiology</i> , 2018, 110, 161-175. | 2.5 | 12 |

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|----|--|-----|-----------|
| 37 | qRT-PCR of Microbial Biofilms. Cold Spring Harbor Protocols, 2008, 2008, pdb.prot5066. | 0.3 | 7 |
| 38 | Isolation of RNA and DNA from Biofilm Samples Obtained by Laser Capture Microdissection Microscopy: Figure 1.. Cold Spring Harbor Protocols, 2008, 2008, pdb.prot5065. | 0.3 | 7 |
| 39 | Role of Hibernation Promoting Factor in Ribosomal Protein Stability during Pseudomonas aeruginosa Dormancy. International Journal of Molecular Sciences, 2020, 21, 9494. | 4.1 | 7 |
| 40 | Functional Characterization of the Pseudomonas aeruginosa Ribosome Hibernation-Promoting Factor. Journal of Bacteriology, 2020, 202, . | 2.2 | 6 |
| 41 | New Technologies for Studying Biofilms. , 2015, , 1-32. | | 5 |
| 42 | Search for a Shared Genetic or Biochemical Basis for Biofilm Tolerance to Antibiotics across Bacterial Species. Antimicrobial Agents and Chemotherapy, 2022, , e0002122. | 3.2 | 3 |