

# Michael J Schurr

## List of Publications by Year in descending order

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76  
papers

5,866  
citations

71102

41  
h-index

76900

74  
g-index

77  
all docs

77  
docs citations

77  
times ranked

5656  
citing authors

#	ARTICLE	IF	CITATIONS
1	Space flight alters bacterial gene expression and virulence and reveals a role for global regulator Hfq. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16299-16304.	7.1	426
2	Mechanism of conversion to mucoidy in <i>Pseudomonas aeruginosa</i> infecting cystic fibrosis patients.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 8377-8381.	7.1	402
3	Surfaces modified with nanometer-thick silver-impregnated polymeric films that kill bacteria but support growth of mammalian cells. Biomaterials, 2010, 31, 680-690.	11.4	233
4	Conversion of <i>Pseudomonas aeruginosa</i> to mucoidy in cystic fibrosis: environmental stress and regulation of bacterial virulence by alternative sigma factors. Journal of Bacteriology, 1994, 176, 2773-2780.	2.2	225
5	Control of AlgU, a member of the sigma E-like family of stress sigma factors, by the negative regulators MucA and MucB and <i>Pseudomonas aeruginosa</i> conversion to mucoidy in cystic fibrosis. Journal of Bacteriology, 1996, 178, 4997-5004.	2.2	225
6	Mechanisms of bacterial pathogenicity. Postgraduate Medical Journal, 2002, 78, 216-224.	1.8	206
7	Anaerobic killing of mucoid <i>Pseudomonas aeruginosa</i> by acidified nitrite derivatives under cystic fibrosis airway conditions. Journal of Clinical Investigation, 2006, 116, 436-446.	8.2	196
8	A549 Lung Epithelial Cells Grown as Three-Dimensional Aggregates: Alternative Tissue Culture Model for <i>Pseudomonas aeruginosa</i> Pathogenesis. Infection and Immunity, 2005, 73, 1129-1140.	2.2	190
9	Analysis of promoters controlled by the putative sigma factor AlgU regulating conversion to mucoidy in <i>Pseudomonas aeruginosa</i> : relationship to sigma E and stress response. Journal of Bacteriology, 1994, 176, 6688-6696.	2.2	178
10	<i>Pseudomonas aeruginosa</i> hypoxic or anaerobic biofilm infections within cystic fibrosis airways. Trends in Microbiology, 2009, 17, 130-138.	7.7	160
11	Two distinct loci affecting conversion to mucoidy in <i>Pseudomonas aeruginosa</i> in cystic fibrosis encode homologs of the serine protease HtrA. Journal of Bacteriology, 1996, 178, 511-523.	2.2	158
12	Transcriptional and Proteomic Responses of <i>Pseudomonas aeruginosa</i> PAO1 to Spaceflight Conditions Involve Hfq Regulation and Reveal a Role for Oxygen. Applied and Environmental Microbiology, 2011, 77, 1221-1230.	3.1	157
13	Functional equivalence of <i>Escherichia coli</i> sigma E and <i>Pseudomonas aeruginosa</i> AlgU: <i>E. coli</i> rpoE restores mucoidy and reduces sensitivity to reactive oxygen intermediates in algU mutants of <i>P. aeruginosa</i> . Journal of Bacteriology, 1995, 177, 3259-3268.	2.2	144
14	Media Ion Composition Controls Regulatory and Virulence Response of <i>Salmonella</i> in Spaceflight. PLoS ONE, 2008, 3, e3923.	2.5	133
15	Differentiation of <i>Pseudomonas aeruginosa</i> into the alginate-producing form: inactivation of mucB causes conversion to mucoidy. Molecular Microbiology, 1993, 9, 497-506.	2.5	116
16	<i>Pseudomonas aeruginosa</i> , mucoidy and the chronic infection phenotype in cystic fibrosis. Trends in Microbiology, 1995, 3, 351-356.	7.7	115
17	The MerR-Like Regulator BrlR Confers Biofilm Tolerance by Activating Multidrug Efflux Pumps in <i>Pseudomonas aeruginosa</i> Biofilms. Journal of Bacteriology, 2013, 195, 3352-3363.	2.2	114
18	Gene cluster controlling conversion to alginate-overproducing phenotype in <i>Pseudomonas aeruginosa</i> : functional analysis in a heterologous host and role in the instability of mucoidy. Journal of Bacteriology, 1994, 176, 3375-3382.	2.2	109

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19	Multiple promoters and induction by heat shock of the gene encoding the alternative sigma factor AlgU (sigma E) which controls mucoidy in cystic fibrosis isolates of <i>Pseudomonas aeruginosa</i> . <i>Journal of Bacteriology</i> , 1995, 177, 5670-5679.	2.2	108
20	<i>Pseudomonas aeruginosa</i> biofilm infections in cystic fibrosis: insights into pathogenic processes and treatment strategies. <i>Expert Opinion on Therapeutic Targets</i> , 2010, 14, 117-130.	3.4	108
21	Identification of AlgR-Regulated Genes in <i>Pseudomonas aeruginosa</i> by Use of Microarray Analysis. <i>Journal of Bacteriology</i> , 2004, 186, 5672-5684.	2.2	106
22	Transcriptome Analysis of <i>Pseudomonas aeruginosa</i> after Interaction with Human Airway Epithelial Cells. <i>Infection and Immunity</i> , 2004, 72, 5433-5438.	2.2	90
23	<i>Pseudomonas aeruginosa</i> AlgR Represses the Rhl Quorum-Sensing System in a Biofilm-Specific Manner. <i>Journal of Bacteriology</i> , 2007, 189, 7752-7764.	2.2	90
24	Dual regulation of mucoidy in <i>Pseudomonas aeruginosa</i> and sigma factor antagonism. <i>Molecular Microbiology</i> , 2000, 36, 341-351.	2.5	86
25	Proteomic, Microarray, and Signature-Tagged Mutagenesis Analyses of Anaerobic <i>Pseudomonas aeruginosa</i> at pH 6.5, Likely Representing Chronic, Late-Stage Cystic Fibrosis Airway Conditions. <i>Journal of Bacteriology</i> , 2008, 190, 2739-2758.	2.2	86
26	Iron-Regulated Expression of Alginate Production, Mucoid Phenotype, and Biofilm Formation by <i>Pseudomonas aeruginosa</i> . <i>MBio</i> , 2014, 5, e01010-13.	4.1	84
27	The novel <i>Pseudomonas aeruginosa</i> two-component regulator BfmR controls bacteriophage-mediated lysis and DNA release during biofilm development through PhdA. <i>Molecular Microbiology</i> , 2011, 81, 767-783.	2.5	75
28	The Transcriptional Regulator AlgR Controls Cyanide Production in <i>Pseudomonas aeruginosa</i> . <i>Journal of Bacteriology</i> , 2004, 186, 6837-6844.	2.2	73
29	Microcolony formation by the opportunistic pathogen <i>Pseudomonas aeruginosa</i> requires pyruvate and pyruvate fermentation. <i>Molecular Microbiology</i> , 2012, 86, 819-835.	2.5	72
30	BrlR from <i>Pseudomonas aeruginosa</i> is a cAMP-responsive transcription factor. <i>Molecular Microbiology</i> , 2014, 92, 471-487.	2.5	72
31	Analysis of the <i>Pseudomonas aeruginosa</i> Regulon Controlled by the Sensor Kinase KinB and Sigma Factor RpoN. <i>Journal of Bacteriology</i> , 2012, 194, 1317-1330.	2.2	71
32	Microbial pathogenesis in cystic fibrosis: coordinate regulation of heat shock response and conversion to mucoidy in <i>Pseudomonas aeruginosa</i> . <i>Molecular Microbiology</i> , 1997, 24, 411-420.	2.5	70
33	The Transcriptional Regulator AlgR Is Essential for <i>Pseudomonas aeruginosa</i> Pathogenesis. <i>Infection and Immunity</i> , 2002, 70, 6083-6093.	2.2	69
34	Activation of the <i>Pseudomonas aeruginosa</i> AlgU Regulon through mucA Mutation Inhibits Cyclic AMP/Vfr Signaling. <i>Journal of Bacteriology</i> , 2010, 192, 5709-5717.	2.2	69
35	Identification of the algZ gene upstream of the response regulator algR and its participation in control of alginate production in <i>Pseudomonas aeruginosa</i> . <i>Journal of Bacteriology</i> , 1997, 179, 187-193.	2.2	67
36	Two-pronged survival strategy for the major cystic fibrosis pathogen, <i>Pseudomonas aeruginosa</i> , lacking the capacity to degrade nitric oxide during anaerobic respiration. <i>EMBO Journal</i> , 2007, 26, 3662-3672.	7.8	63

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37	The <i>Pseudomonas aeruginosa</i> AlgZR two-component system coordinates multiple phenotypes. <i>Frontiers in Cellular and Infection Microbiology</i> , 2014, 4, 82.	3.9	57
38	Skim milk enhances the preservation of thawed ~80°C bacterial stocks. <i>Journal of Microbiological Methods</i> , 2008, 75, 135-138.	1.6	55
39	Polymeric Multilayers that Contain Silver Nanoparticles can be Stamped onto Biological Tissues to Provide Antibacterial Activity. <i>Advanced Functional Materials</i> , 2011, 21, 1863-1873.	14.9	53
40	Acylase-containing polyurethane coatings with anti-biofilm activity. <i>Biotechnology and Bioengineering</i> , 2016, 113, 2535-2543.	3.3	48
41	The long-chain fatty acid sensor, PsrA, modulates the expression of <i>rpoS</i> and the type III secretion <i>exsCEBA</i> operon in <i>Pseudomonas aeruginosa</i> . <i>Molecular Microbiology</i> , 2009, 73, 120-136.	2.5	44
42	Aspartate transcarbamoylase genes of <i>Pseudomonas putida</i> : requirement for an inactive dihydroorotase for assembly into the dodecameric holoenzyme. <i>Journal of Bacteriology</i> , 1995, 177, 1751-1759.	2.2	43
43	<i>Pseudomonas aeruginosa</i> AlgR Controls Cyanide Production in an AlgZ-Dependent Manner. <i>Journal of Bacteriology</i> , 2009, 191, 2993-3002.	2.2	43
44	Spatial transcriptomes within the <i>Pseudomonas aeruginosa</i> biofilm architecture. <i>Molecular Microbiology</i> , 2017, 106, 976-985.	2.5	42
45	<i>Pseudomonas aeruginosa</i> AlgR Phosphorylation Modulates Rhamnolipid Production and Motility. <i>Journal of Bacteriology</i> , 2013, 195, 5499-5515.	2.2	40
46	Catalase (KatA) Plays a Role in Protection against Anaerobic Nitric Oxide in <i>Pseudomonas aeruginosa</i> . <i>PLoS ONE</i> , 2014, 9, e91813.	2.5	40
47	PDGF-BB Does Not Accelerate Healing in Diabetic Mice with Splinted Skin Wounds. <i>PLoS ONE</i> , 2014, 9, e104447.	2.5	39
48	Antibacterial Efficacy of Silver-Impregnated Polyelectrolyte Multilayers Immobilized on a Biological Dressing in a Murine Wound Infection Model. <i>Annals of Surgery</i> , 2012, 256, 371-377.	4.2	38
49	Expression Analysis of the <i>Pseudomonas aeruginosa</i> AlgZR Two-Component Regulatory System. <i>Journal of Bacteriology</i> , 2015, 197, 736-748.	2.2	36
50	<i>Pseudomonas aeruginosa</i> AlgR Phosphorylation Status Differentially Regulates Pyocyanin and Pyoverdine Production. <i>MBio</i> , 2018, 9, .	4.1	36
51	Biochemical Characterization and Posttranslational Modification of Algu, a Regulator of Stress Response in <i>Pseudomonas aeruginosa</i> . <i>Biochemical and Biophysical Research Communications</i> , 1995, 216, 874-880.	2.1	35
52	The <i>Pseudomonas aeruginosa</i> flagellum confers resistance to pulmonary surfactant protein A by impacting the production of exoproteases through quorum sensing. <i>Molecular Microbiology</i> , 2011, 79, 1220-1235.	2.5	29
53	Reduction in Wound Bioburden using a Silver-Loaded Dissolvable Microfilm Construct. <i>Advanced Healthcare Materials</i> , 2014, 3, 916-928.	7.6	29
54	The use of native chemical functional groups presented by wound beds for the covalent attachment of polymeric microcarriers of bioactive factors. <i>Biomaterials</i> , 2013, 34, 340-352.	11.4	25

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55	Which Bacterial Biofilm Exopolysaccharide Is Preferred, Psl or Alginate?. Journal of Bacteriology, 2013, 195, 1623-1626.	2.2	25
56	Inhibition of <i>Pseudomonas aeruginosa</i> biofilm formation on wound dressings. Wound Repair and Regeneration, 2015, 23, 842-854.	3.0	21
57	Optically Responsive, Smart Anti-Bacterial Coatings via the Photofluidization of Azobenzenes. ACS Applied Materials & Interfaces, 2019, 11, 1760-1765.	8.0	18
58	A rapid procedure for isolating mitochondrial DNA. Gene Analysis Techniques, 1988, 5, 102-104.	1.0	14
59	Antimicrobial Activity of an Amnion-Chorion Membrane to Oral Microbes. International Journal of Dentistry, 2019, 2019, 1-7.	1.5	14
60	Expression of mucoid induction factor MucE is dependent upon the alternate sigma factor AlgU in <i>Pseudomonas aeruginosa</i> . BMC Microbiology, 2013, 13, 232.	3.3	13
61	Genes Required for and Effects of Alginate Overproduction Induced by Growth of <i>Pseudomonas aeruginosa</i> on <i>Pseudomonas</i> Isolation Agar Supplemented with Ammonium Metavanadate. Journal of Bacteriology, 2013, 195, 4020-4036.	2.2	10
62	Integration of Silver Nanoparticle-impregnated Polyelectrolyte Multilayers Into Murine-Splinted Cutaneous Wound Beds. Journal of Burn Care and Research, 2013, 34, e359-e367.	0.4	10
63	Gallium-Loaded Dissolvable Microfilm Constructs that Provide Sustained Release of Ga <sup>3+</sup> for Management of Biofilms. Advanced Healthcare Materials, 2015, 4, 2849-2859.	7.6	10
64	The anti-sigma factor MucA of <i>Pseudomonas aeruginosa</i> : Dramatic differences of a mucA22 vs. a $\Delta$ mucA mutant in anaerobic acidified nitrite sensitivity of planktonic and biofilm bacteria in vitro and during chronic murine lung infection. PLoS ONE, 2019, 14, e0216401.	2.5	10
65	Quantifying <i>Pseudomonas aeruginosa</i> Adhesion to Contact Lenses. Eye and Contact Lens, 2003, 29, 65-68.	1.6	9
66	Selective Inhibition of <i>Streptococci</i> Biofilm Growth via a Hydroxylated Azobenzene Coating. Advanced Materials Interfaces, 2020, 7, 1902149.	3.7	6
67	AB569, a nontoxic chemical tandem that kills major human pathogenic bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4921-4930.	7.1	6
68	<i>Pseudomonas aeruginosa</i> Alginate Benefits <i>Staphylococcus aureus</i> ?. Journal of Bacteriology, 2020, .	2.2	4
69	AB569, a non-toxic combination of acidified nitrite and EDTA, is effective at killing the notorious Iraq/Afghanistan combat wound pathogens, multi-drug resistant <i>Acinetobacter baumannii</i> and <i>Acinetobacter</i> spp.. PLoS ONE, 2021, 16, e0247513.	2.5	4
70	The Bactericidal Tandem Drug, AB569: How to Eradicate Antibiotic-Resistant Biofilm <i>Pseudomonas aeruginosa</i> in Multiple Disease Settings Including Cystic Fibrosis, Burns/Wounds and Urinary Tract Infections. Frontiers in Microbiology, 2021, 12, 639362.	3.5	4
71	Bacterial reduction effect of four different dental lasers on titanium surfaces in vitro. Lasers in Medical Science, 2021, 36, 1759-1767.	2.1	4
72	Antimicrobial Susceptibility of <i>Corynebacterium bovis</i> Isolates from Immunodeficient Rodents. Comparative Medicine, 2021, 71, 210-214.	1.0	3

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73	Low-cost, Small-scale Decontamination of Laboratory Equipment by Using Chlorine Dioxide Gas. Journal of the American Association for Laboratory Animal Science, 2019, 58, 569-576.	1.2	1
74	Regulation of Exopolysaccharide Biosynthesis in Pseudomonas aeruginosa. , 0, , 171-189.		1
75	Synthesis, characterization and evaluation of azobenzene nanogels for their antibacterial properties in adhesive dentistry. European Journal of Oral Sciences, 2022, 130, .	1.5	1
76	Acrylated Hydroxyazobenzene Copolymers in Composite-Resin Matrix Inhibits Biofilms In Vitro.. Pediatric Dentistry (discontinued), 2021, 43, 484-491.	0.4	0