Stephen P Diggle

List of Publications by Year
in descending order

69	12,297	44069	85541
papers	citations	48 h-index	71 g-index

78	78	78	10924
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Social evolution theory for microorganisms. Nature Reviews Microbiology, 2006, 4, 597-607.	28.6	993
2	Progress in and promise of bacterial quorum sensing research. Nature, 2017, 551, 313-320.	27.8	880
3	Cooperation and conflict in quorum-sensing bacterial populations. Nature, 2007, 450, 411-414.	27.8	737
4	The Social Lives of Microbes. Annual Review of Ecology, Evolution, and Systematics, 2007, 38, 53-77.	8.3	636
5	The Pseudomonas aeruginosa quinolone signal molecule overcomes the cell density-dependency of the quorum sensing hierarchy, regulates rhl-dependent genes at the onset of stationary phase and can be produced in the absence of LasR. Molecular Microbiology, 2003, 50, 29-43.	2.5	529
6	Acyl-Homoserine Lactone Quorum Sensing: From Evolution to Application. Annual Review of Microbiology, 2013, 67, 43-63.	7.3	504
7	Quinolones: from antibiotics to autoinducers. FEMS Microbiology Reviews, 2011, 35, 247-274.	8.6	477
8	Targeting virulence: can we make evolution-proof drugs?. Nature Reviews Microbiology, 2014, 12, 300-308.	28.6	446
9	The Pseudomonas aeruginosa 4-Quinolone Signal Molecules HHQ and PQS Play Multifunctional Roles in Quorum Sensing and Iron Entrapment. Chemistry and Biology, 2007, 14, 87-96.	6.0	445
10	Quorum Quenching by an N-Acyl-Homoserine Lactone Acylase from Pseudomonas aeruginosa PAO1. Infection and Immunity, 2006, 74, 1673-1682.	2.2	297
11	The galactophilic lectin, LecA, contributes to biofilm development in Pseudomonas aeruginosa. Environmental Microbiology, 2006, 8, 1095-1104.	3.8	282
12	Quorum Sensing and the Social Evolution of Bacterial Virulence. Current Biology, 2009, 19, 341-345.	3.9	273
13	Role of Multicellular Aggregates in Biofilm Formation. MBio, 2016, 7, e00237.	4.1	272
14	4-Quinolone signalling in Pseudomonas aeruginosa: Old molecules, new perspectives. International Journal of Medical Microbiology, 2006, 296, 83-91.	3.6	269
15	Density-dependent fitness benefits in quorum-sensing bacterial populations. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8259-8263.	7.1	269
16	Quorum sensing by 2-alkyl-4-quinolones in Pseudomonas aeruginosa and other bacterial species. Molecular BioSystems, 2008, 4, 882.	2.9	256
17	Advancing the Quorum in Pseudomonas aeruginosa : MvaT and the Regulation of N -Acylhomoserine Lactone Production and Virulence Gene Expression. Journal of Bacteriology, 2002, 184, 2576-2586.	2.2	234
18	The Pseudomonas aeruginosa Lectins PA-IL and PA-IIL Are Controlled by Quorum Sensing and by RpoS. Journal of Bacteriology, 2000, 182, 6401-6411.	2.2	230

#	Article	IF	Citations
19	Inhibition and Dispersion of Pseudomonas aeruginosa Biofilms by Glycopeptide Dendrimers Targeting the Fucose-Specific Lectin LecB. Chemistry and Biology, 2008, 15, 1249-1257.	6.0	211
20	Evolutionary theory of bacterial quorum sensing: when is a signal not a signal?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2007, 362, 1241-1249.	4.0	206
21	Red death in Caenorhabditis elegans caused by Pseudomonas aeruginosa PAO1. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6327-6332.	7.1	196
22	Microbe Profile: Pseudomonas aeruginosa: opportunistic pathogen and lab rat. Microbiology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.8	193
23	Cooperation and cheating in Pseudomonas aeruginosa: the roles of the las, rhl and pqs quorum-sensing systems. ISME Journal, 2011, 5, 1332-1343.	9.8	184
24	Quorum-sensing and cheating in bacterial biofilms. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 4765-4771.	2.6	175
25	Functional Genetic Analysis Reveals a 2-Alkyl-4-Quinolone Signaling System in the Human Pathogen Burkholderia pseudomallei and Related Bacteria. Chemistry and Biology, 2006, 13, 701-710.	6.0	169
26	The Limitations of In Vitro Experimentation in Understanding Biofilms and Chronic Infection. Journal of Molecular Biology, 2015, 427, 3646-3661.	4.2	167
27	Combinatorial quorum sensing allows bacteria to resolve their social and physical environment. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4280-4284.	7.1	163
28	Cell-Cell Communication in Bacteria: United We Stand. Journal of Bacteriology, 2008, 190, 4377-4391.	2.2	147
29	Biofilm Formation in Pseudomonas aeruginosa : Fimbrial cup Gene Clusters Are Controlled by the Transcriptional Regulator MvaT. Journal of Bacteriology, 2004, 186, 2880-2890.	2.2	139
30	Quorum quenching activity inAnabaenasp. PCC 7120: identification of AiiC, a novel AHL-acylase. FEMS Microbiology Letters, 2008, 280, 73-80.	1.8	139
31	Quorum sensing and the confusion about diffusion. Trends in Microbiology, 2012, 20, 586-594.	7.7	136
32	Recombination is a key driver of genomic and phenotypic diversity in a Pseudomonas aeruginosa population during cystic fibrosis infection. Scientific Reports, 2015, 5, 7649.	3.3	134
33	Biosensor-based assays for PQS, HHQ and related 2-alkyl-4-quinolone quorum sensing signal molecules. Nature Protocols, 2007, 2, 1254-1262.	12.0	110
34	Cooperation, Quorum Sensing, and Evolution of Virulence in Staphylococcus aureus. Infection and Immunity, 2014, 82, 1045-1051.	2.2	108
35	Bacterial Quorum Sensing During Infection. Annual Review of Microbiology, 2020, 74, 201-219.	7.3	105
36	A dual biosensor for 2â€alkylâ€4â€quinolone quorumâ€sensing signal molecules. Environmental Microbiology, 2007, 9, 2683-2693.	3.8	93

#	Article	IF	Citations
37	Bursting the bubble on bacterial biofilms: a flow cell methodology. Biofouling, 2012, 28, 835-842.	2.2	92
38	Pseudomonas aeruginosaquorum-sensing signal molecules interfere with dendritic cell-induced T-cell proliferation. FEMS Immunology and Medical Microbiology, 2009, 55, 335-345.	2.7	90
39	Shaping the Growth Behaviour of Biofilms Initiated from Bacterial Aggregates. PLoS ONE, 2016, 11, e0149683.	2.5	83
40	Quorum sensing. Current Biology, 2007, 17, R907-R910.	3.9	80
41	Development of an Ex Vivo Porcine Lung Model for Studying Growth, Virulence, and Signaling of Pseudomonas aeruginosa. Infection and Immunity, 2014, 82, 3312-3323.	2.2	79
42	Loss of Social Behaviours in Populations of Pseudomonas aeruginosa Infecting Lungs of Patients with Cystic Fibrosis. PLoS ONE, 2014, 9, e83124.	2.5	77
43	Kin selection, quorum sensing and virulence in pathogenic bacteria. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 3584-3588.	2.6	73
44	Neoadjuvant Chemotherapy Shifts Breast Tumor Microbiota Populations to Regulate Drug Responsiveness and the Development of Metastasis. Molecular Cancer Research, 2020, 18, 130-139.	3.4	71
45	Staphylococcus aureus forms spreading dendrites that have characteristics of active motility. Scientific Reports, 2016, 5, 17698.	3.3	62
46	A 1,000-Year-Old Antimicrobial Remedy with Antistaphylococcal Activity. MBio, 2015, 6, e01129.	4.1	61
47	Competition in Biofilms between Cystic Fibrosis Isolates of Pseudomonas aeruginosa Is Shaped by R-Pyocins. MBio, 2019, 10, .	4.1	61
48	The Pseudomonas aeruginosa PSL Polysaccharide Is a Social but Noncheatable Trait in Biofilms. MBio, 2017, 8, .	4.1	59
49	Defining motility in the Staphylococci. Cellular and Molecular Life Sciences, 2017, 74, 2943-2958.	5.4	55
50	Protist predation can favour cooperation within bacterial species. Biology Letters, 2013, 9, 20130548.	2.3	49
51	A new assay for rhamnolipid detectionâ€"important virulence factors of Pseudomonas aeruginosa. Applied Microbiology and Biotechnology, 2014, 98, 7199-7209.	3.6	48
52	Allelic polymorphism shapes community function in evolving Pseudomonas aeruginosa populations. ISME Journal, 2020, 14, 1929-1942.	9.8	47
53	Environmental modification via a quorum sensing molecule influences the social landscape of siderophore production. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20170200.	2.6	43
54	An ex vivo lung model to study bronchioles infected with Pseudomonas aeruginosa biofilms. Microbiology (United Kingdom), 2016, 162, 1755-1760.	1.8	42

#	Article	IF	Citations
55	The social behaviours of bacterial pathogens. British Medical Bulletin, 2008, 87, 63-75.	6.9	39
56	Conflict of interest and signal interference lead to the breakdown of honest signaling. Evolution; International Journal of Organic Evolution, 2015, 69, 2371-2383.	2.3	35
57	The Fitness of Pseudomonas aeruginosa Quorum Sensing Signal Cheats Is Influenced by the Diffusivity of the Environment. MBio, 2017, 8, .	4.1	31
58	Optimised chronic infection models demonstrate that siderophore â€˜cheatingâ€™ in Pseudomonas aeruginosa is context specific. ISME Journal, 2017, 11, 2492-2509.	9.8	28
59	Rules of engagement: defining bacterial communication. Current Opinion in Microbiology, 2012, 15, 155-161.	5.1	26
60	O-Specific Antigen-Dependent Surface Hydrophobicity Mediates Aggregate Assembly Type in Pseudomonas aeruginosa. MBio, 2021, 12, e0086021.	4.1	26
61	The evolution of virulence inPseudomonas aeruginosaduring chronic wound infection. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20202272.	2.6	25
62	Bacterial cellâ€toâ€cell signaling promotes the evolution of resistance to parasitic bacteriophages. Ecology and Evolution, 2017, 7, 1936-1941.	1.9	21
63	Combinatorial Communication in Bacteria: Implications for the Origins of Linguistic Generativity. PLoS ONE, 2014, 9, e95929.	2.5	17
64	Heterogenous Susceptibility to R-Pyocins in Populations of Pseudomonas aeruginosa Sourced from Cystic Fibrosis Lungs. MBio, 2021, 12, .	4.1	16
65	The Microbial Olympics. Nature Reviews Microbiology, 2012, 10, 583-588.	28.6	15
66	Combinatorial quorum sensing in Pseudomonas aeruginosa allows for novel cheating strategies. Microbiology (United Kingdom), 2020, 166, 777-784.	1.8	10
67	Detection of 2-Alkyl-4-Quinolones Using Biosensors. Methods in Molecular Biology, 2018, 1673, 25-34.	0.9	6
68	A simple mung bean infection model for studying the virulence of Pseudomonas aeruginosa. Microbiology (United Kingdom), 2018, 164, 764-768.	1.8	5
69	Response to â€˜Refined analyses suggest that recombination is a minor source of genomic diversity in Pseudomonas aeruginosa chronic cystic fibrosis infectionsâ€™ by Williams et al. (2016). Microbial Genomics, 2016, 2, e000054.	2.0	1