Bacterial Quorum Sensing and Metabolic Incentives to

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Citation Report

#	Article	IF	CITATIONS
2	Resistance to Quorum-Quenching Compounds. Applied and Environmental Microbiology, 2013, 79, 6840-6846.	1.4	108
3	Exploiting Quorum Sensing To Confuse Bacterial Pathogens. Microbiology and Molecular Biology Reviews, 2013, 77, 73-111.	2.9	662
4	The Genotypic View of Social Interactions in Microbial Communities. Annual Review of Genetics, 2013, 47, 247-273.	3.2	257
5	Targeting agr- and agr-Like Quorum Sensing Systems for Development of Common Therapeutics to Treat Multiple Gram-Positive Bacterial Infections. Sensors, 2013, 13, 5130-5166.	2.1	100
6	Acyl-Homoserine Lactone Quorum Sensing: From Evolution to Application. Annual Review of Microbiology, 2013, 67, 43-63.	2.9	504
7	Exploiting social evolution in biofilms. Current Opinion in Microbiology, 2013, 16, 207-212.	2.3	71
8	Multilevel selection analysis of a microbial social trait. Molecular Systems Biology, 2013, 9, 684.	3.2	48
9	Programmed cell death in the marine cyanobacterium <i>Trichodesmium</i> mediates carbon and nitrogen export. ISME Journal, 2013, 7, 2340-2348.	4.4	81
10	Genetic Architecture Promotes the Evolution and Maintenance of Cooperation. PLoS Computational Biology, 2013, 9, e1003339.	1.5	28
11	A New Class of Quorum Quenching Molecules from Staphylococcus Species Affects Communication and Growth of Gram-Negative Bacteria. PLoS Pathogens, 2013, 9, e1003654.	2.1	47
12	Protist predation can favour cooperation within bacterial species. Biology Letters, 2013, 9, 20130548.	1.0	49
13	Dynamic social behaviour in a bacterium: <i>Pseudomonas aeruginosa</i> partially compensates for siderophore loss to cheats. Journal of Evolutionary Biology, 2013, 26, 1370-1378.	0.8	31
14	Concentration-dependent activity in natural environments. Frontiers in Microbiology, 2013, 4, 20.	1.5	197
15	Interference of bacterial cell-to-cell communication: A new concept of antimicrobial chemotherapy breaks antibiotic. Frontiers in Microbiology, 2013, 4, 114.	1.5	74
16	Stationary Phase-Specific Virulence Factor Overproduction by a lasR Mutant of Pseudomonas aeruginosa. PLoS ONE, 2014, 9, e88743.	1.1	62
17	Guava Leaf Extract Inhibits Quorum-Sensing and Chromobacterium violaceum Induced Lysis of Human Hepatoma Cells: Whole Transcriptome Analysis Reveals Differential Gene Expression. PLoS ONE, 2014, 9, e107703.	1.1	39
18	The Agr communication system provides a benefit to the populations of Listeria monocytogenes in soil. Frontiers in Cellular and Infection Microbiology, 2014, 4, 160.	1.8	21
19	Collective decision-making in microbes. Frontiers in Microbiology, 2014, 5, 54.	1.5	47

#	Article	IF	CITATIONS
20	Genes as Early Responders Regulate Quorum-Sensing and Control Bacterial Cooperation in Pseudomonas aeruginosa. PLoS ONE, 2014, 9, e101887.	1.1	24
21	Quorum Sensing in Bacteria and a Glance on Pseudomonas aeruginosa. Clinical Microbiology (Los) Tj ETQq $1\ 1\ 0$.	784314 rş	gBT/Overloc
22	Structural Basis for Bacterial Quorum Sensing-mediated Oxalogenesis. Journal of Biological Chemistry, 2014, 289, 11465-11475.	1.6	9
23	What role do periodontal pathogens play in osteoarthritis and periprosthetic joint infections of the knee?. Journal of Applied Biomaterials and Functional Materials, 2014, 12, 13-20.	0.7	22
24	Virus-host arms race at the joint origin of multicellularity and programmed cell death. Cell Cycle, 2014, 13, 3083-3088.	1.3	44
25	Interaction effects of cell diffusion, cell density and public goods properties on the evolution of cooperation in digital microbes. Journal of Evolutionary Biology, 2014, 27, 1869-1877.	0.8	53
26	Reversible nonâ€genetic phenotypic heterogeneity in bacterial quorum sensing. Molecular Microbiology, 2014, 92, 557-569.	1.2	39
27	Gallium-mediated siderophore quenching as an evolutionarily robust antibacterial treatment. Evolution, Medicine and Public Health, 2014, 2014, 18-29.	1.1	106
28	Targeting virulence: can we make evolution-proof drugs?. Nature Reviews Microbiology, 2014, 12, 300-308.	13.6	446
29	Cooperation, Quorum Sensing, and Evolution of Virulence in Staphylococcus aureus. Infection and Immunity, 2014, 82, 1045-1051.	1.0	108
30	From environmental signals to regulators: Modulation of biofilm development in Gramâ€positive bacteria. Journal of Basic Microbiology, 2014, 54, 616-632.	1.8	53
31	Private link between signal and response in <i>Bacillus subtilis</i> quorum sensing. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1586-1591.	3.3	64
32	The Social Biology of Quorum Sensing in a Naturalistic Host Pathogen System. Current Biology, 2014, 24, 2417-2422.	1.8	54
33	Bacterial quorum sensing and metabolic slowing in a cooperative population. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14912-14917.	3.3	125
34	Co-culture systems and technologies: taking synthetic biology to the next level. Journal of the Royal Society Interface, 2014, 11, 20140065.	1.5	428
35	A new method for rapid construction of a Pseudomonas sp. HF-1 bioaugmented system: Accelerating acylated homoserine lactones secretion by pH regulation. Bioresource Technology, 2014, 169, 229-235.	4.8	18
36	Revealing a world of biofilms â€" the pioneering research of Bill Costerton. Nature Reviews Microbiology, 2014, 12, 781-787.	13.6	39
37	Pathogen bacteria adhesion to skin mucus of fishes. Veterinary Microbiology, 2014, 171, 1-12.	0.8	166

#	ARTICLE	IF	Citations
38	Competition Studies Confirm Two Major Barriers That Can Preclude the Spread of Resistance to Quorum-Sensing Inhibitors in Bacteria. ACS Chemical Biology, 2014, 9, 2291-2299.	1.6	106
39	Evolutionary dynamics of interlinked public goods traits: an experimental study of siderophore production in <i>Pseudomonas aeruginosa</i> . Journal of Evolutionary Biology, 2015, 28, 29-39.	0.8	62
40	Programmed Evolution for Optimization of Orthogonal Metabolic Output in Bacteria. PLoS ONE, 2015, 10, e0118322.	1.1	22
41	Influence of quorum sensing in multiple phenotypes of the bacterial pathogen Chromobacterium violaceum. Pathogens and Disease, 2015, 73, 1-4.	0.8	20
42	The Rebirth of Culture in Microbiology through the Example of Culturomics To Study Human Gut Microbiota. Clinical Microbiology Reviews, 2015, 28, 237-264.	5.7	605
43	Quorum sensing restrains growth and is rapidly inactivated during domestication of <pre><scp><i>S</i></scp><i>iionorhizobium meliloti</i></pre> /i>. Environmental Microbiology Reports, 2015, 7, 373-382.	1.0	14
44	Collective sensing and collective responses in quorum-sensing bacteria. Journal of the Royal Society Interface, 2015, 12, 20140882.	1.5	99
45	Collective antibiotic tolerance: mechanisms, dynamics and intervention. Nature Chemical Biology, 2015, 11, 182-188.	3.9	125
46	Non-social adaptation defers a tragedy of the commons in <i>Pseudomonas aeruginosa</i> quorum sensing. ISME Journal, 2015, 9, 1734-1746.	4.4	47
47	Quorum sensing triggers the stochastic escape of individual cells from Pseudomonas putida biofilms. Nature Communications, 2015, 6, 5945.	5.8	842
48	Quorum sensing and policing of <i>Pseudomonas aeruginosa</i> social cheaters. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2187-2191.	3.3	209
49	Core Principles of Bacterial Autoinducer Systems. Microbiology and Molecular Biology Reviews, 2015, 79, 153-169.	2.9	157
50	Control of bacterial metabolism by quorum sensing. Trends in Microbiology, 2015, 23, 567-576.	3.5	133
51	Rethinking evolutionary individuality. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10126-10132.	3.3	73
52	Quorum Sensing Protects Pseudomonas aeruginosa against Cheating by Other Species in a Laboratory Coculture Model. Journal of Bacteriology, 2015, 197, 3154-3159.	1.0	58
53	Co-evolutionary Dynamics of Collective Action with Signaling for a Quorum. PLoS Computational Biology, 2015, 11, e1004101.	1.5	20
54	Quorum Sensing Is Accompanied by Global Metabolic Changes in the Opportunistic Human Pathogen Pseudomonas aeruginosa. Journal of Bacteriology, 2015, 197, 2072-2082.	1.0	91
55	Localization of Quorum Sensing by Extracellular Polymeric Substances (EPS): Considerations of In Situ Signaling. Biological and Medical Physics Series, 2015, , 105-121.	0.3	2

#	Article	IF	CITATIONS
56	"Quorum Non-Sensing― Social Cheating and Deception in Vibrio cholerae. Applied and Environmental Microbiology, 2015, 81, 3856-3862.	1.4	42
57	Community Behavior and Spatial Regulation within a Bacterial Microcolony in Deep Tissue Sites Serves to Protect against Host Attack. Cell Host and Microbe, 2015, 17, 21-31.	5.1	117
58	The Physical Basis of Bacterial Quorum Communication. Biological and Medical Physics Series, 2015, , .	0.3	11
59	Quorum sensing enhancement of the stress response promotes resistance to quorum quenching and prevents social cheating. ISME Journal, 2015, 9, 115-125.	4.4	161
60	Quorum sensing control of Type VI secretion factors restricts the proliferation of quorum-sensing mutants. ELife, 2016, 5, .	2.8	75
61	Changes in the Structure of the Microbial Community Associated with Nannochloropsis salina following Treatments with Antibiotics and Bioactive Compounds. Frontiers in Microbiology, 2016, 7, 1155.	1.5	37
62	Adaptive Significance of Quorum Sensing-Dependent Regulation of Rhamnolipids by Integration of Growth Rate in Burkholderia glumae: A Trade-Off between Survival and Efficiency. Frontiers in Microbiology, 2016, 7, 1215.	1.5	19
63	The Shift of an Intestinal "Microbiome―to a "Pathobiome―Governs the Course and Outcome of Sepsis Following Surgical Injury. Shock, 2016, 45, 475-482.	1.0	130
64	Defining heterogeneity within bacterial populations via single cell approaches. BioEssays, 2016, 38, 782-790.	1.2	100
65	Structural Insights into an Oxalate-producing Serine Hydrolase with an Unusual Oxyanion Hole and Additional Lyase Activity. Journal of Biological Chemistry, 2016, 291, 15185-15195.	1.6	8
66	Quorum Sensing Coordinates Cooperative Expression of Pyruvate Metabolism Genes To Maintain a Sustainable Environment for Population Stability. MBio, 2016, 7, .	1.8	42
67	Negative niche construction favors the evolution of cooperation. Evolutionary Ecology, 2016, 30, 267-283.	0.5	11
68	Enhanced Clearance of Pseudomonas aeruginosa by Peroxisome Proliferator-Activated Receptor Gamma. Infection and Immunity, 2016, 84, 1975-1985.	1.0	31
69	LasR Variant Cystic Fibrosis Isolates Reveal an Adaptable Quorum-Sensing Hierarchy in Pseudomonas aeruginosa. MBio, 2016, 7, .	1.8	219
70	Bacterial Quorum Sensing Stabilizes Cooperation by Optimizing Growth Strategies. Applied and Environmental Microbiology, 2016, 82, 6498-6506.	1.4	31
71	Fungal Applications in Sustainable Environmental Biotechnology. Fungal Biology, 2016, , .	0.3	16
72	Unraveling the Chemical Interactions of Fungal Endophytes for Exploitation as Microbial Factories. Fungal Biology, 2016, , 353-370.	0.3	4
73	Nutrient reduction induced stringent responses promote bacterial quorum-sensing divergence for population fitness. Scientific Reports, 2016, 6, 34925.	1.6	29

#	Article	IF	Citations
74	Pleiotropy and the low cost of individual traits promote cooperation. Evolution; International Journal of Organic Evolution, 2016, 70, 488-494.	1.1	25
75	Directed assembly of a bacterial quorum. ISME Journal, 2016, 10, 158-169.	4.4	44
76	Can resistance against quorum-sensing interference be selected?. ISME Journal, 2016, 10, 4-10.	4.4	80
77	Facultative cheating supports the coexistence of diverse quorum-sensing alleles. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2152-2157.	3.3	76
78	An age-dependent model to analyse the evolutionary stability of bacterial quorum sensing. Journal of Theoretical Biology, 2016, 405, 104-115.	0.8	14
79	Antisocial <i>luxO</i> Mutants Provide a Stationary-Phase Survival Advantage in Vibrio fischeri ES114. Journal of Bacteriology, 2016, 198, 673-687.	1.0	24
80	Correlated pay-offs are key to cooperation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150084.	1.8	112
81	Foundations and Emerging Paradigms for Computing in Living Cells. Journal of Molecular Biology, 2016, 428, 893-915.	2.0	19
82	Quorum sensing protects bacterial co-operation from exploitation by cheats. ISME Journal, 2016, 10, 1706-1716.	4.4	67
83	Microbe social skill: the cell-to-cell communication between microorganisms. Science Bulletin, 2017, 62, 516-524.	4.3	26
84	The Fitness of <i>Pseudomonas aeruginosa</i> Quorum Sensing Signal Cheats Is Influenced by the Diffusivity of the Environment. MBio, 2017, 8, .	1.8	31
85	Analysis of stability to cheaters in models of antibiotic degrading microbial communities. Journal of Theoretical Biology, 2017, 423, 53-62.	0.8	10
86	Nitrogen Source Stabilization of Quorum Sensing in the Pseudomonas aeruginosa Bioaugmentation Strain SD-1. Applied and Environmental Microbiology, 2017, 83, .	1.4	7
87	Metabolism and the Evolution of Social Behavior. Molecular Biology and Evolution, 2017, 34, 2367-2379.	3.5	20
88	Bacterial cellâ€toâ€cell signaling promotes the evolution of resistance to parasitic bacteriophages. Ecology and Evolution, 2017, 7, 1936-1941.	0.8	21
90	Resource abundance and the critical transition to cooperation. Journal of Evolutionary Biology, 2017, 30, 750-761.	0.8	16
91	Mapping quorum sensing onto neural networks to understand collective decision making in heterogeneous microbial communities. Physical Biology, 2017, 14, 046002.	0.8	6
92	Proteomic assessment of the role of <i>N</i> -acyl homoserine lactone in <i>Shewanella putrefaciens</i> spoilage. Letters in Applied Microbiology, 2017, 65, 388-394.	1.0	8

#	Article	IF	CITATIONS
93	Maintenance of Microbial Cooperation Mediated by Public Goods in Single- and Multiple-Trait Scenarios. Journal of Bacteriology, 2017, 199, .	1.0	61
94	Nutrient limitation determines the fitness of cheaters in bacterial siderophore cooperation. Nature Communications, 2017, 8, 230.	5.8	69
95	Positive Autoregulation of an Acyl-Homoserine Lactone Quorum-Sensing Circuit Synchronizes the Population Response. MBio, $2017, 8, .$	1.8	23
96	Gene Duplication in Pseudomonas aeruginosa Improves Growth on Adenosine. Journal of Bacteriology, 2017, 199, .	1.0	15
97	Progress in and promise of bacterial quorum sensing research. Nature, 2017, 551, 313-320.	13.7	880
98	Social interactions in bacterial cell–cell signaling. FEMS Microbiology Reviews, 2017, 41, 92-107.	3.9	106
99	Leaf Extracts of Mangifera indica L. Inhibit Quorum Sensing – Regulated Production of Virulence Factors and Biofilm in Test Bacteria. Frontiers in Microbiology, 2017, 8, 727.	1.5	110
100	Why Quorum Sensing Controls Private Goods. Frontiers in Microbiology, 2017, 8, 885.	1.5	33
101	Interactions mediated by a public good transiently increase cooperativity in growing Pseudomonas putida metapopulations. Scientific Reports, 2018, 8, 4093.	1.6	20
102	A common evolutionary pathway for maintaining quorum sensing in Pseudomonas aeruginosa. Journal of Microbiology, 2018, 56, 83-89.	1.3	17
103	Quorum-sensing control of antibiotic resistance stabilizes cooperation in <i>Chromobacterium violaceum</i> . ISME Journal, 2018, 12, 1263-1272.	4.4	74
104	A novel chemical inducer of Streptococcus quorum sensing acts by inhibiting the pheromone-degrading endopeptidase PepO. Journal of Biological Chemistry, 2018, 293, 931-940.	1.6	7
105	Black Queen markets: commensalism, dependency, and the evolution of cooperative specialization in human society. Journal of Bioeconomics, 2018, 20, 69-105.	1.5	11
106	The Role of Pleiotropy in the Evolutionary Maintenance of Positive Niche Construction. American Naturalist, 2018, 192, 35-48.	1.0	11
107	Pathogenesis of Periodontal Diseases. , 2018, , .		3
108	Diversity of Oral Biofilms in Periodontal Health and Disease. , 2018, , 9-20.		4
109	Biofilms. The Frontiers Collection, 2018, , 153-173.	0.1	0
110	Quorum-Sensing Systems as Targets for Antivirulence Therapy. Trends in Microbiology, 2018, 26, 313-328.	3.5	351

#	ARTICLE	IF	Citations
111	Pleiotropy, cooperation, and the social evolution of genetic architecture. PLoS Biology, 2018, 16, e2006671.	2.6	38
112	Probing the evolutionary robustness of two repurposed drugs targeting iron uptake in Pseudomonas aeruginosa. Evolution, Medicine and Public Health, 2018, 2018, 246-259.	1.1	28
113	A single mutation in rapP induces cheating to prevent cheating in Bacillus subtilis by minimizing public good production. Communications Biology, 2018, 1, 133.	2.0	13
114	Does quorum sensing interference affect the fitness of bacterial pathogens in the real world?. Environmental Microbiology, 2018, 20, 3918-3926.	1.8	15
115	Pseudomonas aeruginosa Quorum-Sensing and Type VI Secretion System Can Direct Interspecific Coexistence During Evolution. Frontiers in Microbiology, 2018, 9, 2287.	1.5	22
116	Bacterial Quorum Sensing and Microbial Community Interactions. MBio, 2018, 9, .	1.8	364
117	Focusing quorum sensing signalling by nanoâ€magnetic assembly. Environmental Microbiology, 2018, 20, 2585-2597.	1.8	7
118	Cheating on Cheaters Stabilizes Cooperation in Pseudomonas aeruginosa. Current Biology, 2018, 28, 2070-2080.e6.	1.8	61
119	Diallyl disulfide from garlic oil inhibits Pseudomonas aeruginosa virulence factors by inactivating key quorum sensing genes. Applied Microbiology and Biotechnology, 2018, 102, 7555-7564.	1.7	38
120	A Metabolic Trade-Off Modulates Policing of Social Cheaters in Populations of Pseudomonas aeruginosa. Frontiers in Microbiology, 2018, 9, 337.	1.5	21
121	Pyocyanin Restricts Social Cheating in Pseudomonas aeruginosa. Frontiers in Microbiology, 2018, 9, 1348.	1.5	59
122	Maximizing Growth Yield and Dispersal via Quorum Sensing Promotes Cooperation in Vibrio Bacteria. Applied and Environmental Microbiology, 2018, 84, .	1.4	20
123	Selection for increased quorum-sensing cooperation in <i>Pseudomonas aeruginosa</i> through the shut-down of a drug resistance pump. ISME Journal, 2018, 12, 2458-2469.	4.4	54
124	Pseudomonas aeruginosa Induced Host Epithelial Cell Mitochondrial Dysfunction. Scientific Reports, 2019, 9, 11929.	1.6	30
125	Bacterial Cheaters Evade Punishment by Cyanide. IScience, 2019, 19, 101-109.	1.9	13
126	Privatization of public goods can cause population decline. Nature Ecology and Evolution, 2019, 3, 1206-1216.	3.4	16
127	Dynamics of cheater invasion in a cooperating population of Pseudomonas aeruginosa. Scientific Reports, 2019, 9, 10190.	1.6	7
128	Many plant pathogenic Pseudomonas savastanoi pv glycinea isolates possess an inactive quorum sensing ahlR gene via a point mutation. FEMS Microbiology Letters, 2019, 366, .	0.7	3

#	Article	IF	CITATIONS
129	Conditional quorum-sensing induction of a cyanide-insensitive terminal oxidase stabilizes cooperating populations of Pseudomonas aeruginosa. Nature Communications, 2019, 10, 4999.	5.8	35
130	Cooperation in Microbial Populations: Theory and Experimental Model Systems. Journal of Molecular Biology, 2019, 431, 4599-4644.	2.0	30
131	New insight into bacterial social communication in natural host: Evidence for interplay of heterogeneous and unison quorum response. PLoS Genetics, 2019, 15, e1008395.	1.5	19
132	In-vivo microscopy reveals the impact of <i>Pseudomonas aeruginosa</i> social interactions on host colonization. ISME Journal, 2019, 13, 2403-2414.	4.4	28
133	Catabolism of Nucleic Acids by a Cystic Fibrosis Pseudomonas aeruginosa Isolate: An Adaptive Pathway to Cystic Fibrosis Sputum Environment. Frontiers in Microbiology, 2019, 10, 1199.	1.5	11
134	Phenotypic Heterogeneity in Bacterial Quorum Sensing Systems. Journal of Molecular Biology, 2019, 431, 4530-4546.	2.0	49
135	Metabolic regulation., 2019,, 372-445.		0
136	Codon-usage frequency mediated SNPs selection in lasR gene of cystic fibrosis Pseudomonas aeruginosa isolates. Microbiological Research, 2019, 223-225, 137-143.	2.5	5
137	Delayed evolutionary model for public goods competition with policing in phenotypically variant bacterial biofilms. Europhysics Letters, 2019, 126, 18002.	0.7	9
138	The regulation of N-acyl-homoserine lactones (AHLs)-based quorum sensing on EPS secretion via ATP synthetic for the stability of aerobic granular sludge. Science of the Total Environment, 2019, 673, 83-91.	3.9	92
139	Social cheating in a <i>Pseudomonas aeruginosa</i> quorum-sensing variant. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7021-7026.	3.3	104
140	Evolution of the <i>Pseudomonas aeruginosa</i> quorum-sensing hierarchy. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7027-7032.	3.3	197
141	Behavioral heterogeneity in quorum sensing can stabilize social cooperation in microbial populations. BMC Biology, 2019, 17, 20.	1.7	37
142	Microbes: Social Evolution. , 2019, , 651-660.		0
143	Resistance to leukocytes ties benefits of quorum sensing dysfunctionality to biofilm infection. Nature Microbiology, 2019, 4, 1114-1119.	5.9	57
144	Bacterial quorum sensing in complex and dynamically changing environments. Nature Reviews Microbiology, 2019, 17, 371-382.	13.6	683
145	Understanding policing as a mechanism of cheater control in cooperating bacteria. Journal of Evolutionary Biology, 2019, 32, 412-424.	0.8	16
146	Modulation of <i>Pseudomonas aeruginosa</i> Quorum Sensing by Glutathione. Journal of Bacteriology, 2019, 201, .	1.0	12

#	Article	IF	CITATIONS
147	Unclear Intentions: Eavesdropping in Microbial and Plant Systems. Frontiers in Ecology and Evolution, 2019, 7, .	1.1	11
148	Genetic architecture constrains exploitation of siderophore cooperation in the bacterium <i>Burkholderia cenocepacia</i> <ir> <ir> bacterium bacterium</ir></ir>	1.6	17
149	Using G-Functions to Investigate the Evolutionary Stability of Bacterial Quorum Sensing. Mathematics, 2019, 7, 1112.	1.1	0
150	One for All, but Not All for One: Social Behavior during Bacterial Diseases. Trends in Microbiology, 2019, 27, 64-74.	3.5	19
151	Understanding of aerobic sludge granulation enhanced by sludge retention time in the aspect of quorum sensing. Bioresource Technology, 2019, 272, 226-234.	4.8	54
152	Quorum sensing for population-level control of bacteria and potential therapeutic applications. Cellular and Molecular Life Sciences, 2020, 77, 1319-1343.	2.4	101
153	Positive linkage between bacterial social traits reveals that homogeneous rather than specialised behavioral repertoires prevail in natural Pseudomonas communities. FEMS Microbiology Ecology, 2020, 96, .	1.3	9
154	Iron interferes with quorum sensing-mediated cooperation in Pseudomonas aeruginosa by affecting the expression of ppyR and mexT, in addition to rhlR. Journal of Microbiology, 2020, 58, 938-944.	1.3	4
155	A Bacterial Tower of Babel: Quorum-Sensing Signaling Diversity and Its Evolution. Annual Review of Microbiology, 2020, 74, 587-606.	2.9	45
156	Redox Electrochemistry to Interrogate and Control Biomolecular Communication. IScience, 2020, 23, 101545.	1.9	30
157	Eco-Evolutionary Effects of Bacterial Cooperation on Phage Therapy: An Unknown Risk?. Frontiers in Microbiology, 2020, 11, 590294.	1.5	6
158	Intraspecies Signaling between Common Variants of Pseudomonas aeruginosa Increases Production of Quorum-Sensing-Controlled Virulence Factors. MBio, 2020, 11 , .	1.8	30
159	Competition for nutritional resources masks the true frequency of bacterial mutants. BMC Biology, 2020, 18, 194.	1.7	0
160	Convection and the Extracellular Matrix Dictate Inter- and Intra-Biofilm Quorum Sensing Communication in Environmental Systems. Environmental Science & Environmental Science & 2020, 54, 6730-6740.	4.6	21
161	Rhamnolipids stabilize quorum sensing mediated cooperation in <i>Pseudomonas aeruginosa</i> Microbiology Letters, 2020, 367, .	0.7	17
162	Physiological Advantage of Phenotypic Heterogeneity in a Quorum-Sensing Population. Journal of the Indian Institute of Science, 2020, 100, 485-496.	0.9	1
163	In silico bacteria evolve robust cooperation via complex quorum-sensing strategies. Scientific Reports, 2020, 10, 8628.	1.6	4
164	Nutrient factor-dependent performance of bacterial quorum sensing system during population evolution. Archives of Microbiology, 2020, 202, 2181-2188.	1.0	0

#	ARTICLE	IF	Citations
165	Impact of plant genotype and plant habitat in shaping bacterial pathobiome: a comparative study in olive tree. Scientific Reports, 2020, 10, 3475.	1.6	23
166	For the Greater (Bacterial) Good: Heterogeneous Expression of Energetically Costly Virulence Factors. Infection and Immunity, 2020, 88, .	1.0	11
167	The bitterness of genitourinary infections: Properties, ligands of genitourinary bitter taste receptors and mechanisms linking taste sensing to inflammatory processes in the genitourinary tract. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2020, 247, 101-110.	0.5	17
168	Community diversity and habitat structure shape the repertoire of extracellular proteins in bacteria. Nature Communications, 2020, 11, 758.	5.8	26
170	<i>Pseudomonas aeruginosa lasR</i> mutant fitness in microoxia is supported by an Anr-regulated oxygen-binding hemerythrin. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3167-3173.	3.3	44
171	Swarming motility growth favours the emergence of a subpopulation of <scp><i>Pseudomonas aeruginosa</i></scp> quorumâ€sensing mutants. Environmental Microbiology, 2020, 22, 2892-2906.	1.8	12
172	More than Simple Parasites: the Sociobiology of Bacteriophages and Their Bacterial Hosts. MBio, 2020, 11 , .	1.8	23
173	Quorum sensing systems regulate heterotrophic nitrification-aerobic denitrification by changing the activity of nitrogen-cycling enzymes. Environmental Science and Ecotechnology, 2020, 2, 100026.	6.7	25
174	Role and application of quorum sensing in anaerobic ammonium oxidation (anammox) process: A review. Critical Reviews in Environmental Science and Technology, 2021, 51, 626-648.	6.6	45
175	Quorum sensing provides a molecular mechanism for evolution to tune and maintain investment in cooperation. ISME Journal, 2021, 15, 1236-1247.	4.4	18
176	Ten recent insights for our understanding of cooperation. Nature Ecology and Evolution, 2021, 5, 419-430.	3.4	54
177	Pleiotropic mutations can rapidly evolve to directly benefit self and cooperative partner despite unfavorable conditions. ELife, 2021, 10, .	2.8	11
178	Citral and its derivatives inhibit quorum sensing and biofilm formation in Chromobacterium violaceum. Archives of Microbiology, 2021, 203, 1451-1459.	1.0	13
179	Extracellular Metabolism Sets the Table for Microbial Cross-Feeding. Microbiology and Molecular Biology Reviews, 2021, 85, .	2.9	58
180	From genotype to phenotype: adaptations of Pseudomonas aeruginosa to the cystic fibrosis environment. Microbial Genomics, 2021, 7, .	1.0	23
181	Iron limitation by transferrin promotes simultaneous cheating of pyoverdine and exoprotease in <i>Pseudomonas aeruginosa</i> . ISME Journal, 2021, 15, 2379-2389.	4.4	12
183	Surfactin Facilitates Horizontal Gene Transfer in Bacillus subtilis. Frontiers in Microbiology, 2021, 12, 657407.	1.5	14
184	Tobramycin Adaptation Enhances Policing of Social Cheaters in Pseudomonas aeruginosa. Applied and Environmental Microbiology, 2021, 87, e0002921.	1.4	12

#	Article	IF	CITATIONS
185	A review of the current in-situ fouling control strategies in MBR: Biological versus physicochemical. Journal of Industrial and Engineering Chemistry, 2021, 98, 42-59.	2.9	38
186	A dormant amoeba species can selectively sense and predate on different soil bacteria. Functional Ecology, 2021, 35, 1708-1721.	1.7	18
189	A deep insight into the suppression mechanism of Sedum alfredii root exudates on Pseudomonas aeruginosa based on quorum sensing. Ecotoxicology and Environmental Safety, 2021, 217, 112240.	2.9	2
191	Bacterial communication. Biology and Philosophy, 2021, 36, 1.	0.7	3
192	Would that it were so simple: Interactions between multiple traits undermine classical singleâ€traitâ€based predictions of microbial community function and evolution. Ecology Letters, 2021, 24, 2775-2795.	3.0	6
193	Insight into the rapid biogranulation for suspended single-cell microalgae harvesting in wastewater treatment systems: Focus on the role of extracellular polymeric substances. Chemical Engineering Journal, 2021, , 132631.	6.6	6
195	Interspecies evolutionary dynamics mediated by public goods in bacterial quorum sensing. Physical Review E, 2021, 103, 012403.	0.8	1
196	Combinatorial quorum sensing in Pseudomonas aeruginosa allows for novel cheating strategies. Microbiology (United Kingdom), 2020, 166, 777-784.	0.7	10
202	Integration of Metabolic and Quorum Sensing Signals Governing the Decision to Cooperate in a Bacterial Social Trait. PLoS Computational Biology, 2015, 11, e1004279.	1.5	50
203	The Evolution of Quorum Sensing as a Mechanism to Infer Kinship. PLoS Computational Biology, 2016, 12, e1004848.	1.5	55
204	A Synthetic Quorum Sensing System Reveals a Potential Private Benefit for Public Good Production in a Biofilm. PLoS ONE, 2015, 10, e0132948.	1.1	24
205	Tragedy of the commons in the chemostat. PLoS ONE, 2017, 12, e0186119.	1.1	16
206	Rampant Cheating by Pathogens?. PLoS Pathogens, 2016, 12, e1005792.	2.1	10
207	Strong cooperation or tragedy of the commons in the chemostat. Mathematical Biosciences and Engineering, 2019, 16, 139-149.	1.0	4
208	Acknowledging selection at sub-organismal levels resolves controversy on pro-cooperation mechanisms. ELife, 2015, 4, .	2.8	13
209	Host-selected mutations converging on a global regulator drive an adaptive leap towards symbiosis in bacteria. ELife, 2017, 6, .	2.8	40
210	Ecological feedback in quorum-sensing microbial populations can induce heterogeneous production of autoinducers. ELife, 2017, 6, .	2.8	28
212	Constrained Genetic Architecture Promotes Cooperation. , 0, , .		0

#	Article	IF	CITATIONS
220	The Dynamical Modeling Studies of the Quorum Sensing Mechanism in Bacteria. Biophysics, 2018, 06, 7-30.	0.2	O
230	Corneal epithelial injury-induced norepinephrine promotes Pseudomonas aeruginosa keratitis. Experimental Eye Research, 2020, 195, 108048.	1.2	7
232	Extracellular products-mediated interspecific interaction between Pseudomonas aeruginosa and Escherichia coli. Journal of Microbiology, 2021, 59, 29-40.	1.3	1
238	Agr Quorum Sensing influences the Wood-Ljungdahl pathway in Clostridium autoethanogenum. Scientific Reports, 2022, 12, 411.	1.6	8
239	Condensins are essential for <i>Pseudomonas aeruginosa</i> corneal virulence through their control of lifestyle and virulence programs. Molecular Microbiology, 2022, 117, 937-957.	1.2	1
240	Cheating Promotes Coexistence in a Two-Species One-Substrate Culture Model. Frontiers in Ecology and Evolution, 2022, 9, .	1.1	3
241	The Nutritional Environment Is Sufficient To Select Coexisting Biofilm and Quorum Sensing Mutants of Pseudomonas aeruginosa. Journal of Bacteriology, 2022, 204, JB0044421.	1.0	8
242	The battle for oxygen during bacterial and fungal infections. Trends in Microbiology, 2022, 30, 643-653.	3.5	17
243	Evolution of the Quorum Sensing Regulon in Cooperating Populations of Pseudomonas aeruginosa. MBio, 2022, 13, e0016122.	1.8	17
246	Inhibition of Quorum Sensing Regulated Virulence Factors and Biofilm Formation by <i>Eucalyptus globulus</i> against Multidrug-Resistant <i>Pseudomonas aeruginosa</i> Journal of Pharmacopuncture, 2022, 25, 37-45.	0.4	5
247	Modular configurations of living biomaterials incorporating nano-based artificial mediators and synthetic biology to improve bioelectrocatalytic performance: A review. Science of the Total Environment, 2022, 824, 153857.	3.9	6
248	Microevolution of the mexT and lasR Reinforces the Bias of Quorum Sensing System in Laboratory Strains of Pseudomonas aeruginosa PAO1. Frontiers in Microbiology, 2022, 13, 821895.	1.5	7
265	Notch ankyrin domain: evolutionary rise of a thermodynamic sensor. Cell Communication and Signaling, 2022, 20, 66.	2.7	3
267	Pleiotropic constraints promote the evolution of cooperation in cellular groups. PLoS Biology, 2022, 20, e3001626.	2.6	5
268	Nutrient Availability and Phage Exposure Alter the Quorum-Sensing and CRISPR-Cas-Controlled Population Dynamics of Pseudomonas aeruginosa. MSystems, 2022, 7, .	1.7	2
269	Evolution-proof inhibitors of public good cooperation: a screening strategy inspired by social evolution theory. FEMS Microbiology Reviews, 0, , .	3.9	0
271	Influence of genomic structural variations and nutritional conditions on the emergence of quorum sensing-dependent gene regulation defects in Burkholderia glumae. Frontiers in Microbiology, 0, 13, .	1.5	3
272	Multidrug-resistant Pseudomonas aeruginosa is predisposed to lasR mutation through up-regulated activity of efflux pumps in non-cystic fibrosis bronchiectasis patients. Frontiers in Cellular and Infection Microbiology, 0, 12, .	1.8	1

#	ARTICLE	IF	Citations
273	Cheater suppression and stochastic clearance through quorum sensing. PLoS Computational Biology, 2022, 18, e1010292.	1.5	1
274	Multimodal imaging reveals a small subpopulation of <i>Deinococcus radiodurans</i> exhibiting correlated low superoxide radical levels with extraordinary silver ion metabolism. Natural Sciences, 0, , .	1.0	0
276	Evolving social behavior through selection of single-cell adhesion in Dictyostelium discoideum. IScience, 2022, 25, 105006.	1.9	4
277	Microbiome engineering for bioremediation of emerging pollutants. Bioprocess and Biosystems Engineering, 2023, 46, 323-339.	1.7	2
278	Cooperation loci are more pleiotropic than private loci in the bacterium <i>Pseudomonas aeruginosa</i> . Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	2
279	Evolution of Quorum Sensing in <i>Pseudomonas aeruginosa</i> Can Occur via Loss of Function and Regulon Modulation. MSystems, 2022, 7, .	1.7	4
280	Pseudomonas aeruginosa Quorum Sensing. Advances in Experimental Medicine and Biology, 2022, , 95-115.	0.8	12
281	Black Queen Hypothesis, partial privatization, and quorum sensing evolution. PLoS ONE, 2022, 17, e0278449.	1.1	1
282	Lactate-dependent chaperone-mediated autophagy induces oscillatory HIF- $1\hat{l}\pm$ activity promoting proliferation of hypoxic cells. Cell Systems, 2022, 13, 1048-1064.e7.	2.9	10
283	Host-Defense-Peptide-Mimicking \hat{I}^2 -Peptide Polymer Acting as a Dual-Modal Antibacterial Agent by Interfering Quorum Sensing and Killing Individual Bacteria Simultaneously. Research, 2023, 6, .	2.8	4
284	Scavenging of reactive oxygen species effectively reduces Pseudomonas aeruginosa biofilms through disrupting policing. Environmental Research, 2023, 220, 115182.	3.7	2
285	Quorum sensing relationship analysis of microbial symbionts. , 2023, , 831-845.		0
286	The role and mechanism of quorum sensing on environmental antimicrobial resistance. Environmental Pollution, 2023, 322, 121238.	3.7	12
287	Bacterial Communication Coordinated Behaviors of Whole Communities to Cope with Environmental Changes. Environmental Science & Environmental &	4.6	4