Rolf KÃ¼mmerli

List of Publications by Year
in descending order

77 papers	4,948 citations	172457 29 h-index	133252 59 g-index
104 all docs	104 docs citations	104 times ranked	5883 citing authors

#	Article	IF	Citations
1	Siderophores drive invasion dynamics in bacterial communities through their dual role as public good versus public bad. Ecology Letters, 2022, 25, 138-150.	6.4	21
2	A comprehensive method to elucidate pyoverdines produced by fluorescent Pseudomonas spp. by UHPLC-HR-MS/MS. Analytical and Bioanalytical Chemistry, 2022, 414, 2671-2685.	3.7	9
3	Enforced specialization fosters mutual cheating and not division of labour in the bacterium Pseudomonas aeruginosa. Journal of Evolutionary Biology, 2022, 35, 719-730.	1.7	1
4	Coordination of siderophore gene expression among clonal cells of the bacterium Pseudomonas aeruginosa. Communications Biology, 2022, 5, .	4.4	10
5	Loss of a pyoverdine secondary receptor in Pseudomonas aeruginosa results in a fitter strain suitable for population invasion. ISME Journal, 2021, 15, 1330-1343.	9.8	10
6	Local adaptation, geographical distance and phylogenetic relatedness: Assessing the drivers of siderophoreâ€mediated social interactions in natural bacterial communities. Journal of Evolutionary Biology, 2021, 34, 1266-1278.	1.7	9
7	Single-Cell Imaging Reveals That Staphylococcus aureus Is Highly Competitive Against Pseudomonas aeruginosa on Surfaces. Frontiers in Cellular and Infection Microbiology, 2021, 11, 733991.	3.9	6
8	Ecology drives the evolution of diverse social strategies in Pseudomonas aeruginosa. Molecular Ecology, 2021, 30, 5214-5228.	3.9	12
9	Model Systems to Study the Chronic, Polymicrobial Infections in Cystic Fibrosis: Current Approaches and Exploring Future Directions. MBio, 2021, 12, e0176321.	4.1	26
10	Losing out to improve group fitness. ELife, 2021, 10, .	6.0	0
11	Bacterial siderophores in community and host interactions. Nature Reviews Microbiology, 2020, 18, 152-163.	28.6	495
12	Positive linkage between bacterial social traits reveals that homogeneous rather than specialised behavioral repertoires prevail in natural Pseudomonas communities. FEMS Microbiology Ecology, 2020, 96, .	2.7	9
13	Strain Background, Species Frequency, and Environmental Conditions Are Important in Determining Pseudomonas aeruginosa and Staphylococcus aureus Population Dynamics and Species Coexistence. Applied and Environmental Microbiology, 2020, 86, .	3.1	14
14	Microbial Mutualism: Will You Still Need Me, WillÂYouÂStill Feed Me?. Current Biology, 2020, 30, R1041-R1043.	3.9	3
15	Combining antibiotics with antivirulence compounds can have synergistic effects and reverse selection for antibiotic resistance in Pseudomonas aeruginosa. PLoS Biology, 2020, 18, e3000805.	5.6	69
16	Competition for iron drives phytopathogen control by natural rhizosphere microbiomes. Nature Microbiology, 2020, 5, 1002-1010.	13.3	260
17	Antagonistic interactions subdue interâ€species greenâ€beard cooperation in bacteria. Journal of Evolutionary Biology, 2020, 33, 1245-1255.	1.7	5
18	Harnessing bacterial interactions to manage infections: a review on the opportunistic pathogen Pseudomonas aeruginosa as a case example. Journal of Medical Microbiology, 2020, 69, 147-161.	1.8	26

#	Article	IF	Citations
19	Title is missing!. , 2020, 18, e3000805.		0
20	Title is missing!. , 2020, 18, e3000805.		0
21	Title is missing!. , 2020, 18, e3000805.		0
22	Title is missing!. , 2020, 18, e3000805.		0
23	Title is missing!. , 2020, 18, e3000805.		0
24	Title is missing!. , 2020, 18, e3000805.		0
25	In-vivo microscopy reveals the impact of Pseudomonas aeruginosa social interactions on host colonization. ISME Journal, 2019, 13, 2403-2414.	9.8	28
26	Individualâ€•versus groupâ€optimality in the production of secreted bacterial compounds. Evolution; International Journal of Organic Evolution, 2019, 73, 675-688.	2.3	21
27	Understanding policing as a mechanism of cheater control in cooperating bacteria. Journal of Evolutionary Biology, 2019, 32, 412-424.	1.7	16
28	Genetic architecture constrains exploitation of siderophore cooperation in the bacteriumBurkholderia cenocepacia. Evolution Letters, 2019, 3, 610-622.	3.3	17
29	Transposable temperate phages promote the evolution of divergent social strategies in Pseudomonas aeruginosa populations. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191794.	2.6	13
30	The bacteriumPseudomonas aeruginosasenses and gradually responds to interspecific competition for iron. Evolution; International Journal of Organic Evolution, 2018, 72, 1515-1528.	2.3	40
31	Probing the evolutionary robustness of two repurposed drugs targeting iron uptake in Pseudomonas aeruginosa. Evolution, Medicine and Public Health, 2018, 2018, 246-259.	2.5	28
32	Low spatial structure and selection against secreted virulence factors attenuates pathogenicity in Pseudomonas aeruginosa. ISME Journal, 2018, 12, 2907-2918.	9.8	44
33	Environmental determinants of pyoverdine production, exploitation and competition in natural Pseudomonas communities. Environmental Microbiology, 2018, 20, 3629-3642.	3.8	37
34	Division of Labor during Biofilm Matrix Production. Current Biology, 2018, 28, 1903-1913.e5.	3.9	203
35	Cheating fosters species co-existence in well-mixed bacterial communities. ISME Journal, 2017, 11, 1179-1188.	9.8	69
36	Manipulating virulence factor availability can have complex consequences for infections. Evolutionary Applications, 2017, 10, 91-101.	3.1	29

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37	Siderophore cheating and cheating resistance shape competition for iron in soil and freshwater Pseudomonas communities. Nature Communications, 2017, 8, 414.	12.8	186
38	The physical boundaries of public goods cooperation between surface-attached bacterial cells. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20170631.	2.6	48
39	The path to re-evolve cooperation is constrained in Pseudomonas aeruginosa. BMC Evolutionary Biology, 2017, 17, 214.	3.2	11
40	Do Bacterial â€œVirulence Factorsâ€•Always Increase Virulence? A Meta-Analysis of Pyoverdine Production in Pseudomonas aeruginosa As a Test Case. Frontiers in Microbiology, 2016, 7, 1952.	3.5	33
41	Beyond killing. Evolution, Medicine and Public Health, 2016, 2016, 148-157.	2.5	87
42	Presence of a loner strain maintains cooperation and diversity in well-mixed bacterial communities. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152682.	2.6	47
43	Evolutionary dynamics of interlinked public goods traits: an experimental study of siderophore production in Pseudomonas aeruginosa. Journal of Evolutionary Biology, 2015, 28, 29-39.	1.7	62
44	Coâ€evolutionary dynamics between public good producers andÂcheats in the bacterium Pseudomonas aeruginosa. Journal of Evolutionary Biology, 2015, 28, 2264-2274.	1.7	62
45	Quorum sensing triggers the stochastic escape of individual cells from Pseudomonas putida biofilms. Nature Communications, 2015, 6, 5945.	12.8	842
46	Cheat invasion causes bacterial trait loss in lung infections. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10577-10578.	7.1	5
47	Collective decision-making in microbes. Frontiers in Microbiology, 2014, 5, 54.	3.5	47
48	EXPLAINING THE SOCIOBIOLOGY OF PYOVERDIN PRODUCING PSEUDOMONAS : A COMMENT ON ZHANG AND RAINEY (2013). Evolution; International Journal of Organic Evolution, 2014, 68, 3337-3343.	2.3	31
49	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.	1.7	53
50	'Evolution-Proofing' Antibacterials. Evolution, Medicine and Public Health, 2014, 2014, 134-135.	2.5	7
51	Gallium-mediated siderophore quenching as an evolutionarily robust antibacterial treatment. Evolution, Medicine and Public Health, 2014, 2014, 18-29.	2.5	106
52	Habitat structure and the evolution of diffusible siderophores in bacteria. Ecology Letters, 2014, 17, 1536-1544.	6.4	98
53	Altruism can evolve when relatedness is low: evidence from bacteria committing suicide upon phage infection. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20123035.	2.6	65
54	Switching between apparently redundant iron-uptake mechanisms benefits bacteria in changeable environments. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131055.	2.6	154

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55	Defying bacteriophages: Contrasting altruistic with individual-based resistance mechanisms inEscherichia coli. Communicative and Integrative Biology, 2013, 6, e25159.	1.4	6
56	Cost of cooperation rules selection for cheats in bacterial metapopulations. Journal of Evolutionary Biology, 2012, 25, 473-484.	1.7	61
57	A Test of Evolutionary Policing Theory with Data from Human Societies. PLoS ONE, 2011, 6, e24350.	2.5	15
58	Inclusive fitness theory and eusociality. Nature, 2011, 471, E1-E4.	27.8	339
59	Between-Year Variation in Population Sex Ratio Increases with Complexity of the Breeding System in Hymenoptera. American Naturalist, 2011, 177, 835-846.	2.1	4
60	Repression of competition favours cooperation: experimental evidence from bacteria. Journal of Evolutionary Biology, 2010, 23, 699-706.	1.7	32
61	Resistance to extreme strategies, rather than prosocial preferences, can explain human cooperation in public goods games. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10125-10130.	7.1	72
62	Molecular and regulatory properties of a public good shape the evolution of cooperation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18921-18926.	7.1	117
63	Patterns of split sex ratio in ants have multiple evolutionary causes based on different within-colony conflicts. Biology Letters, 2009, 5, 713-716.	2.3	21
64	Viscous medium promotes cooperation in the pathogenic bacteriumPseudomonas aeruginosa. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 3531-3538.	2.6	200
65	Social insects â€“ superorganisms or just superb organisms?. Current Biology, 2009, 19, R105-R107.	3.9	0
66	LIMITED DISPERSAL, BUDDING DISPERSAL, AND COOPERATION: AN EXPERIMENTAL STUDY. Evolution; International Journal of Organic Evolution, 2009, 63, 939-949.	2.3	163
67	Phenotypic plasticity of a cooperative behaviour in bacteria. Journal of Evolutionary Biology, 2009, 22, 589-598.	1.7	147
68	Patterns of infant handling and relatedness in Barbary macaques (Macaca sylvanus) on Gibraltar. Primates, 2008, 49, 271-282.	1.1	13
69	Reproductive parameters vary with social and ecological factors in the polygynous antFormica exsecta. Oikos, 2008, 117, 580-590.	2.7	11
70	Social Evolution: This Microbe Will Self-Destruct. Current Biology, 2008, 18, R1021-R1023.	3.9	15
71	Reproductive specialization in multiple-queen colonies of the ant Formica exsecta. Behavioral Ecology, 2007, 18, 375-383.	2.2	17
72	Human cooperation in social dilemmas: comparing the Snowdrift game with the Prisoner's Dilemma. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 2965-2970.	2.6	86

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73	Contrasting population genetic structure for workers and queens in the putatively unicolonial ant Formica exsecta. Molecular Ecology, 2007, 16, 4493-4503.	3.9	20
74	Extreme reproductive specialization within ant colonies: some queens produce males whereas others produce workers. Animal Behaviour, 2007, 74, 1535-1543.	1.9	13
75	Sham nepotism as a result of intrinsic differences in brood viability in ants. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 2049-2052.	2.6	45
76	Male and Female Reproductive Success in Macaca sylvanus in Gibraltar: No Evidence for Rank Dependence. International Journal of Primatology, 2005, 26, 1229-1249.	1.9	22
77	Experimental manipulation of queen number affects colony sex ratio investment in the highly polygynous ant Formica exsecta. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 1789-1794.	2.6	20