Joel L Sachs

List of Publications by Year
in descending order

62 papers	5,295 citations	159585 30 h-index	144013 57 g-index
63 all docs	63 docs citations	63 times ranked	5314 citing authors

#	Article	IF	Citations
1	No disruption of rhizobial symbiosis during early stages of cowpea domestication. Evolution; International Journal of Organic Evolution, 2022, 76, 496-511.	2.3	4
2	Wild legumes maintain beneficial soil rhizobia populations despite decades of nitrogen deposition. Oecologia, 2022, 198, 419.	2.0	11
3	Symbiotic organs: the nexus of hostâ€“microbe evolution. Trends in Ecology and Evolution, 2022, 37, 599-610.	8.7	24
4	Pangenome Evolution Reconciles Robustness and Instability of Rhizobial Symbiosis. MBio, 2022, 13, e0007422.	4.1	13
5	Dynamic Interactions Between Mega Symbiosis ICEs and Bacterial Chromosomes Maintain Genome Architecture. Genome Biology and Evolution, 2022, 14, .	2.5	2
6	Dysregulation of hostâ€control causes interspecific conflict over host investment into symbiotic organs. Evolution; International Journal of Organic Evolution, 2021, 75, 1189-1200.	2.3	8
7	Evolution of specialization in a plantâ€microbial mutualism is explained by the oscillation theory of speciation. Evolution; International Journal of Organic Evolution, 2021, 75, 1070-1086.	2.3	11
8	Experimental evolution can enhance benefits of rhizobia to novel legume hosts. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210812.	2.6	10
9	The emergence of microbiome centres. Nature Microbiology, 2020, 5, 2-3.	13.3	13
10	Agriculture and the Disruption of Plantâ€“Microbial Symbiosis. Trends in Ecology and Evolution, 2020, 35, 426-439.	8.7	81
11	Recurrent mutualism breakdown events in a legume rhizobia metapopulation. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20192549.	2.6	24
12	Polyploid plants obtain greater fitness benefits from a nutrient acquisition mutualism. New Phytologist, 2020, 227, 944-954.	7.3	22
13	Host investment into symbiosis varies among genotypes of the legume Acmispon strigosus, but host sanctions are uniform. New Phytologist, 2019, 221, 446-458.	7.3	36
14	Interspecific conflict and the evolution of ineffective rhizobia. Ecology Letters, 2019, 22, 914-924.	6.4	27
15	Fitness variation among host species and the paradox of ineffective rhizobia. Journal of Evolutionary Biology, 2018, 31, 599-610.	1.7	37
16	Symbiotic nitrogen fixation by rhizobia â€" the roots of a success story. Current Opinion in Plant Biology, 2018, 44, 7-15.	7.1	172
17	Legumes versus rhizobia: a model for ongoing conflict in symbiosis. New Phytologist, 2018, 219, 1199-1206.	7.3	80
18	Cell autonomous sanctions in legumes target ineffective rhizobia in nodules with mixed infections. American Journal of Botany, 2017, 104, 1299-1312.	1.7	61

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19	Nitrogen deposition decreases the benefits of symbiosis in a native legume. Plant and Soil, 2017, 414, 159-170.	3.7	57
20	Lotus japonicus alters in planta fitness of Mesorhizobium loti dependent on symbiotic nitrogen fixation. PLoS ONE, 2017, 12, e0185568.	2.5	20
21	Metapopulation dominance and genomic-island acquisition ofBradyrhizobiumwith superior catabolic capabilities. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20160496.	2.6	24
22	Nonnodulating Bradyrhizobium spp. Modulate the Benefits of Legume-Rhizobium Mutualism. Applied and Environmental Microbiology, 2016, 82, 5259-5268.	3.1	29
23	Epidemic Spread of Symbiotic and Non-Symbiotic Bradyrhizobium Genotypes Across California. Microbial Ecology, 2016, 71, 700-710.	2.8	27
24	Cheaters must prosper: reconciling theoretical and empirical perspectives on cheating in mutualism. Ecology Letters, 2015, 18, 1270-1284.	6.4	126
25	Lotus hosts delimit the mutualismâ€“parasitism continuum of <scp>B</scp>radyrhizobium. Journal of Evolutionary Biology, 2015, 28, 447-456.	1.7	52
26	Native <scp>C</scp>alifornia soils are selective reservoirs for multidrugâ€resistant bacteria. Environmental Microbiology Reports, 2015, 7, 442-449.	2.4	11
27	Engineering Microbiomes to Improve Plant and Animal Health. Trends in Microbiology, 2015, 23, 606-617.	7.7	486
28	The exploitation of mutualisms. , 2015, , 93-106.		21
29	Evolutionary origins and diversification of proteobacterial mutualists. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132146.	2.6	59
30	Specialization-generalization trade-off in a Bradyrhizobium symbiosis with wild legume hosts. BMC Ecology, 2014, 14, 8.	3.0	53
31	Efficiency of partner choice and sanctions inLotusis not altered by nitrogen fertilization. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132587.	2.6	59
32	Origins, Evolution, and Breakdown of Bacterial Symbiosis. , 2013, , 637-644.		5
33	Biological soil crust community types differ in key ecological functions. Soil Biology and Biochemistry, 2013, 65, 168-171.	8.8	87
34	Mutualistic Co-evolution of Type III Effector Genes in Sinorhizobium fredii and Bradyrhizobium japonicum. PLoS Pathogens, 2013, 9, e1003204.	4.7	76
35	The Origins of Cooperative Bacterial Communities. MBio, 2012, 3, .	4.1	104
36	New paradigms for the evolution of beneficial infections. Trends in Ecology and Evolution, 2011, 26, 202-209.	8.7	112

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37	Inclusive fitness theory and eusociality. Nature, 2011, 471, E1-E4.	27.8	339
38	Microbially Mediated Plant Functional Traits. Annual Review of Ecology, Evolution, and Systematics, 2011, 42, 23-46.	8.3	447
39	Evolutionary transitions in bacterial symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10800-10807.	7.1	284
40	Evolutionary Instability of Symbiotic Function in Bradyrhizobium japonicum. PLoS ONE, 2011, 6, e26370.	2.5	43
41	Origins of cheating and loss of symbiosis in wildBradyrhizobium. Journal of Evolutionary Biology, 2010, 23, 1075-1089.	1.7	133
42	Host control over infection and proliferation of a cheater symbiont. Journal of Evolutionary Biology, 2010, 23, 1919-1927.	1.7	95
43	Symbiont genomics, our new tangled bank. Genomics, 2010, 95, 129-137.	2.9	48
44	In Situ Phylogenetic Structure and Diversity of Wild Bradyrhizobium Communities. Applied and Environmental Microbiology, 2009, 75, 4727-4735.	3.1	93
45	The origins of uncooperative rhizobia. Oikos, 2008, 117, 961-966.	2.7	42
46	Resolving the first steps to multicellularity. Trends in Ecology and Evolution, 2008, 23, 245-248.	8.7	28
47	EVOLUTION OF COLONIALITY IN BIRDS: A TEST OF HYPOTHESES WITH THE RED-NECKED GREBE (PODICEPS) Tj ETQq1 1 0.784314 rg	1.4	11
48	The evolution of cooperative breeding; is there cheating?. Behavioural Processes, 2007, 76, 131-137.	1.1	14
49	The Origin and Evolution of Cultures. Evolution and Cognition. By Robert Boyd and , Peter J Richerson. Oxford and New York: Oxford University Press. $74.00 (hardcover); $35.00 (paper). viii + 456 p; ill.; author and subject indexes. ISBN: 0â€19â€516524â€1 (hc); 0â€19â€518145â€X (pb). 2005.. Quarterly Review of Biology, 2007, 82, 183-184.	0.1	0
50	Evolution of Coloniality in Birds: A Test of Hypotheses With the Red-Necked Grebe (Podiceps) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222	1.4	13
51	Technoâ€Cultural Evolution: Cycles of Creation and Conflict. By WilliamÂMcDonaldÂ Wallace. Washington (DC): Potomac Books. $26.95. xxvi + 267 p; ill.; index. ISBN: 1â€“57488â€“966â€“4. 2006.. Quarterly Review of Biology, 2006, 81, 425-425.	0.1	0
52	Pathways to mutualism breakdown. Trends in Ecology and Evolution, 2006, 21, 585-592.	8.7	334
53	Cooperation within and among species. Journal of Evolutionary Biology, 2006, 19, 1415-1418.	1.7	28
54	An empirical test of partner choice mechanisms in a wild legumeâ€“rhizobium interaction. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 77-81.	2.6	180

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55	A shift to parasitism in the jellyfish symbiont Symbiodinium microadriaticum. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 425-429.	2.6	136
56	Experimental evolution of conflict mediation between genomes. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 390-395.	7.1	65
57	The Biology of Civilisation: Understanding Human Culture as a Force in Nature. By StephenÂ Boyden. Sydney (Australia): University of New South Wales Press; distributed by University of Washington Press, Seattle (Washington). $22.50 (paper). xv + 189 p; ill.; index. ISBN: 0â€86840â€766â€6. 2004.. Quarterly Review of Biology, 2005, 80, 507-508.	0.1	0
58	Genetic and Cultural Evolution of Cooperation. Based on a workshop held in Berlin, Germany, 23â€“28 June 2002. Edited by PeterÂ Hammerstein. Published by MIT Press, Cambridge (Massachusetts), in cooperation with Dahlem University Press, Berlin, Germany. $45.00. xiv + 485 p; ill.; name and subject indexes. ISBN: 0â€“262â€“08326â€“4. 2003.. Quarterly Review of Biology, 2004, 79, 458-459.	0.1	0
59	The Evolution of Cooperation. Quarterly Review of Biology, 2004, 79, 135-160.	0.1	885
60	RED-NECKED GREBES BECOME SEMICOLONIAL WHEN PRIME NESTING SUBSTRATE IS AVAILABLE. Condor, 2003, 105, 80.	1.6	14
61	Red-Necked Grebes Become Semicolonial When Prime Nesting Substrate is Available. Condor, 2003, 105, 80-94.	1.6	12
62	Characterization of microsatellite loci for red-necked grebesPodiceps grisegena. Molecular Ecology, 1999, 8, 687-688.	3.9	6