David C Queller

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5011890/publications.pdf

Version: 2024-02-01

30070 22166 14,065 156 54 citations h-index papers

g-index 163 163 163 8295 docs citations times ranked citing authors all docs

113

#	Article	IF	CITATIONS
1	ESTIMATING RELATEDNESS USING GENETIC MARKERS. Evolution; International Journal of Organic Evolution, 1989, 43, 258-275.	2.3	2,493
2	Microsatellites and kinship. Trends in Ecology and Evolution, 1993, 8, 285-288.	8.7	763
3	Kin Selection and Social Insects. BioScience, 1998, 48, 165-175.	4.9	532
4	Altruism and social cheating in the social amoeba Dictyostelium discoideum. Nature, 2000, 408, 965-967.	27.8	424
5	Inclusive fitness theory and eusociality. Nature, 2011, 471, E1-E4.	27.8	339
6	Quantitative Genetics, Inclusive Fitness, and Group Selection. American Naturalist, 1992, 139, 540-558.	2.1	323
7	Genetic relatedness in viscous populations. Evolutionary Ecology, 1994, 8, 70-73.	1.2	292
8	Beyond society: the evolution of organismality. Philosophical Transactions of the Royal Society B: Biological Sciences, 2009, 364, 3143-3155.	4.0	286
9	A GENERAL MODEL FOR KIN SELECTION. Evolution; International Journal of Organic Evolution, 1992, 46, 376-380.	2.3	267
10	Single-Gene Greenbeard Effects in the Social Amoeba Dictyostelium discoideum. Science, 2003, 299, 105-106.	12.6	264
11	Kinship, reciprocity and synergism in the evolution of social behaviour. Nature, 1985, 318, 366-367.	27.8	258
12	Pleiotropy as a mechanism to stabilize cooperation. Nature, 2004, 431, 693-696.	27.8	253
13	Primitive agriculture in a social amoeba. Nature, 2011, 469, 393-396.	27.8	251
14	Relatedness and the fraternal major transitions. Philosophical Transactions of the Royal Society B: Biological Sciences, 2000, 355, 1647-1655.	4.0	233
15	High relatedness maintains multicellular cooperation in a social amoeba by controlling cheater mutants. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8913-8917.	7.1	233
16	Unrelated helpers in a social insect. Nature, 2000, 405, 784-787.	27.8	231
17	Polymorphic Members of the lag Gene Family Mediate Kin Discrimination in Dictyostelium. Current Biology, 2009, 19, 567-572.	3.9	204
18	Sexual selection in a hermaphroditic plant. Nature, 1983, 305, 706-707.	27.8	203

#	Article	IF	CITATIONS
19	Kin Discrimination and Cooperation in Microbes. Annual Review of Microbiology, 2011, 65, 349-367.	7.3	191
20	Kin preference in a social microbe. Nature, 2006, 442, 881-882.	27.8	186
21	Evolution of cooperation and control of cheating in a social microbe. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10855-10862.	7.1	186
22	Unicolonial ants: where do they come from, what are they and where are they going?. Trends in Ecology and Evolution, 2009, 24, 341-349.	8.7	183
23	Evolution of microbial markets. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1237-1244.	7.1	180
24	Does population viscosity promote kin selection?. Trends in Ecology and Evolution, 1992, 7, 322-324.	8.7	149
25	Comparative genomics of the social amoebae Dictyostelium discoideum and Dictyostelium purpureum. Genome Biology, 2011, 12, R20.	9.6	141
26	Facultative cheater mutants reveal the genetic complexity of cooperation in social amoebae. Nature, 2008, 451, 1107-1110.	27.8	137
27	Kin Discrimination Increases with Genetic Distance in a Social Amoeba. PLoS Biology, 2008, 6, e287.	5.6	127
28	Expanded social fitness and Hamilton's rule for kin, kith, and kind. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10792-10799.	7.1	122
29	Cooperators Since Life BeganThe Major Transitions in Evolution.John Maynard Smith , Eors Szathmary. Quarterly Review of Biology, 1997, 72, 184-188.	0.1	117
30	The costs and benefits of being a chimera. Proceedings of the Royal Society B: Biological Sciences, 2002, 269, 2357-2362.	2.6	112
31	High Relatedness Is Necessary and Sufficient to Maintain Multicellularity in <i>Dictyostelium</i> Science, 2011, 334, 1548-1551.	12.6	109
32	THE SOCIAL ORGANISM: CONGRESSES, PARTIES, AND COMMITTEES. Evolution; International Journal of Organic Evolution, 2010, 64, 605-616.	2.3	108
33	A selfish strategy of social insect workers that promotes social cohesion. Nature, 1993, 365, 639-641.	27.8	103
34	Kin selection and conflict in seed maturation. Journal of Theoretical Biology, 1983, 100, 153-172.	1.7	102
35	Theory of genomic imprinting conflict in social insects. BMC Evolutionary Biology, 2003, 3, 15.	3.2	98
36	<i>Burkholderia</i> bacteria infectiously induce the proto-farming symbiosis of <i>Dictyostelium</i> amoebae and food bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5029-37.	7.1	98

#	Article	IF	Citations
37	A Phylogenetic Perspective on Sequence Evolution in Microsatellite Loci. Journal of Molecular Evolution, 2000, 50, 324-338.	1.8	95
38	Fundamental Theorems of Evolution. American Naturalist, 2017, 189, 345-353.	2.1	94
39	Reproduction in foundress associations of the social wasp, Polistes carolina: conventions, competition, and skew. Behavioral Ecology, 2002, 13, 531-542.	2.2	91
40	Insertions, substitutions, and the origin of microsatellites. Genetical Research, 2000, 76, 227-236.	0.9	84
41	Genetic relatedness in primitively eusocial wasps. Nature, 1989, 342, 268-270.	27.8	74
42	DNA methylation is widespread across social Hymenoptera. Current Biology, 2008, 18, R287-R288.	3.9	72
43	Fruiting bodies of the social amoeba Dictyostelium discoideum increase spore transport by Drosophila. BMC Evolutionary Biology, 2014, 14, 105.	3.2	71
44	Kin selection and frequency dependence: a game theoretic approach. Biological Journal of the Linnean Society, 1984, 23, 133-143.	1.6	70
45	Testing the kinship theory of intragenomic conflict in honey bees (<i>Apis mellifera</i>). Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1020-1025.	7.1	69
46	The Many Selves of Social Insects. Science, 2002, 296, 311-313.	12.6	67
47	Variation, Sex, and Social Cooperation: Molecular Population Genetics of the Social Amoeba Dictyostelium discoideum. PLoS Genetics, 2010, 6, e1001013.	3 . 5	67
48	Ancient Conservation of Trinucleotide Microsatellite Loci in Polistine Wasps. Molecular Phylogenetics and Evolution, 1998, 10, 168-177.	2.7	66
49	Cheater-resistance is not futile. Nature, 2009, 461, 980-982.	27.8	66
50	Predation and the Evolution of Sociality in the Paper Wasp Polistes Bellicosus. Ecology, 1988, 69, 1497-1505.	3.2	63
51	Relatedness and queen number in the Neotropical wasp, Parachartergus colobopterus. Animal Behaviour, 1991, 42, 461-470.	1.9	63
52	A bacterial symbiont is converted from an inedible producer of beneficial molecules into food by a single mutation in the <i>gacA</i> gene. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14528-14533.	7.1	63
53	Male production in stingless bees: variable outcomes of queen-worker conflict. Molecular Ecology, 2002, 11, 2661-2667.	3.9	62
54	Relatedness, Conflict, and the Evolution of Eusociality. PLoS Biology, 2015, 13, e1002098.	5.6	60

#	Article	IF	CITATIONS
55	Male-Female Conflict and Parent-Offspring Conflict. American Naturalist, 1994, 144, S84-S99.	2.1	57
56	Problems of multi-species organisms: endosymbionts to holobionts. Biology and Philosophy, 2016, 31, 855-873.	1.4	56
57	There is nothing wrong with inclusive fitness. Trends in Ecology and Evolution, 2006, 21, 599-600.	8.7	55
58	Evolutionary Conflict. Annual Review of Ecology, Evolution, and Systematics, 2018, 49, 73-93.	8.3	53
59	Worker Control of Sex Ratios and Selection for Extreme Multiple Mating by Queens. American Naturalist, 1993, 142, 346-351.	2.1	52
60	A New Classification of the Dictyostelids. Protist, 2018, 169, 1-28.	1.5	52
61	Genomic Signatures of Cooperation and Conflict in the Social Amoeba. Current Biology, 2015, 25, 1661-1665.	3.9	51
62	Whole Genome Sequencing of Mutation Accumulation Lines Reveals a Low Mutation Rate in the Social Amoeba Dictyostelium discoideum. PLoS ONE, 2012, 7, e46759.	2.5	50
63	Models of kin selection on seed provisioning. Heredity, 1984, 53, 151-165.	2.6	49
64	The evolution of leks through female choice. Animal Behaviour, 1987, 35, 1424-1432.	1.9	49
65	Privatization and property in biology. Animal Behaviour, 2014, 92, 305-311.	1.9	49
66	Synergistic activity of cosecreted natural products from amoebae-associated bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3758-3763.	7.1	49
67	Endosymbiotic adaptations in three new bacterial species associated with <i>Dictyostelium discoideum</i> : <i>Paraburkholderia agricolaris</i> sp. nov., <i>Paraburkholderia hayleyella</i> sp. nov., and <i>Paraburkholderia bonniea</i> sp. nov. PeerJ, 2020, 8, e9151.	2.0	49
68	Wasps fail to make distinctions. Nature, 1990, 344, 388-388.	27.8	45
69	The measurement and meaning of inclusive fitness. Animal Behaviour, 1996, 51, 229-232.	1.9	45
70	The Cost of Queen Loss in the Social Wasp Polistes dominulus (Hymenoptera: Vespidae). Journal of the Kansas Entomological Society, 2004, 77, 343-355.	0.2	45
71	Queen number and genetic relatedness in a neotropical wasp, Polybia occidentalis. Behavioral Ecology, 1993, 4, 7-13.	2.2	43
72	Pollen Removal, Paternity, and the Male Function of Flowers. American Naturalist, 1997, 149, 585-594.	2.1	43

#	Article	IF	CITATIONS
73	Kinship is relative. Nature, 2004, 430, 975-976.	27.8	43
74	Exploiting new terrain: an advantage to sociality in the slime mold Dictyostelium discoideum. Behavioral Ecology, 2007, 18, 433-437.	2.2	42
75	The Ecology and Evolution of Amoeba-Bacterium Interactions. Applied and Environmental Microbiology, 2021, 87, .	3.1	42
76	Symbiont location, host fitness, and possible coadaptation in a symbiosis between social amoebae and bacteria. ELife, $2018, 7, .$	6.0	42
77	A Search for Parent-of-Origin Effects on Honey Bee Gene Expression. G3: Genes, Genomes, Genetics, 2015, 5, 1657-1662.	1.8	41
78	<i>Burkholderia</i> bacteria use chemotaxis to find social amoeba <i>Dictyostelium discoideum</i> hosts. ISME Journal, 2018, 12, 1977-1993.	9.8	41
79	CONFLICTS OF INTEREST IN SOCIAL INSECTS: MALE PRODUCTION IN TWO SPECIES OF <i>POLISTES </i> Evolution; International Journal of Organic Evolution, 1998, 52, 797-805.	2.3	40
80	The specificity of <i>Burkholderia</i> symbionts in the social amoeba farming symbiosis: Prevalence, species, genetic and phenotypic diversity. Molecular Ecology, 2019, 28, 847-862.	3.9	40
81	The Spaniels of St. Marx and the Panglossian Paradox: A Critique of a Rhetorical Programme. Quarterly Review of Biology, 1995, 70, 485-489.	0.1	39
82	Genome Nucleotide Composition Shapes Variation in Simple Sequence Repeats. Molecular Biology and Evolution, 2011, 28, 899-909.	8.9	39
83	Structured growth and genetic drift raise relatedness in the social amoeba <i>Dictyostelium discoideum</i> . Biology Letters, 2012, 8, 794-797.	2.3	38
84	Genetic relatedness and incipient eusociality in stenogastrine wasps. Animal Behaviour, 1994, 48, 813-821.	1.9	37
85	Control of reproduction in social insect colonies: individual and collective relatedness preferences in the paper wasp, Polistes annularis. Behavioral Ecology and Sociobiology, 1997, 40, 3-16.	1.4	33
86	Colony life history and demography of a swarm-founding social wasp. Behavioral Ecology and Sociobiology, 1997, 40, 71-77.	1.4	33
87	The genetic structure of swarms and the timing of their production in the queen cycles of neotropical wasps. Molecular Ecology, 1998, 7, 709-718.	3.9	33
88	Genetic and behavioral conflict over male production between workers and queens in the stingless bee Paratrigona subnuda. Behavioral Ecology and Sociobiology, 2002, 53, 1-8.	1.4	33
89	Sentinel cells, symbiotic bacteria and toxin resistance in the social amoeba <i>Dictyostelium discoideum</i> . Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152727.	2.6	32
90	Demographic and Genetic Evidence for Cyclical Changes in Queen Number in a Neotropical Wasp, Polybia emaciata. American Naturalist, 1992, 140, 363-372.	2.1	31

#	Article	IF	Citations
91	Males from Mars. Nature, 2005, 435, 1167-1168.	27.8	31
92	An Unusually Low Microsatellite Mutation Rate in <i>Dictyostelium discoideum</i> , an Organism With Unusually Abundant Microsatellites. Genetics, 2007, 177, 1499-1507.	2.9	31
93	High relatedness in a social amoeba: the role of kin-discriminatory segregation. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 2619-2624.	2.6	31
94	Genetic signatures of microbial altruism and cheating in social amoebas in the wild. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3096-3101.	7.1	31
95	Relatedness and altruism in Polistes wasps. Behavioral Ecology, 1993, 4, 128-137.	2.2	30
96	Queens, not workers, produce the males in the stingless bee Schwarziana quadripunctata quadripunctata. Animal Behaviour, 2003, 66, 359-368.	1.9	30
97	Diversity of Free-Living Environmental Bacteria and Their Interactions With a Bactivorous Amoeba. Frontiers in Cellular and Infection Microbiology, 2018, 8, 411.	3.9	29
98	The queen is not a pacemaker in the small-colony wasps Polistes instabilis and P. dominulus. Animal Behaviour, 2006, 71, 1197-1203.	1.9	27
99	The role of queens in colonies of the swarm-founding wasp Parachartergus colobopterus. Animal Behaviour, 2000, 59, 841-848.	1.9	26
100	An invitation to die: initiators of sociality in a social amoeba become selfish spores. Biology Letters, 2010, 6, 800-802.	2.3	26
101	Joint phenotypes, evolutionary conflict and the fundamental theorem of natural selection. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130423.	4.0	26
102	Pax Argentinica. Nature, 2000, 405, 519-520.	27.8	24
103	Discovery of a large clonal patch of a social amoeba: implications for social evolution. Molecular Ecology, 2009, 18, 1273-1281.	3.9	23
104	Fine-scale spatial ecology drives kin selection relatedness among cooperating amoebae. Evolution; International Journal of Organic Evolution, 2016, 70, 848-859.	2.3	23
105	Which phenotypic traits of Dictyostelium discoideum farmers are conferred by their bacterial symbionts?. Symbiosis, 2016, 68, 39-48.	2.3	22
106	How social evolution theory impacts our understanding of development in the social amoeba <i>Dictyostelium</i> . Development Growth and Differentiation, 2011, 53, 597-607.	1.5	21
107	Aggression and worker control of caste fate in a multiple-queen wasp, Parachartergus colobopterus. Animal Behaviour, 2004, 67, 1-10.	1.9	20
108	Fitness costs and benefits vary for two facultative Burkholderia symbionts of the social amoeba, Dictyostelium discoideum. Ecology and Evolution, 2019, 9, 9878-9890.	1.9	20

#	Article	IF	Citations
109	Family quarrels in seeds and rapid adaptive evolution in <i>Arabidopsis</i> . Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9463-9468.	7.1	20
110	A method for detecting kin discrimination within natural colonies of social insects. Animal Behaviour, 1994, 47, 569-576.	1.9	19
111	Lack of kin discrimination during wasp colony fission. Behavioral Ecology, 1998, 9, 172-176.	2.2	19
112	The Rate and Effects of Spontaneous Mutation on Fitness Traits in the Social Amoeba, <i>Dictyostelium discoideum </i> . G3: Genes, Genomes, Genetics, 2013, 3, 1115-1127.	1.8	19
113	Dictyostelium Development Shows a Novel Pattern of Evolutionary Conservation. Molecular Biology and Evolution, 2013, 30, 977-984.	8.9	17
114	Cheating does not explain selective differences at high and low relatedness in a social amoeba. BMC Evolutionary Biology, 2010, 10, 76.	3.2	16
115	Colony Defense in the Social Wasp, Parachartergus colobopterus. Biotropica, 1990, 22, 324.	1.6	15
116	In the social amoeba Dictyostelium discoideum, density, not farming status, determines predatory success on unpalatable Escherichia coli. BMC Microbiology, 2014, 14, 328.	3.3	15
117	Eusociality. Current Biology, 2003, 13, R861-R863.	3.9	14
118	The veil of ignorance can favour biological cooperation. Biology Letters, 2013, 9, 20130365.	2.3	14
119	Cooperation and conflict in the social amoeba Dictyostelium discoideum. International Journal of Developmental Biology, 2019, 63, 371-382.	0.6	14
120	Amino Acid Repeats Cause Extraordinary Coding Sequence Variation in the Social Amoeba Dictyostelium discoideum. PLoS ONE, 2012, 7, e46150.	2.5	14
121	Kin discrimination in the tropical swarm-founding wasp, Parachartergus colobopterus. Animal Behaviour, 1990, 40, 598-601.	1.9	13
122	Polistes dominulus (Hymenoptera, Vespidae) Larvae Show Different Cuticular Patterns According to their Sex: Workers Seem Not Use This Chemical Information. Chemical Senses, 2008, 34, 195-202.	2.0	13
123	Genetic diversity in the social amoeba Dictyostelium discoideum: Population differentiation and cryptic species. Molecular Phylogenetics and Evolution, 2011, 60, 455-462.	2.7	13
124	Kin Selection and Its Discontents. Philosophy of Science, 2016, 83, 861-872.	1.0	13
125	Experimental evolution of multicellularity using microbial pseudo-organisms. Biology Letters, 2013, 9, 20120636.	2.3	12
126	Wild <i>Dictyostelium discoideum</i> social amoebae show plastic responses to the presence of nonrelatives during multicellular development. Ecology and Evolution, 2020, 10, 1119-1134.	1.9	12

#	Article	IF	CITATIONS
127	Loss and resiliency of social amoeba symbiosis under simulated warming. Ecology and Evolution, 2020, 10, 13182-13189.	1.9	11
128	Novel Chlamydiae and <i>Amoebophilus</i> endosymbionts are prevalent in wild isolates of the model social amoeba <i>Dictyostelium discoideum</i> Environmental Microbiology Reports, 2021, 13, 708-719.	2.4	11
129	Some Agreement on Kin Selection and Eusociality?. PLoS Biology, 2015, 13, e1002133.	5.6	10
130	Low Base-Substitution Mutation Rate but High Rate of Slippage Mutations in the Sequence Repeat-Rich Genome of Dictyostelium discoideum. G3: Genes, Genomes, Genetics, 2020, 10, 3445-3452.	1.8	10
131	The social side of wild yeast. Nature, 2008, 456, 589-590.	27.8	9
132	Longâ€term evolutionary conflict, Sisyphean arms races, and power in Fisher's geometric model. Ecology and Evolution, 2019, 9, 11243-11253.	1.9	9
133	The gene's eye view, the Gouldian knot, Fisherian swords and the causes of selection. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190354.	4.0	9
134	Migration in the social stage of <i>Dictyostelium discoideum </i> li>amoebae impacts competition. PeerJ, 2015, 3, e1352.	2.0	9
135	Polymorphic microsatellite loci for primitively eusocial Stenogastrine wasps. Molecular Ecology, 2000, 9, 2203-2205.	3.9	8
136	Sex ratios and social evolution. Current Biology, 2006, 16, R664-R668.	3.9	8
137	Kin selection. Current Biology, 2002, 12, R832.	3.9	7
138	Pleiotropy and synergistic cooperation. PLoS Biology, 2019, 17, e3000320.	5.6	7
139	To work or not to work. Nature, 2006, 444, 42-43.	27.8	6
140	Measuring Cheating, Fitness, and Segregation in Dictyostelium discoideum. Methods in Molecular Biology, 2013, 983, 231-248.	0.9	5
141	Microsatellite variation in a social insect. Biochemical Genetics, 1993, 31, 87-96.	1.7	5
142	Trinucleotide microsatellite loci and increased heterozygosity in cross-species applications in the social wasp, Polistes. Biochemical Genetics, 1997, 35, 273-279.	1.7	4
143	A gene's eye view of Darwinian populations. Biology and Philosophy, 2011, 26, 905-913.	1.4	4
144	Mind the gap: a comparative study of migratory behavior in social amoebae. Behavioral Ecology and Sociobiology, 2012, 66, 1291-1296.	1.4	4

#	Article	IF	CITATIONS
145	The Theory of Inclusive FitnessA review of Social Evolution and Inclusive Fitness Theory: An Introduction. By James A. R. Marshall. Princeton (New Jersey): Princeton University Press. \$39.95. xix + 195 p.; ill.; index. ISBN: 978-0-691-16156-3. 2015 Quarterly Review of Biology, 2016, 91, 343-347.	0.1	3
146	Insights and opportunities in insect social behavior. Current Opinion in Insect Science, 2019, 34, ix-xx.	4.4	3
147	Social Evolution: Ant Eggs Lacking Totipotency. Current Biology, 2008, 18, R299-R301.	3.9	2
148	Predator-by-Environment Interactions Mediate Bacterial Competition in the Dictyostelium discoideum Microbiome. Frontiers in Microbiology, 2018, 9, 781.	3.5	2
149	Inference of symbiotic adaptations in nature using experimental evolution. Evolution; International Journal of Organic Evolution, 2021, 75, 945-955.	2.3	2
150	DEEP SOCIALITY. Evolution; International Journal of Organic Evolution, 2012, 66, 1671-1673.	2.3	1
151	What life is for: a commentary on Fromhage and Jennions. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191060.	2.6	1
152	Beating the systematics. Nature, 1991, 352, 100-100.	27.8	O
153	Defenders of the Truth: The Battle for Science in the Sociobiology Debate and Beyond. Ullica Segerstrale. Quarterly Review of Biology, 2001, 76, 210-211.	0.1	O
154	Nancy A. Moran ―Recipient of the 2017 Molecular Ecology Prize. Molecular Ecology, 2018, 27, 35-37.	3.9	0
155	Kin Selection and Relatedness. , 2019, , 667-673.		O
156	The Sociobiology of Plants: <i>Plant Reproductive Ecology</i> . Patterns and Strategies. Jon Lovett Doust and Lesley Lovett Doust, Eds. Oxford University Press, New York, 1988. xiv, 344 pp., illus. \$49.95 Science, 1989, 243, 244-244.	12.6	0