Nancy A Moran

List of Publications by Year
in descending order

280 papers	49,629 citations	902 116 h-index	1895 208 g-index
294 all docs	294 docs citations	294 times ranked	22847 citing authors

#	Article	IF	Citations
1	The gut microbiota of insects â€“ diversity in structure and function. FEMS Microbiology Reviews, 2013, 37, 699-735.	3.9	1,853
2	A Metagenomic Survey of Microbes in Honey Bee Colony Collapse Disorder. Science, 2007, 318, 283-287.	6.0	1,481
3	Genomics and Evolution of Heritable Bacterial Symbionts. Annual Review of Genetics, 2008, 42, 165-190.	3.2	1,460
4	Extreme genome reduction in symbiotic bacteria. Nature Reviews Microbiology, 2012, 10, 13-26.	13.6	1,195
5	Facultative bacterial symbionts in aphids confer resistance to parasitic wasps. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1803-1807.	3.3	1,080
6	Accelerated evolution and Muller's rachet in endosymbiotic bacteria.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 2873-2878.	3.3	920
7	Genome Sequence of the Pea Aphid Acyrthosiphon pisum. PLoS Biology, 2010, 8, e1000313.	2.6	913
8	Facultative Symbionts in Aphids and the Horizontal Transfer of Ecologically Important Traits. Annual Review of Entomology, 2010, 55, 247-266.	5.7	787
9	The Evolutionary Maintenance of Alternative Phenotypes. American Naturalist, 1992, 139, 971-989.	1.0	760
10	Deletional bias and the evolution of bacterial genomes. Trends in Genetics, 2001, 17, 589-596.	2.9	687
11	Functional diversity within the simple gut microbiota of the honey bee. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11002-11007.	3.3	671
12	Microbial Minimalism. Cell, 2002, 108, 583-586.	13.5	666
13	Gut microbial communities of social bees. Nature Reviews Microbiology, 2016, 14, 374-384.	13.6	648
14	50 Million Years of Genomic Stasis in Endosymbiotic Bacteria. Science, 2002, 296, 2376-2379.	6.0	570
15	Lateral Transfer of Genes from Fungi Underlies Carotenoid Production in Aphids. Science, 2010, 328, 624-627.	6.0	544
16	Variation in resistance to parasitism in aphids is due to symbionts not host genotype. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12795-12800.	3.3	506
17	The 160-Kilobase Genome of the Bacterial Endosymbiont Carsonella. Science, 2006, 314, 267-267.	6.0	501
18	Genes Lost and Genes Found: Evolution of Bacterial Pathogenesis and Symbiosis. Science, 2001, 292, 1096-1099.	6.0	496

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19	Genetics, Physiology, and Evolutionary Relationships of the Genus Buchnera: Intracellular Symbionts of Aphids. Annual Review of Microbiology, 1995, 49, 55-94.	2.9	483
20	Molecular Interactions between Bacterial Symbionts and Their Hosts. Cell, 2006, 126, 453-465.	13.5	481
21	Glyphosate perturbs the gut microbiota of honey bees. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10305-10310.	3.3	469
22	A simple and distinctive microbiota associated with honey bees and bumble bees. Molecular Ecology, 2011, 20, 619-628.	2.0	462
23	Establishment of Characteristic Gut Bacteria during Development of the Honeybee Worker. Applied and Environmental Microbiology, 2012, 78, 2830-2840.	1.4	455
24	Calibrating bacterial evolution. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 12638-12643.	3.3	431
25	Honeybee gut microbiota promotes host weight gain via bacterial metabolism and hormonal signaling. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4775-4780.	3.3	419
26	Symbiosis as an adaptive process and source of phenotypic complexity. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8627-8633.	3.3	418
27	Heritable symbiosis: The advantages and perils of an evolutionary rabbit hole. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10169-10176.	3.3	401
28	Costs and benefits of symbiont infection in aphids: variation among symbionts and across temperatures. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 603-610.	1.2	395
29	Bacteriophages Encode Factors Required for Protection in a Symbiotic Mutualism. Science, 2009, 325, 992-994.	6.0	395
30	From Gene Trees to Organismal Phylogeny in Prokaryotes:The Case of the Î³-Proteobacteria. PLoS Biology, 2003, 1, e19.	2.6	393
31	Metabolic Complementarity and Genomics of the Dual Bacterial Symbiosis of Sharpshooters. PLoS Biology, 2006, 4, e188.	2.6	391
32	The impact of microbial symbionts on host plant utilization by herbivorous insects. Molecular Ecology, 2014, 23, 1473-1496.	2.0	380
33	Routes of Acquisition of the Gut Microbiota of the Honey Bee Apis mellifera. Applied and Environmental Microbiology, 2014, 80, 7378-7387.	1.4	380
34	Aphid genome expression reveals hostâ€"symbiont cooperation in the production of amino acids. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 2849-2854.	3.3	375
35	Antibiotic exposure perturbs the gut microbiota and elevates mortality in honeybees. PLoS Biology, 2017, 15, e2001861.	2.6	367
36	Evolutionary Relationships of Three New Species of Enterobacteriaceae Living as Symbionts of Aphids and Other Insects. Applied and Environmental Microbiology, 2005, 71, 3302-3310.	1.4	357

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37	Aphid Thermal Tolerance Is Governed by a Point Mutation in Bacterial Symbionts. PLoS Biology, 2007, 5, e96.	2.6	354
38	Dynamic microbiome evolution in social bees. Science Advances, 2017, 3, e1600513.	4.7	349
39	The Hologenome Concept: Helpful or Hollow?. PLoS Biology, 2015, 13, e1002311.	2.6	346
40	Symbiosis. Current Biology, 2006, 16, R866-R871.	1.8	345
41	Convergent evolution of metabolic roles in bacterial co-symbionts of insects. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15394-15399.	3.3	343
42	Distinctive Gut Microbiota of Honey Bees Assessed Using Deep Sampling from Individual Worker Bees. PLoS ONE, 2012, 7, e36393.	1.1	338
43	Lifestyle evolution in symbiotic bacteria: insights from genomics. Trends in Ecology and Evolution, 2000, 15, 321-326.	4.2	328
44	Symbiosis and Insect Diversification: an Ancient Symbiont of Sap-Feeding Insects from the Bacterial Phylum Bacteroidetes. Applied and Environmental Microbiology, 2005, 71, 8802-8810.	1.4	327
45	Parallel genomic evolution and metabolic interdependence in an ancient symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19392-19397.	3.3	327
46	The role of the gut microbiome in health and disease of adult honey bee workers. Current Opinion in Insect Science, 2018, 26, 97-104.	2.2	326
47	Genomic changes following host restriction in bacteria. Current Opinion in Genetics and Development, 2004, 14, 627-633.	1.5	320
48	Functional Convergence in Reduced Genomes of Bacterial Symbionts Spanning 200 My of Evolution. Genome Biology and Evolution, 2010, 2, 708-718.	1.1	320
49	The Tiniest Tiny Genomes. Annual Review of Microbiology, 2014, 68, 195-215.	2.9	312
50	Evolutionary Origins of Genomic Repertoires in Bacteria. PLoS Biology, 2005, 3, e130.	2.6	307
51	Independent origins and horizontal transfer of bacterial symbionts of aphids. Molecular Ecology, 2001, 10, 217-228.	2.0	306
52	Genomics and host specialization of honey bee and bumble bee gut symbionts. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11509-11514.	3.3	305
53	Adaptation and Constraint in the Complex Life Cycles of Animals. Annual Review of Ecology, Evolution, and Systematics, 1994, 25, 573-600.	6.7	300
54	Population dynamics of defensive symbionts in aphids. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 293-299.	1.2	295

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55	The players in a mutualistic symbiosis: Insects, bacteria, viruses, and virulence genes. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16919-16926.	3.3	293
56	Side-stepping secondary symbionts: widespread horizontal transfer across and beyond the Aphidoidea. Molecular Ecology, 2003, 12, 1061-1075.	2.0	286
57	The Dynamics and Time Scale of Ongoing Genomic Erosion in Symbiotic Bacteria. Science, 2009, 323, 379-382.	6.0	276
58	Small, Smaller, Smallest: The Origins and Evolution of Ancient Dual Symbioses in a Phloem-Feeding Insect. Genome Biology and Evolution, 2013, 5, 1675-1688.	1.1	276
59	Immune system stimulation by the native gut microbiota of honey bees. Royal Society Open Science, 2017, 4, 170003.	1.1	276
60	Phylogenetics of cytoplasmically inherited microorganisms of arthropods. Trends in Ecology and Evolution, 1994, 9, 15-20.	4.2	273
61	Evidence for the establishment of aphid-eubacterium endosymbiosis in an ancestor of four aphid families. Journal of Bacteriology, 1991, 173, 6321-6324.	1.0	272
62	The consequences of genetic drift for bacterial genome complexity. Genome Research, 2009, 19, 1450-1454.	2.4	260
63	Cultivation and characterization of the gut symbionts of honey bees and bumble bees: description of Snodgrassella alvi gen. nov., sp. nov., a member of the family Neisseriaceae of the Betaproteobacteria , and Gilliamella apicola gen. nov., sp. nov., a member of Orbaceae fam. nov., Orbales ord. nov., a sister taxon to the order â€˜ Enterobacteriales. International Journal of Systematic and Evolutionary Microbiology, 2013, 63, 2008-2018.	0.8	257
64	Phylogenetics and the Cohesion of Bacterial Genomes. Science, 2003, 301, 829-832.	6.0	256
65	Cospeciation of Psyllids and Their Primary Prokaryotic Endosymbionts. Applied and Environmental Microbiology, 2000, 66, 2898-2905.	1.4	255
66	Bacterial endosymbionts in animals. Current Opinion in Microbiology, 2000, 3, 270-275.	2.3	249
67	Origin of an Alternative Genetic Code in the Extremely Small and GCâ€"Rich Genome of a Bacterial Symbiont. PLoS Genetics, 2009, 5, e1000565.	1.5	247
68	Nitrogen recycling and nutritional provisioning by<i>Blattabacterium</i>, the cockroach endosymbiont. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19521-19526.	3.3	243
69	Sexual acquisition of beneficial symbionts in aphids. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 12803-12806.	3.3	232
70	Costs and benefits of a superinfection of facultative symbionts in aphids. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 1273-1280.	1.2	230
71	Bacteriocyte-Associated Symbionts of Insects. BioScience, 1998, 48, 295-304.	2.2	222
72	COSPECIATION BETWEEN BACTERIAL ENDOSYMBIONTS (BUCHNERA) AND A RECENT RADIATION OF APHIDS (UROLEUCON) AND PITFALLS OF TESTING FOR PHYLOGENETIC CONGRUENCE. Evolution; International Journal of Organic Evolution, 2000, 54, 517-525.	1.1	219

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73	Metabolism of Toxic Sugars by Strains of the Bee Gut Symbiont Gilliamella apicola. MBio, 2016, 7, .	1.8	216
74	Nutritional enhancement of host plants by aphids â€" a comparison of three aphid species on grasses. Journal of Insect Physiology, 2000, 46, 33-40.	0.9	215
75	The Bee Microbiome: Impact on Bee Health and Model for Evolution and Ecology of Host-Microbe Interactions. MBio, 2016, 7, e02164-15.	1.8	215
76	One Bacterial Cell, One Complete Genome. PLoS ONE, 2010, 5, e10314.	1.1	215
77	<i>Hamiltonella defensa</i> , genome evolution of protective bacterial endosymbiont from pathogenic ancestors. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9063-9068.	3.3	214
78	The process of genome shrinkage in the obligate symbiont Buchnera aphidicola. Genome Biology, 2001, 2, research0054.1.	13.9	213
79	Low nutritive quality as defense against herbivores. Journal of Theoretical Biology, 1980, 86, 247-254.	0.8	212
80	Estimating Population Size and Transmission Bottlenecks in Maternally Transmitted Endosymbiotic Bacteria. Microbial Ecology, 2002, 44, 137-143.	1.4	205
81	Species Response to Environmental Change: Impacts of Food Web Interactions and Evolution. Science, 2009, 323, 1347-1350.	6.0	202
82	Sequence evolution in bacterial endosymbionts having extreme base compositions. Molecular Biology and Evolution, 1999, 16, 1586-1598.	3.5	200
83	Molecular phylogeny of the homoptera: a paraphyletic taxon. Journal of Molecular Evolution, 1995, 41, 211-223.	0.8	197
84	Variation in gut microbial communities and its association with pathogen infection in wild bumble bees (<i>Bombus</i>). ISME Journal, 2014, 8, 2369-2379.	4.4	193
85	Division of labor in honey bee gut microbiota for plant polysaccharide digestion. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 25909-25916.	3.3	191
86	Heritable Endosymbionts of Drosophila. Genetics, 2006, 174, 363-376.	1.2	187
87	Massive Genomic Decay in Serratia symbiotica, a Recently Evolved Symbiont of Aphids. Genome Biology and Evolution, 2011, 3, 195-208.	1.1	186
88	Arsenophonus, an emerging clade of intracellular symbionts with a broad host distribution. BMC Microbiology, 2009, 9, 143.	1.3	185
89	Diverse Phage-Encoded Toxins in a Protective Insect Endosymbiont. Applied and Environmental Microbiology, 2008, 74, 6782-6791.	1.4	184
90	Early gut colonizers shape parasite susceptibility and microbiota composition in honey bee workers. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9345-9350.	3.3	184

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91	Honey bees as models for gut microbiota research. Lab Animal, 2018, 47, 317-325.	0.2	184
92	Genomic signatures of ancient asexual lineages. Biological Journal of the Linnean Society, 2003, 79, 69-84.	0.7	182
93	Parallel Histories of Horizontal Gene Transfer Facilitated Extreme Reduction of Endosymbiont Genomes in Sap-Feeding Insects. Molecular Biology and Evolution, 2014, 31, 857-871.	3.5	180
94	Genome Reduction and Co-evolution between the Primary and Secondary Bacterial Symbionts of Psyllids. Molecular Biology and Evolution, 2012, 29, 3781-3792.	3.5	175
95	Evolutionary and Ecological Consequences of Gut Microbial Communities. Annual Review of Ecology, Evolution, and Systematics, 2019, 50, 451-475.	3.8	175
96	The Evolution of Host-Plant Alternation in Aphids: Evidence for Specialization as a Dead End. American Naturalist, 1988, 132, 681-706.	1.0	174
97	Evidence for genetic drift in endosymbionts (Buchnera): analyses of protein-coding genes. Molecular Biology and Evolution, 1999, 16, 83-97.	3.5	174
98	The Evolutionary History of Quorum-Sensing Systems in Bacteria. Molecular Biology and Evolution, 2004, 21, 903-913.	3.5	172
99	Interspecific Competition between Root-Feeding and Leaf-Galling Aphids Mediated by Host-Plant Resistance. Ecology, 1990, 71, 1050-1058.	1.5	164
100	Bacterial Genes in the Aphid Genome: Absence of Functional Gene Transfer from Buchnera to Its Host. PLoS Genetics, 2010, 6, e1000827.	1.5	164
101	Type III secretion systems and the evolution of mutualistic endosymbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12397-12402.	3.3	161
102	Long-Term Exposure to Antibiotics Has Caused Accumulation of Resistance Determinants in the Gut Microbiota of Honeybees. MBio, 2012, 3, .	1.8	161
103	Engineered symbionts activate honey bee immunity and limit pathogens. Science, 2020, 367, 573-576.	6.0	161
104	Tracing the evolution of gene loss in obligate bacterial symbionts. Current Opinion in Microbiology, 2003, 6, 512-518.	2.3	159
105	Endosymbiotic bacteria as a source of carotenoids in whiteflies. Biology Letters, 2012, 8, 986-989.	1.0	158
106	Genomics of the honey bee microbiome. Current Opinion in Insect Science, 2015, 10, 22-28.	2.2	153
107	Evolutionary replacement of obligate symbionts in an ancient and diverse insect lineage. Environmental Microbiology, 2013, 15, 2073-2081.	1.8	152
108	Co-cladogenesis spanning three phyla: leafhoppers (Insecta: Hemiptera: Cicadellidae) and their dual bacterial symbionts. Molecular Ecology, 2006, 15, 4175-4191.	2.0	144

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109	How nutritionally imbalanced is phloem sap for aphids?. Entomologia Experimentalis Et Applicata, 1999, 91, 203-210.	0.7	142
110	Molecular data support a rapid radiation of aphids in the Cretaceous and multiple origins of host alternation. Biological Journal of the Linnean Society, 2000, 71, 689-717.	0.7	139
111	Effects of facultative symbionts and heat stress on the metabolome of pea aphids. ISME Journal, 2010, 4, 242-252.	4.4	137
112	A genomic perspective on nutrient provisioning by bacterial symbionts of insects. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14543-14548.	3.3	132
113	Hidden Diversity in Honey Bee Gut Symbionts Detected by Single-Cell Genomics. PLoS Genetics, 2014, 10, e1004596.	1.5	131
114	Experimental replacement of an obligate insect symbiont. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2093-2096.	3.3	130
115	Regulation of Transcription in a Reduced Bacterial Genome: Nutrient-Provisioning Genes of the Obligate Symbiont Buchnera aphidicola. Journal of Bacteriology, 2005, 187, 4229-4237.	1.0	127
116	Consequences of reductive evolution for gene expression in an obligate endosymbiont. Molecular Microbiology, 2003, 48, 1491-1500.	1.2	126
117	Horizontal Transfer of Bacterial Symbionts: Heritability and Fitness Effects in a Novel Aphid Host. Applied and Environmental Microbiology, 2005, 71, 7987-7994.	1.4	126
118	Evolutionary genetics of a defensive facultative symbiont of insects: exchange of toxinâ€encoding bacteriophage. Molecular Ecology, 2008, 17, 916-929.	2.0	126
119	The eubacterial endosymbionts of whiteflies (homoptera: Aleyrodoidea) constitute a lineage distinct from the endosymbionts of aphids and mealybugs. Current Microbiology, 1992, 25, 119-123.	1.0	123
120	Swapping symbionts in spittlebugs: evolutionary replacement of a reduced genome symbiont. ISME Journal, 2014, 8, 1237-1246.	4.4	121
121	Intracellular symbionts of sharpshooters (Insecta: Hemiptera: Cicadellinae) form a distinct clade with a small genome. Environmental Microbiology, 2003, 5, 116-126.	1.8	120
122	Intraspecific Variation in Symbiont Genomes: Bottlenecks and the Aphid-Buchnera Association. Genetics, 2001, 157, 477-489.	1.2	119
123	Links between metamorphosis and symbiosis in holometabolous insects. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20190068.	1.8	118
124	Accumulation of Deleterious Mutations in Endosymbionts: Mullerâ€™s Ratchet with Two Levels of Selection. American Naturalist, 2000, 156, 425-441.	1.0	114
125	Genome-wide screen identifies host colonization determinants in a bacterial gut symbiont. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13887-13892.	3.3	112
126	The Evolution and Genetics of Aphid Endosymbionts. BioScience, 1997, 47, 12-20.	2.2	109

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127	Deleterious mutations destabilize ribosomal RNA in endosymbiotic bacteria. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 4458-4462.	3.3	109
128	Independent Studies Using Deep Sequencing Resolve the Same Set of Core Bacterial Species Dominating Gut Communities of Honey Bees. PLoS ONE, 2012, 7, e41250.	1.1	109
129	Functional and evolutionary insights into the simple yet specific gut microbiota of the honey bee from metagenomic analysis. Gut Microbes, 2013, 4, 60-65.	4.3	108
130	Intraspecific variability in herbivore performance and host quality: a field study of Uroleucon caligatum (Homoptera: Aphididae) and its Solidago hosts (Asteraceae). Ecological Entomology, 1981, 6, 301-306.	1.1	106
131	Intraspecific phylogenetic congruence among multiple symbiont genomes. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 2517-2521.	1.2	106
132	Multiple introductions of the <i>Spiroplasma</i> bacterial endosymbiont into <i>Drosophila</i>. Molecular Ecology, 2009, 18, 1294-1305.	2.0	103
133	Reconstructing the phylogeny of aphids (Hemiptera: Aphididae) using DNA of the obligate symbiont Buchnera aphidicola. Molecular Phylogenetics and Evolution, 2013, 68, 42-54.	1.2	102
134	Secondary Endosymbionts of Psyllids Have Been Acquired Multiple Times. Current Microbiology, 2000, 41, 300-304.	1.0	98
135	Standard methods for research on<i>Apis mellifera</i>gut symbionts. Journal of Apicultural Research, 2013, 52, 1-24.	0.7	98
136	Post-Pleistocene radiation of the pea aphid complex revealed by rapidly evolving endosymbionts. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16315-16320.	3.3	97
137	Frischella perrara gen. nov., sp. nov., a gammaproteobacterium isolated from the gut of the honeybee, Apis mellifera. International Journal of Systematic and Evolutionary Microbiology, 2013, 63, 3646-3651.	0.8	96
138	Genetic conflict and conditional altruism in social aphid colonies. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 12068-12071.	3.3	95
139	Antibiotics reduce genetic diversity of core species in the honeybee gut microbiome. Molecular Ecology, 2018, 27, 2057-2066.	2.0	95
140	Diversification of Type VI Secretion System Toxins Reveals Ancient Antagonism among Bee Gut Microbes. MBio, 2017, 8, .	1.8	94
141	Faster evolutionary rates in endosymbiotic bacteria than in cospeciating insect hosts. Journal of Molecular Evolution, 1995, 41, 727-731.	0.8	93
142	Genomic basis of endosymbiont-conferred protection against an insect parasitoid. Genome Research, 2012, 22, 106-114.	2.4	91
143	Obligate bacterial endosymbionts limit thermal tolerance of insect host species. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24712-24718.	3.3	91
144	The Bacterium Frischella perrara Causes Scab Formation in the Gut of its Honeybee Host. MBio, 2015, 6, e00193-15.	1.8	90

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145	Pathogenicity of Serratia marcescens Strains in Honey Bees. MBio, 2018, 9, .	1.8	90
146	Genetic Engineering of Bee Gut Microbiome Bacteria with a Toolkit for Modular Assembly of Broad-Host-Range Plasmids. ACS Synthetic Biology, 2018, 7, 1279-1290.	1.9	87
147	Evolution of host specialization in gut microbes: the bee gut as a model. Gut Microbes, 2015, 6, 214-220.	4.3	86
148	Microbiome Structure Influences Infection by the Parasite Crithidia bombi in Bumble Bees. Applied and Environmental Microbiology, 2018, 84, .	1.4	86
149	Feeding damage by Diuraphis noxia results in a nutritionally enhanced phloem diet. Entomologia Experimentalis Et Applicata, 1999, 91, 403-412.	0.7	85
150	Loss of DNA Recombinational Repair Enzymes in the Initial Stages of Genome Degeneration. Molecular Biology and Evolution, 2003, 20, 1188-1194.	3.5	85
151	Evolution and Diversity of Facultative Symbionts from the Aphid Subfamily Lachninae. Applied and Environmental Microbiology, 2009, 75, 5328-5335.	1.4	85
152	Genome Evolution of the Obligate Endosymbiont Buchnera aphidicola. Molecular Biology and Evolution, 2019, 36, 1481-1489.	3.5	85
153	Gene Family Evolution in the Pea Aphid Based on Chromosome-Level Genome Assembly. Molecular Biology and Evolution, 2019, 36, 2143-2156.	3.5	84
154	Diversification of Genes for Carotenoid Biosynthesis in Aphids following an Ancient Transfer from a Fungus. Molecular Biology and Evolution, 2012, 29, 313-323.	3.5	82
155	Dynamics of genome evolution in facultative symbionts of aphids. Environmental Microbiology, 2010, 12, 2060-2069.	1.8	81
156	Phylogenetics and evolution of the aphid genus Uroleucon based on mitochondrial and nuclear DNA sequences. Systematic Entomology, 1999, 24, 85-93.	1.7	80
157	Oral or Topical Exposure to Glyphosate in Herbicide Formulation Impacts the Gut Microbiota and Survival Rates of Honey Bees. Applied and Environmental Microbiology, 2020, 86, .	1.4	78
158	Phylogenetic relationships of the endosymbionts of mealybugs (Homoptera: Pseudococcidae) based on 16S rDNA sequences. Molecular Phylogenetics and Evolution, 1992, 1, 26-30.	1.2	74
159	Non-cultivable microorganisms from symbiotic associations of insects and other hosts. , 1997, 72, 39-48.		74
160	A dual-genome microarray for the pea aphid, Acyrthosiphon pisum, and its obligate bacterial symbiont, Buchnera aphidicola. BMC Genomics, 2006, 7, 50.	1.2	73
161	Strain diversity and host specificity in a specialized gut symbiont of honeybees and bumblebees. Molecular Ecology, 2016, 25, 4461-4471.	2.0	73
162	Functional genomics of Buchnera and the ecology of aphid hosts. Molecular Ecology, 2005, 15, 1251-1261.	2.0	72

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163	Genome Shrinkage and Loss of Nutrient-Providing Potential in the Obligate Symbiont of the Primitive Termite Mastotermes darwiniensis. Applied and Environmental Microbiology, 2012, 78, 204-210.	1.4	72
164	Intraspecific genetic variation in hosts affects regulation of obligate heritable symbionts. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13114-13119.	3.3	71
165	The tryptophan biosynthetic pathway of aphid endosymbionts (Buchnera): Genetics and evolution of plasmid-associated anthranilate synthase (trpEG) within the aphididae. Journal of Molecular Evolution, 1996, 42, 414-421.	0.8	70
166	Differential Genome Evolution Between Companion Symbionts in an Insect-Bacterial Symbiosis. MBio, 2014, 5, e01697-14.	1.8	70
167	A 48-Million-Year-Old Aphid--Host Plant Association and Complex Life Cycle: Biogeographic Evidence. Science, 1989, 245, 173-175.	6.0	69
168	Variable Incidence of Spiroplasma Infections in Natural Populations of Drosophila Species. PLoS ONE, 2009, 4, e5703.	1.1	69
169	EVOLUTIONARY REDUCTION OF COMPLEX LIFE CYCLES: LOSS OF HOSTâ€ALTERNATION IN <i>PEMPHIGUS</i> (HOMOPTERA: APHIDIDAE). Evolution; International Journal of Organic Evolution, 1988, 42, 717-728.	1.1	66
170	Evolutionary loss and replacement of <i>Buchnera</i>, the obligate endosymbiont of aphids. ISME Journal, 2018, 12, 898-908.	4.4	64
171	Molecular data support a rapid radiation of aphids in the Cretaceous and multiple origins of host alternation. Biological Journal of the Linnean Society, 2000, 71, 689-717.	0.7	63
172	Imidacloprid Decreases Honey Bee Survival Rates but Does Not Affect the Gut Microbiome. Applied and Environmental Microbiology, 2018, 84, .	1.4	63
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