Nancy A Moran

List of Publications by Citations

276 papers	37,736 citations	109 h-index	191 g-index
294 ext. papers	44,709 ext. citations	8.4 avg, IF	8.07 L-index

#	Paper	IF	Citations
276	A metagenomic survey of microbes in honey bee colony collapse disorder. *Science*, **2007**, 318, 283-7	33.3	1250
275	Genomics and evolution of heritable bacterial symbionts. *Annual Review of Genetics*, **2008**, 42, 165-90	14.5	1128
274	The gut microbiota of insects - diversity in structure and function. *FEMS Microbiology Reviews*, **2013**, 37, 699-735	15.1	1124
273	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, 1803-7	11.5	915
272	Extreme genome reduction in symbiotic bacteria. *Nature Reviews Microbiology*, **2011**, 10, 13-26	22.2	873
271	Accelerated evolution and Muller's rachet in endosymbiotic bacteria. *Proceedings of the National Academy of Sciences of the United States of America*, **1996**, 93, 2873-8	11.5	784
270	Genome sequence of the pea aphid Acyrthosiphon pisum. *PLoS Biology*, **2010**, 8, e1000313	9.7	732
269	The Evolutionary Maintenance of Alternative Phenotypes. *American Naturalist*, **1992**, 139, 971-989	3.7	672
268	Facultative symbionts in aphids and the horizontal transfer of ecologically important traits. *Annual Review of Entomology*, **2010**, 55, 247-66	21.8	637
267	Deletional bias and the evolution of bacterial genomes. *Trends in Genetics*, **2001**, 17, 589-96	8.5	596
266	Microbial minimalism: genome reduction in bacterial pathogens. *Cell*, **2002**, 108, 583-6	56.2	553
265	50 million years of genomic stasis in endosymbiotic bacteria. *Science*, **2002**, 296, 2376-9	33.3	501
264	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, 11002-7	11.5	470
263	Lateral transfer of genes from fungi underlies carotenoid production in aphids. *Science*, **2010**, 328, 624-7	33.3	448
262	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, 12795-800	11.5	439
261	Genes lost and genes found: evolution of bacterial pathogenesis and symbiosis. *Science*, **2001**, 292, 1096-9	33.3	429
260	Molecular interactions between bacterial symbionts and their hosts. *Cell*, **2006**, 126, 453-65	56.2	409

259	Genetics, physiology, and evolutionary relationships of the genus Buchnera: intracellular symbionts of aphids. *Annual Review of Microbiology*, **1995**, 49, 55-94	17.5	409
258	The 160-kilobase genome of the bacterial endosymbiont Carsonella. *Science*, **2006**, 314, 267	33.3	403
257	Gut microbial communities of social bees. *Nature Reviews Microbiology*, **2016**, 14, 374-84	22.2	364
256	Calibrating bacterial evolution. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 12638-43	11.5	357
255	From gene trees to organismal phylogeny in prokaryotes: the case of the gamma-Proteobacteria. *PLoS Biology*, **2003**, 1, E19	9.7	355
254	A simple and distinctive microbiota associated with honey bees and bumble bees. *Molecular Ecology*, **2011**, 20, 619-28	5.7	349
253	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 Suppl 1, 8627-33	11.5	346
252	Bacteriophages encode factors required for protection in a symbiotic mutualism. *Science*, **2009**, 325, 992-4	33.3	340
251	Metabolic complementarity and genomics of the dual bacterial symbiosis of sharpshooters. *PLoS Biology*, **2006**, 4, e188	9.7	327
250	Costs and benefits of symbiont infection in aphids: variation among symbionts and across temperatures. *Proceedings of the Royal Society B: Biological Sciences*, **2006**, 273, 603-10	4.4	325
249	Establishment of characteristic gut bacteria during development of the honeybee worker. *Applied and Environmental Microbiology*, **2012**, 78, 2830-40	4.8	305
248	Evolutionary relationships of three new species of Enterobacteriaceae living as symbionts of aphids and other insects. *Applied and Environmental Microbiology*, **2005**, 71, 3302-10	4.8	295
247	Independent origins and horizontal transfer of bacterial symbionts of aphids. *Molecular Ecology*, **2001**, 10, 217-28	5.7	288
246	Symbiosis. *Current Biology*, **2006**, 16, R866-71	6.3	287
245	Genomic changes following host restriction in bacteria. *Current Opinion in Genetics and Development*, **2004**, 14, 627-33	4.9	280
244	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, 19392-7	11.5	272
243	Aphid thermal tolerance is governed by a point mutation in bacterial symbionts. *PLoS Biology*, **2007**, 5, e96	9.7	272
242	The impact of microbial symbionts on host plant utilization by herbivorous insects. *Molecular Ecology*, **2014**, 23, 1473-96	5.7	267

241	Evolutionary origins of genomic repertoires in bacteria. *PLoS Biology*, **2005**, 3, e130	9.7	267
240	Aphid genome expression reveals host-symbiont cooperation in the production of amino acids. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 2849-54	11.5	265
239	Side-stepping secondary symbionts: widespread horizontal transfer across and beyond the Aphidoidea. *Molecular Ecology*, **2003**, 12, 1061-75	5.7	262
238	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, 10169-76	11.5	261
237	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, 16919-26	11.5	261
236	Lifestyle evolution in symbiotic bacteria: insights from genomics. *Trends in Ecology and Evolution*, **2000**, 15, 321-326	10.9	261
235	The Hologenome Concept: Helpful or Hollow?. *PLoS Biology*, **2015**, 13, e1002311	9.7	259
234	Distinctive gut microbiota of honey bees assessed using deep sampling from individual worker bees. *PLoS ONE*, **2012**, 7, e36393	3.7	258
233	Symbiosis and insect diversification: an ancient symbiont of sap-feeding insects from the bacterial phylum Bacteroidetes. *Applied and Environmental Microbiology*, **2005**, 71, 8802-10	4.8	257
232	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, 15394-9	11.5	256
231	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	11.5	255
230	Population dynamics of defensive symbionts in aphids. *Proceedings of the Royal Society B: Biological Sciences*, **2008**, 275, 293-9	4.4	251
229	Routes of Acquisition of the Gut Microbiota of the Honey Bee Apis mellifera. *Applied and Environmental Microbiology*, **2014**, 80, 7378-87	4.8	250
228	Functional convergence in reduced genomes of bacterial symbionts spanning 200 My of evolution. *Genome Biology and Evolution*, **2010**, 2, 708-18	3.9	244
227	Evidence for the establishment of aphid-eubacterium endosymbiosis in an ancestor of four aphid families. *Journal of Bacteriology*, **1991**, 173, 6321-4	3.5	243
226	The dynamics and time scale of ongoing genomic erosion in symbiotic bacteria. *Science*, **2009**, 323, 379-82	33.3	235
225	Adaptation and Constraint in the Complex Life Cycles of Animals. *Annual Review of Ecology, Evolution, and Systematics*, **1994**, 25, 573-600		233
224	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	11.5	231

223	The tiniest tiny genomes. *Annual Review of Microbiology*, **2014**, 68, 195-215	17.5	220
222	Phylogenetics of cytoplasmically inherited microorganisms of arthropods. *Trends in Ecology and Evolution*, **1994**, 9, 15-20	10.9	214
221	Phylogenetics and the cohesion of bacterial genomes. *Science*, **2003**, 301, 829-32	33.3	213
220	Bacterial endosymbionts in animals. *Current Opinion in Microbiology*, **2000**, 3, 270-5	7.9	212
219	Bacteriocyte-Associated Symbionts of Insects. *BioScience*, **1998**, 48, 295-304	5.7	205
218	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, 11509-14	11.5	204
217	The consequences of genetic drift for bacterial genome complexity. *Genome Research*, **2009**, 19, 1450-4	9.7	204
216	Antibiotic exposure perturbs the gut microbiota and elevates mortality in honeybees. *PLoS Biology*, **2017**, 15, e2001861	9.7	204
215	Cospeciation of psyllids and their primary prokaryotic endosymbionts. *Applied and Environmental Microbiology*, **2000**, 66, 2898-905	4.8	203
214	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, 517-25	3.8	201
213	Sexual acquisition of beneficial symbionts in aphids. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 12803-6	11.5	197
212	Origin of an alternative genetic code in the extremely small and GC-rich genome of a bacterial symbiont. *PLoS Genetics*, **2009**, 5, e1000565	6	193
211	Nitrogen recycling and nutritional provisioning by Blattabacterium, the cockroach endosymbiont. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 19521-6	11.5	192
210	Low nutritive quality as defense against herbivores. *Journal of Theoretical Biology*, **1980**, 86, 247-254	2.3	192
209	Costs and benefits of a superinfection of facultative symbionts in aphids. *Proceedings of the Royal Society B: Biological Sciences*, **2006**, 273, 1273-80	4.4	190
208	Small, smaller, smallest: the origins and evolution of ancient dual symbioses in a Phloem-feeding insect. *Genome Biology and Evolution*, **2013**, 5, 1675-88	3.9	189
207	Hamiltonella defensa, genome evolution of protective bacterial endosymbiont from pathogenic ancestors. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 9063-8	11.5	187
206	One bacterial cell, one complete genome. *PLoS ONE*, **2010**, 5, e10314	3.7	184

205	Dynamic microbiome evolution in social bees. *Science Advances*, **2017**, 3, e1600513	14.3	183
204	The process of genome shrinkage in the obligate symbiont Buchnera aphidicola. *Genome Biology*, **2001**, 2, RESEARCH0054	18.3	183
203	Estimating population size and transmission bottlenecks in maternally transmitted endosymbiotic bacteria. *Microbial Ecology*, **2002**, 44, 137-43	4.4	180
202	Nutritional enhancement of host plants by aphids - a comparison of three aphid species on grasses. *Journal of Insect Physiology*, **2000**, 46, 33-40	2.4	178
201	Sequence evolution in bacterial endosymbionts having extreme base compositions. *Molecular Biology and Evolution*, **1999**, 16, 1586-98	8.3	172
200	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 Enterobacteriales of the Gammaproteobacteria.	2.2	168
199	Species response to environmental change: impacts of food web interactions and evolution. *Science* , **2009**, 323, 1347-50	33.3	167
198	Molecular phylogeny of the Homoptera: a paraphyletic taxon. *Journal of Molecular Evolution*, **1995**, 41, 211-23	3.1	166
197	Diverse phage-encoded toxins in a protective insect endosymbiont. *Applied and Environmental Microbiology*, **2008**, 74, 6782-91	4.8	165
196	Genomic signatures of ancient asexual lineages. *Biological Journal of the Linnean Society*, **2003**, 79, 69-84	1.9	162
195	Immune system stimulation by the native gut microbiota of honey bees. *Royal Society Open Science*, **2017**, 4, 170003	3.3	158
194	Heritable endosymbionts of Drosophila. *Genetics*, **2006**, 174, 363-76	4	155
193	Evidence for genetic drift in endosymbionts (Buchnera): analyses of protein-coding genes. *Molecular Biology and Evolution*, **1999**, 16, 83-97	8.3	154
192	Massive genomic decay in Serratia symbiotica, a recently evolved symbiont of aphids. *Genome Biology and Evolution*, **2011**, 3, 195-208	3.9	153
191	The Evolution of Host-Plant Alternation in Aphids: Evidence for Specialization as a Dead End. *American Naturalist*, **1988**, 132, 681-706	3.7	153
190	The role of the gut microbiome in health and disease of adult honey bee workers. *Current Opinion in Insect Science*, **2018**, 26, 97-104	5.1	152
189	Variation in gut microbial communities and its association with pathogen infection in wild bumble bees (Bombus). *ISME Journal*, **2014**, 8, 2369-79	11.9	146
188	The Bee Microbiome: Impact on Bee Health and Model for Evolution and Ecology of Host-Microbe Interactions. *MBio*, **2016**, 7, e02164-15	7.8	145

187	The evolutionary history of quorum-sensing systems in bacteria. *Molecular Biology and Evolution*, **2004**, 21, 903-13	8.3	142
186	Bacterial genes in the aphid genome: absence of functional gene transfer from Buchnera to its host. *PLoS Genetics*, **2010**, 6, e1000827	6	140
185	Tracing the evolution of gene loss in obligate bacterial symbionts. *Current Opinion in Microbiology*, **2003**, 6, 512-8	7.9	140
184	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, 12397-402	11.5	137
183	Arsenophonus, an emerging clade of intracellular symbionts with a broad host distribution. *BMC Microbiology*, **2009**, 9, 143	4.5	134
182	Interspecific Competition between Root-Feeding and Leaf-Galling Aphids Mediated by Host-Plant Resistance. *Ecology*, **1990**, 71, 1050-1058	4.6	134
181	Metabolism of Toxic Sugars by Strains of the Bee Gut Symbiont Gilliamella apicola. *MBio*, **2016**, 7,	7.8	122
180	Parallel histories of horizontal gene transfer facilitated extreme reduction of endosymbiont genomes in sap-feeding insects. *Molecular Biology and Evolution*, **2014**, 31, 857-71	8.3	122
179	Genome reduction and co-evolution between the primary and secondary bacterial symbionts of psyllids. *Molecular Biology and Evolution*, **2012**, 29, 3781-92	8.3	118
178	Co-cladogenesis spanning three phyla: leafhoppers (Insecta: Hemiptera: Cicadellidae) and their dual bacterial symbionts. *Molecular Ecology*, **2006**, 15, 4175-91	5.7	118
177	How nutritionally imbalanced is phloem sap for aphids?. *Entomologia Experimentalis Et Applicata*, **1999**, 91, 203-210	2.1	118
176	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 Suppl 2, 14543-8	11.5	117
175	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	1.9	116
174	Long-term exposure to antibiotics has caused accumulation of resistance determinants in the gut microbiota of honeybees. *MBio*, **2012**, 3,	7.8	115
173	The eubacterial endosymbionts of whiteflies (homoptera: Aleyrodoidea) constitute a lineage distinct from the endosymbionts of aphids and mealybugs. *Current Microbiology*, **1992**, 25, 119-123	2.4	115
172	Endosymbiotic bacteria as a source of carotenoids in whiteflies. *Biology Letters*, **2012**, 8, 986-9	3.6	113
171	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, 9345-50	11.5	113
170	Genomics of the honey bee microbiome. *Current Opinion in Insect Science*, **2015**, 10, 22-28	5.1	111

169	Evolutionary replacement of obligate symbionts in an ancient and diverse insect lineage. *Environmental Microbiology*, **2013**, 15, 2073-81	5.2	111
168	Horizontal transfer of bacterial symbionts: heritability and fitness effects in a novel aphid host. *Applied and Environmental Microbiology*, **2005**, 71, 7987-94	4.8	109
167	Evolutionary genetics of a defensive facultative symbiont of insects: exchange of toxin-encoding bacteriophage. *Molecular Ecology*, **2008**, 17, 916-29	5.7	106
166	Intraspecific variation in symbiont genomes: bottlenecks and the aphid-buchnera association. *Genetics*, **2001**, 157, 477-89	4	105
165	Consequences of reductive evolution for gene expression in an obligate endosymbiont. *Molecular Microbiology*, **2003**, 48, 1491-500	4.1	104
164	Accumulation of Deleterious Mutations in Endosymbionts: Muller's Ratchet with Two Levels of Selection. *American Naturalist*, **2000**, 156, 425-441	3.7	103
163	Hidden diversity in honey bee gut symbionts detected by single-cell genomics. *PLoS Genetics*, **2014**, 10, e1004596	6	102
162	Effects of facultative symbionts and heat stress on the metabolome of pea aphids. *ISME Journal*, **2010**, 4, 242-52	11.9	101
161	Regulation of transcription in a reduced bacterial genome: nutrient-provisioning genes of the obligate symbiont Buchnera aphidicola. *Journal of Bacteriology*, **2005**, 187, 4229-37	3.5	100
160	Deleterious mutations destabilize ribosomal RNA in endosymbiotic bacteria. *Proceedings of the National Academy of Sciences of the United States of America*, **1998**, 95, 4458-62	11.5	98
159	Intracellular symbionts of sharpshooters (Insecta: Hemiptera: Cicadellinae) form a distinct clade with a small genome. *Environmental Microbiology*, **2003**, 5, 116-26	5.2	97
158	The Evolution and Genetics of Aphid Endosymbionts. *BioScience*, **1997**, 47, 12-20	5.7	95
157	Intraspecific phylogenetic congruence among multiple symbiont genomes. *Proceedings of the Royal Society B: Biological Sciences*, **2000**, 267, 2517-21	4.4	93
156	Multiple introductions of the Spiroplasma bacterial endosymbiont into Drosophila. *Molecular Ecology*, **2009**, 18, 1294-305	5.7	87
155	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	2.1	86
154	Independent studies using deep sequencing resolve the same set of core bacterial species dominating gut communities of honey bees. *PLoS ONE*, **2012**, 7, e41250	3.7	86
153	Secondary endosymbionts of psyllids have been acquired multiple times. *Current Microbiology*, **2000**, 41, 300-4	2.4	85
152	Honey bees as models for gut microbiota research. *Lab Animal*, **2018**, 47, 317-325	0.4	85

151	Genetic conflict and conditional altruism in social aphid colonies. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 12068-71	11.5	84
150	Faster evolutionary rates in endosymbiotic bacteria than in cospeciating insect hosts. *Journal of Molecular Evolution*, **1995**, 41, 727-731	3.1	83
149	Engineered symbionts activate honey bee immunity and limit pathogens. *Science*, **2020**, 367, 573-576	33.3	81
148	Experimental replacement of an obligate insect symbiont. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 2093-6	11.5	80
147	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, 16315-20	11.5	80
146	Loss of DNA recombinational repair enzymes in the initial stages of genome degeneration. *Molecular Biology and Evolution*, **2003**, 20, 1188-94	8.3	80
145	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	11.5	80
144	Swapping symbionts in spittlebugs: evolutionary replacement of a reduced genome symbiont. *ISME Journal*, **2014**, 8, 1237-46	11.9	79
143	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	2.2	73
142	Evolution and diversity of facultative symbionts from the aphid subfamily Lachninae. *Applied and Environmental Microbiology*, **2009**, 75, 5328-35	4.8	73
141	Genomic basis of endosymbiont-conferred protection against an insect parasitoid. *Genome Research*, **2012**, 22, 106-14	9.7	73
140	Phylogenetics and evolution of the aphid genus Uroleucon based on mitochondrial and nuclear DNA sequences. *Systematic Entomology*, **1999**, 24, 85-93	3.4	73
139	Evolutionary and ecological consequences of gut microbial communities. *Annual Review of Ecology, Evolution, and Systematics*, **2019**, 50, 451-475	13.5	72
138	Reconstructing the phylogeny of aphids (Hemiptera: Aphididae) using DNA of the obligate symbiont Buchnera aphidicola. *Molecular Phylogenetics and Evolution*, **2013**, 68, 42-54	4.1	71
137	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	11.5	70
136	Functional and evolutionary insights into the simple yet specific gut microbiota of the honey bee from metagenomic analysis. *Gut Microbes*, **2013**, 4, 60-5	8.8	70
135	Feeding damage by Diuraphis noxia results in a nutritionally enhanced phloem diet. *Entomologia Experimentalis Et Applicata*, **1999**, 91, 403-412	2.1	67
134	Phylogenetic relationships of the endosymbionts of mealybugs (Homoptera: Pseudococcidae) based on 16S rDNA sequences. *Molecular Phylogenetics and Evolution*, **1992**, 1, 26-30	4.1	66

133	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, 414-21	3.1	65
132	Functional genomics of Buchnera and the ecology of aphid hosts. *Molecular Ecology*, **2006**, 15, 1251-61	5.7	63
131	The Bacterium Frischella perrara Causes Scab Formation in the Gut of its Honeybee Host. *MBio*, **2015**, 6, e00193-15	7.8	62
130	Standard methods for research on Apis mellifera gut symbionts. *Journal of Apicultural Research*, **2013**, 52, 1-24	2	62
129	Dynamics of genome evolution in facultative symbionts of aphids. *Environmental Microbiology*, **2010**, 12, 2060-9	5.2	62
128	Non-cultivable microorganisms from symbiotic associations of insects and other hosts. *Antonie Van Leeuwenhoek*, **1997**, 72, 39-48	2.1	62
127	Diversification of Type VI Secretion System Toxins Reveals Ancient Antagonism among Bee Gut Microbes. *MBio*, **2017**, 8,	7.8	61
126	A 48-million-year-old aphid--host plant association and complex life cycle: biogeographic evidence. *Science*, **1989**, 245, 173-5	33.3	60
125	Diversification of genes for carotenoid biosynthesis in aphids following an ancient transfer from a fungus. *Molecular Biology and Evolution*, **2012**, 29, 313-23	8.3	59
124	EVOLUTIONARY REDUCTION OF COMPLEX LIFE CYCLES: LOSS OF HOST-ALTERNATION IN PEMPHIGUS (HOMOPTERA: APHIDIDAE). *Evolution; International Journal of Organic Evolution*, **1988**, 42, 717-728	3.8	59
123	Antibiotics reduce genetic diversity of core species in the honeybee gut microbiome. *Molecular Ecology*, **2018**, 27, 2057-2066	5.7	57
122	Decoupling of genome size and sequence divergence in a symbiotic bacterium. *Journal of Bacteriology*, **2000**, 182, 3867-9	3.5	55
121	Evolution of host specialization in gut microbes: the bee gut as a model. *Gut Microbes*, **2015**, 6, 214-20	8.8	54
120	Genome shrinkage and loss of nutrient-providing potential in the obligate symbiont of the primitive termite Mastotermes darwiniensis. *Applied and Environmental Microbiology*, **2012**, 78, 204-10	4.8	53
119	A dual-genome microarray for the pea aphid, Acyrthosiphon pisum, and its obligate bacterial symbiont, Buchnera aphidicola. *BMC Genomics*, **2006**, 7, 50	4.5	53
118	Evolutionary rates for tuf genes in endosymbionts of aphids. *Molecular Biology and Evolution*, **1998**, 15, 574-82	8.3	52
117	Differential genome evolution between companion symbionts in an insect-bacterial symbiosis. *MBio*, **2014**, 5, e01697-14	7.8	51
116	Extensive proliferation of transposable elements in heritable bacterial symbionts. *Journal of Bacteriology*, **2008**, 190, 777-9	3.5	50

115	Extremely low levels of genetic polymorphism in endosymbionts (Buchnera) of aphids (Pemphigus). *Molecular Ecology*, **2002**, 11, 2649-60	5.7	50
114	Degenerative minimalism in the genome of a psyllid endosymbiont. *Journal of Bacteriology*, **2001**, 183, 1853-61	3.5	49
113	The significance of age and reproductive experience in the mate preferences of feral pigeons, Columba livia. *Animal Behaviour*, **1979**, 27, 686-698	2.8	49
112	Microbiome Structure Influences Infection by the Parasite Crithidia bombi in Bumble Bees. *Applied and Environmental Microbiology*, **2018**, 84,	4.8	48
111	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	11.5	48
110	Genetic characterization of plasmids containing genes encoding enzymes of leucine biosynthesis in endosymbionts (Buchnera) of aphids. *Journal of Molecular Evolution*, **1999**, 48, 77-85	3.1	47
109	Strain diversity and host specificity in a specialized gut symbiont of honeybees and bumblebees. *Molecular Ecology*, **2016**, 25, 4461-71	5.7	47
108	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	5.7	46
107	Variable incidence of Spiroplasma infections in natural populations of Drosophila species. *PLoS ONE* , **2009**, 4, e5703	3.7	46
106	Pathogenicity of Serratia marcescens Strains in Honey Bees. *MBio*, **2018**, 9,	7.8	46
105	Links between metamorphosis and symbiosis in holometabolous insects. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2019**, 374, 20190068	5.8	44
104	The evolution of genomic instability in the obligate endosymbionts of whiteflies. *Genome Biology and Evolution*, **2013**, 5, 783-93	3.9	44
103	Functional and evolutionary analysis of the genome of an obligate fungal symbiont. *Genome Biology and Evolution*, **2013**, 5, 891-904	3.9	43
102	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	11.5	43
101	Differential Colonization of Resistant and Susceptible Host Plants: Pemphigus and Populus. *Ecology* , **1990**, 71, 1059-1067	4.6	42
100	Host-specific assemblages typify gut microbial communities of related insect species. *SpringerPlus*, **2014**, 3, 138		41
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