Jean-Christophe Simon

List of Publications by Year
in descending order

111 papers	6,220 citations	71102 41 h-index	82547 72 g-index
117 all docs	117 docs citations	117 times ranked	5296 citing authors

#	Article	IF	Citations
1	Tackling the population genetics of clonal and partially clonal organisms. Trends in Ecology and Evolution, 2005, 20, 194-201.	8.7	398
2	Symbiotic Bacterium Modifies Aphid Body Color. Science, 2010, 330, 1102-1104.	12.6	389
3	A continuum of genetic divergence from sympatric host races to species in the pea aphid complex. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7495-7500.	7.1	358
4	Ecology and evolution of sex in aphids. Trends in Ecology and Evolution, 2002, 17, 34-39.	8.7	307
5	Host-microbiota interactions: from holobiont theory to analysis. Microbiome, 2019, 7, 5.	11.1	276
6	Horizontally Transmitted Symbionts and Host Colonization of Ecological Niches. Current Biology, 2013, 23, 1713-1717.	3.9	248
7	Plant-insect interactions under bacterial influence: ecological implications and underlying mechanisms. Journal of Experimental Botany, 2015, 66, 467-478.	4.8	146
8	Facultative Symbiont Infections Affect Aphid Reproduction. PLoS ONE, 2011, 6, e21831.	2.5	141
9	Genomics of adaptation to host-plants in herbivorous insects. Briefings in Functional Genomics, 2015, 14, 413-423.	2.7	135
10	Large-scale gene discovery in the pea aphid Acyrthosiphon pisum (Hemiptera). Genome Biology, 2006, 7, R21.	9.6	123
11	Cross-species amplification of microsatellite loci in aphids: assessment and application. Molecular Ecology Notes, 2004, 4, 104-109.	1.7	117
12	Bacterial Communities Associated with Host-Adapted Populations of Pea Aphids Revealed by Deep Sequencing of 16S Ribosomal DNA. PLoS ONE, 2015, 10, e0120664.	2.5	110
13	PHYLOGENETIC EVIDENCE FOR HYBRID ORIGINS OF ASEXUAL LINEAGES IN AN APHID SPECIES. Evolution; International Journal of Organic Evolution, 2003, 57, 1291-1303.	2.3	106
14	Evolutionary history of aphid-plant associations and their role in aphid diversification. Comptes Rendus - Biologies, 2010, 333, 474-487.	0.2	102
15	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.	7.1	97
16	Shifting from clonal to sexual reproduction in aphids: physiological and developmental aspects. Biology of the Cell, 2008, 100, 441-451.	2.0	96
17	Rapid evolution of aphid pests in agricultural environments. Current Opinion in Insect Science, 2018, 26, 17-24.	4.4	87
18	Encyclopâ€™Aphid: a website on aphids and their natural enemies. Entomologia Generalis, 2020, 40, 97-101.	3.1	87

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19	Reinventing the Wheel and Making It Round Again: Evolutionary Convergence in<i>Buchnera</i>â€“<i>Serratia</i>Symbiotic Consortia between the Distantly Related Lachninae Aphids<i>Tuberolachnus salignus</i>and<i>Cinara cedri</i>. Genome Biology and Evolution, 2016, 8, 1440-1458.	2.5	85
20	Happens in the best of subfamilies: establishment and repeated replacements of coâ€obligate secondary endosymbionts within Lachninae aphids. Environmental Microbiology, 2017, 19, 393-408.	3.8	80
21	Coexistence in space and time of sexual and asexual populations of the cereal aphid Sitobion avenae. Oecologia, 2001, 128, 379-388.	2.0	78
22	The Cellular Immune Response of the Pea Aphid to Foreign Intrusion and Symbiotic Challenge. PLoS ONE, 2012, 7, e42114.	2.5	78
23	An ecological cost associated with protective symbionts of aphids. Ecology and Evolution, 2014, 4, 836-840.	1.9	78
24	Large Gene Family Expansion and Variable Selective Pressures for Cathepsin B in Aphids. Molecular Biology and Evolution, 2007, 25, 5-17.	8.9	75
25	Symbiont infection affects aphid defensive behaviours. Biology Letters, 2011, 7, 743-746.	2.3	73
26	Evolutionary and functional insights into reproductive strategies of aphids. Comptes Rendus - Biologies, 2010, 333, 488-496.	0.2	71
27	Limited genetic exchanges between populations of an insect pest living on uncultivated and related cultivated host plants. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 1075-1082.	2.6	69
28	Genetic Control of Contagious Asexuality in the Pea Aphid. PLoS Genetics, 2014, 10, e1004838.	3.5	67
29	Fast Evolution and Lineage-Specific Gene Family Expansions of Aphid Salivary Effectors Driven by Interactions with Host-Plants. Genome Biology and Evolution, 2018, 10, 1554-1572.	2.5	67
30	Promises and challenges in insectâ€“plant interactions. Entomologia Experimentalis Et Applicata, 2018, 166, 319-343.	1.4	66
31	Inheritance patterns of secondary symbionts during sexual reproduction of pea aphid biotypes. Insect Science, 2014, 21, 291-300.	3.0	61
32	Genetic characterisation of new hostâ€specialised biotypes and novel associations with bacterial symbionts in the pea aphid complex. Insect Conservation and Diversity, 2015, 8, 484-492.	3.0	59
33	Differential gene expression according to race and host plant in the pea aphid. Molecular Ecology, 2016, 25, 4197-4215.	3.9	59
34	Cheaper is not always worse: strongly protective isolates of a defensive symbiont are less costly to the aphid host. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20142333.	2.6	58
35	Complex trait differentiation between host-populations of the pea aphid Acyrthosiphon pisum (Harris): implications for the evolution of ecological specialisation. Biological Journal of the Linnean Society, 0, 97, 718-727.	1.6	57
36	Masculinization of the X Chromosome in the Pea Aphid. PLoS Genetics, 2013, 9, e1003690.	3.5	56

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37	Accelerated Evolution of Sex Chromosomes in Aphids, an X0 System. Molecular Biology and Evolution, 2012, 29, 837-847.	8.9	55
38	Global patterns in genomic diversity underpinning the evolution of insecticide resistance in the aphid crop pest Myzus persicae. Communications Biology, 2021, 4, 847.	4.4	55
39	Early Progress in Aphid Genomics and Consequences for Plantâ€"Aphid Interactions Studies. Molecular Plant-Microbe Interactions, 2008, 21, 701-708.	2.6	50
40	Metapopulation structure of the specialized herbivore Macrosiphoniella tanacetaria (Homoptera,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.9	48
41	Multi-scale characterization of symbiont diversity in the pea aphid complex through metagenomic approaches. Microbiome, 2018, 6, 181.	11.1	47
42	Extreme Life-Cycle and Sex Ratio Variation among Sexually Produced Clones of the Aphid Rhopalosiphum padi (Homoptera: Aphididae). Oikos, 1999, 86, 254.	2.7	46
43	Diversity in symbiont consortia in the pea aphid complex is associated with large phenotypic variation in the insect host. Evolutionary Ecology, 2016, 30, 925-941.	1.2	46
44	DNA Barcoding and the Associated PhylAphidB@se Website for the Identification of European Aphids (Insecta: Hemiptera: Aphididae). PLoS ONE, 2014, 9, e97620.	2.5	43
45	Farmâ€scale assessment of movement patterns and colonization dynamics of the grain aphid in arable crops and hedgerows. Agricultural and Forest Entomology, 2007, 9, 337-346.	1.3	42
46	Disentangling the Causes for Faster-X Evolution in Aphids. Genome Biology and Evolution, 2018, 10, 507-520.	2.5	42
47	Genomics of Environmentally Induced Phenotypes in 2 Extremely Plastic Arthropods. Journal of Heredity, 2011, 102, 512-525.	2.4	41
48	Tracing Individual Movements Of Aphids Reveals Preferential Routes Of Population Transfers In Agroecosystems. , 2006, 16, 839-844.		39
49	Lack of detectable genetic recombination on the X chromosome during the parthenogenetic production of female and male aphids. Genetical Research, 2002, 79, 203-209.	0.9	38
50	Aphid colony turn-over influences the spatial distribution of the grain aphid Sitobion avenae over the wheat growing season. Agricultural and Forest Entomology, 2007, 9, 125-134.	1.3	38
51	Dynamics of a Recurrent Buchnera Mutation That Affects Thermal Tolerance of Pea Aphid Hosts. Genetics, 2010, 186, 367-372.	2.9	38
52	Conditional Reduction of Predation Risk Associated with a Facultative Symbiont in an Insect. PLoS ONE, 2015, 10, e0143728.	2.5	36
53	Patterns of genetic variation among Canadian populations of the bird cherry-oat aphid, Rhopalosiphum padi L. (Homoptera: Aphididae). Heredity, 1995, 74, 346-353.	2.6	35
54	Temporal habitat variability and the maintenance of sex in host populations of the pea aphid. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 2887-2891.	2.6	35

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55	Identifying genomic hotspots of differentiation and candidate genes involved in the adaptive divergence of pea aphid host races. Molecular Ecology, 2018, 27, 3287-3300.	3.9	34
56	Consequences of coinfection with protective symbionts on the host phenotype and symbiont titres in the pea aphid system. Insect Science, 2017, 24, 798-808.	3.0	33
57	Deciphering reproductive polyphenism in aphids. Invertebrate Reproduction and Development, 2005, 48, 71-80.	0.8	32
58	Does variation in host plant association and symbiont infection of pea aphid populations induce genetic and behaviour differentiation of its main parasitoid, Aphidius ervi?. Evolutionary Ecology, 2013, 27, 165-184.	1.2	32
59	Isolation and characterization of microsatellite loci in the aphid species, Rhopalosiphum padi. Molecular Ecology Notes, 2001, 1, 4-5.	1.7	31
60	WIDESPREAD HOST-DEPENDENT HYBRID UNFITNESS IN THE PEA APHID SPECIES COMPLEX. Evolution; International Journal of Organic Evolution, 2014, 68, 2983-2995.	2.3	28
61	Targeted reâ€sequencing confirms the importance of chemosensory genes in aphid host race differentiation. Molecular Ecology, 2017, 26, 43-58.	3.9	27
62	Differential Expression of Candidate Salivary Effector Genes in Pea Aphid Biotypes With Distinct Host Plant Specificity. Frontiers in Plant Science, 2019, 10, 1301.	3.6	27
63	EFFECT OF HOST DEFENSE CHEMICALS ON CLONAL DISTRIBUTION AND PERFORMANCE OF DIFFERENT GENOTYPES OF THE CEREAL APHID Sitobion avenae. Journal of Chemical Ecology, 2004, 30, 2515-2525.	1.8	26
64	Differences in defensive behaviour between hostâ€adapted races of the pea aphid. Ecological Entomology, 2010, 35, 147-154.	2.2	26
65	The effects of reproductive specialization on energy costs and fitness genetic variances in cyclical and obligate parthenogenetic aphids. Ecology and Evolution, 2012, 2, 1414-1425.	1.9	25
66	Optimization of Agroinfiltration in Pisum sativum Provides a New Tool for Studying the Salivary Protein Functions in the Pea Aphid Complex. Frontiers in Plant Science, 2016, 7, 1171.	3.6	25
67	A large genomic insertion containing a duplicated follistatin gene is linked to the pea aphid male wing dimorphism. ELife, 2020, 9, .	6.0	22
68	EVOLUTION OF TRADE-OFFS BETWEEN SEXUAL AND ASEXUAL PHASES AND THE ROLE OF REPRODUCTIVE PLASTICITY IN THE GENETIC ARCHITECTURE OF APHID LIFE HISTORIES. Evolution; International Journal of Organic Evolution, 2009, 63, 2402-2412.	2.3	21
69	Effects of pea aphid secondary endosymbionts on aphid resistance and development of the aphid parasitoid <i>Aphidius ervi</i>: a correlative study. Entomologia Experimentalis Et Applicata, 2010, 136, 243-253.	1.4	21
70	Is the life cycle of high arctic aphids adapted to climate change?. Polar Biology, 2008, 31, 1037-1042.	1.2	20
71	The anatomy of an aphid genome: From sequence to biology. Comptes Rendus - Biologies, 2010, 333, 464-473.	0.2	20
72	Diversification of MIF immune regulators in aphids: link with agonistic and antagonistic interactions. BMC Genomics, 2014, 15, 762.	2.8	20

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73	Molecular and Quantitative Genetic Differentiation in Sitobion avenae Populations from Both Sides of the Qinling Mountains. PLoS ONE, 2015, 10, e0122343.	2.5	20
74	Impact of water-deficit stress on tritrophic interactions in a wheat-aphid-parasitoid system. PLoS ONE, 2017, 12, e0186599.	2.5	20
75	Functional insights from the GC-poor genomes of two aphid parasitoids, Aphidius ervi and Lysiphlebus fabarum. BMC Genomics, 2020, 21, 376.	2.8	19
76	Assessment of the Dominance Level of the R81T Target Resistance to Two Neonicotinoid Insecticides in<i>Myzus persicae</i>(Hemiptera: Aphididae). Journal of Economic Entomology, 2016, 109, 2182-2189.	1.8	18
77	Hosts do not simply outsource pathogen resistance to protective symbionts. Evolution; International Journal of Organic Evolution, 2018, 72, 1488-1499.	2.3	18
78	Molecular markers to differentiate two morphologically-close species of the genus Sitobion. Entomologia Experimentalis Et Applicata, 1999, 92, 217-225.	1.4	17
79	Host plant effects on the outcomes of defensive symbioses in the pea aphid complex. Evolutionary Ecology, 2019, 33, 651-669.	1.2	17
80	Fitness comparison between clones differing in their ability to produce sexuals in the aphid <i>Rhopalosiphum padi</i>. Entomologia Experimentalis Et Applicata, 1996, 80, 469-474.	1.4	16
81	Does sexâ€biased dispersal account for the lack of geographic and hostâ€associated differentiation in introduced populations of an aphid parasitoid?. Ecology and Evolution, 2015, 5, 2149-2161.	1.9	16
82	The promises and challenges of research on plantâ€“insectâ€“microbe interactions. Insect Science, 2017, 24, 904-909.	3.0	16
83	Do ecological niches differ between sexual and asexual lineages of an aphid species?. Evolutionary Ecology, 2014, 28, 1095-1104.	1.2	15
84	Evolution of Soldier-Specific Venomous Protease in Social Aphids. Molecular Biology and Evolution, 2008, 25, 2627-2641.	8.9	14
85	Examination of the success rate of secondary symbiont manipulation by microinjection methods in the pea aphid system. Entomologia Experimentalis Et Applicata, 2020, 168, 174-183.	1.4	14
86	Dramatic Changes in the Genotypic Frequencies of Target Insecticide Resistance in French Populations of <I>Myzus persicae</I> (Hemiptera: Aphididae) Over the Last Decade. Journal of Economic Entomology, 2013, 106, 1838-1847.	1.8	13
87	Different phenotypic plastic responses to predators observed among aphid lineages specialized on different host plants. Scientific Reports, 2019, 9, 9017.	3.3	13
88	A Link Between Communities of Protective Endosymbionts and Parasitoids of the Pea Aphid Revealed in Unmanipulated Agricultural Systems. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	13
89	Expression differences in Aphidius ervi (Hymenoptera: Braconidae) females reared on different aphid host species. PeerJ, 2017, 5, e3640.	2.0	11
90	Comparing 16S rDNA amplicon sequencing and hybridization capture for pea aphid microbiota diversity analysis. BMC Research Notes, 2018, 11, 461.	1.4	10

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91	Hosting certain facultative symbionts modulates the phenoloxidase activity and immune response of the pea aphid <i>Acyrthosiphon pisum</i>. Insect Science, 2021, 28, 1780-1799.	3.0	9
92	Characterization of microsatellite loci in the aphid species Macrosiphoniella tanacetaria (Homoptera,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.7	8
93	Differences in escape behavior between pea aphid biotypes reflect their host plantsâ€™ palatability to mammalian herbivores. Basic and Applied Ecology, 2019, 34, 108-117.	2.7	8
94	PHYLOGENETIC EVIDENCE FOR HYBRID ORIGINS OF ASEXUAL LINEAGES IN AN APHID SPECIES. Evolution; International Journal of Organic Evolution, 2003, 57, 1291.	2.3	7
95	Strong biases in the transmission of sex chromosomes in the aphid Rhopalosiphum padi. Genetical Research, 2005, 85, 111-117.	0.9	7
96	Relative importance of longâ€term changes in climate and landâ€use on the phenology and abundance of legume crop specialist and generalist aphids. Insect Science, 2019, 26, 881-896.	3.0	7
97	Influence of â€œprotectiveâ€•symbionts throughout the different steps of an aphidâ€"parasitoid interaction. Environmental Epigenetics, 2021, 67, 441-453.	1.8	7
98	A major-effect genetic locus, ApRVII, controlling resistance against both adapted and non-adapted aphid biotypes in pea. Theoretical and Applied Genetics, 2022, 135, 1511-1528.	3.6	7
99	Characterization of microsatellite loci in the aphid species Metopeurum fuscoviride (Homoptera,) Tj ETQq1 1 0.784314 rgBT /Overloc	1.7	6
100	Differences in egg hatching time between cyclical and obligate parthenogenetic lineages of aphids. Insect Science, 2019, 26, 135-141.	3.0	6
101	MinYS: mine your symbiont by targeted genome assembly in symbiotic communities. NAR Genomics and Bioinformatics, 2020, 2, lqaa047.	3.2	5
102	Aphid infestation differently affects the defences of nitrate-fed and nitrogen-fixing Medicago truncatula and alters symbiotic nitrogen fixation. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20201493.	2.6	5
103	Intraspecific difference among herbivore lineages and their hostâ€plant specialization drive the strength of trophic cascades. Ecology Letters, 2020, 23, 1242-1251.	6.4	5
104	Limited influence of gain and loss of symbionts on host plant selection in specialized pea aphid genotypes. Entomologia Generalis, 2021, 41, 39-47.	3.1	5
105	Host plants and insecticides shape the evolution of genetic and clonal diversity in a major aphid crop pest. Evolutionary Applications, 2022, 15, 1653-1669.	3.1	5
106	Life on the Edge: Ecological Genetics of a High Arctic Insect Species and Its Circumpolar Counterpart. Insects, 2019, 10, 427.	2.2	4
107	Latitudinal trend in the reproductive mode of the pea aphid <i>Acyrthosiphon pisum</i> invading a wide climatic range. Ecology and Evolution, 2020, 10, 8289-8298.	1.9	3
108	Alarm Pheromone Responses Depend on Genotype, but Not on the Presence of Facultative Endosymbionts in the Pea Aphid Acyrthosiphon pisum. Insects, 2021, 12, 43.	2.2	3

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109	Secondary Symbionts Affect Foraging Capacities of Plant-Specialized Genotypes of the Pea Aphid. Microbial Ecology, 2021, 82, 1009-1019.	2.8	2
110	Aphid Resistance in Pisum Affects the Feeding Behavior of Pea-Adapted and Non-Pea-Adapted Biotypes of Acyrthosiphon pisum Differently. Insects, 2022, 13, 268.	2.2	2
111	Functional divergence of three glutathione transferases in two biotypes of the English grain aphid, Sitobion avenae. Entomologia Experimentalis Et Applicata, 0, , .	1.4	1