Xavier Vekemans

List of Publications by Year
in descending order

90 papers	10,471 citations	57758 44 h-index	45317 90 g-index
97 all docs	97 docs citations	97 times ranked	9265 citing authors

#	Article	IF	Citations
1	spagedi: a versatile computer program to analyse spatial genetic structure at the individual or population levels. Molecular Ecology Notes, 2002, 2, 618-620.	1.7	3,239
2	New insights from fine-scale spatial genetic structure analyses in plant populations. Molecular Ecology, 2004, 13, 921-935.	3.9	1,037
3	Data from amplified fragment length polymorphism (AFLP) markers show indication of size homoplasy and of a relationship between degree of homoplasy and fragment size. Molecular Ecology, 2002, 11, 139-151.	3.9	747
4	Isolation by distance in a continuous population: reconciliation between spatial autocorrelation analysis and population genetics models. Heredity, 1999, 83, 145-154.	2.6	360
5	Chromosome-scale assemblies of plant genomes using nanopore long reads and optical maps. Nature Plants, 2018, 4, 879-887.	9.3	316
6	Chloroplast DNA variation and postglacial recolonization of common ash (Fraxinus excelsior L.) in Europe. Molecular Ecology, 2004, 13, 3437-3452.	3.9	248
7	Plant self-incompatibility in natural populations: a critical assessment of recent theoretical and empirical advances. Molecular Ecology, 2004, 13, 2873-2889.	3.9	193
8	The effect of subdivision on variation at multi-allelic loci under balancing selection. Genetical Research, 2000, 76, 51-62.	0.9	190
9	The Transition to Self-Compatibility in Arabidopsis thaliana and Evolution within S-Haplotypes over 10 Myr. Molecular Biology and Evolution, 2006, 23, 1741-1750.	8.9	154
10	Repeated Adaptive Introgression at a Gene under Multiallelic Balancing Selection. PLoS Genetics, 2008, 4, e1000168.	3.5	151
11	Estimating seed vs. pollen dispersal from spatial genetic structure in the common ash. Molecular Ecology, 2003, 12, 2483-2495.	3.9	147
12	The signature of balancing selection: Fungal mating compatibility gene evolution. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 9172-9177.	7.1	138
13	NUCLEAR MICROSATELLITES REVEAL CONTRASTING PATTERNS OF GENETIC STRUCTURE BETWEEN WESTERN AND SOUTHEASTERN EUROPEAN POPULATIONS OF THE COMMON ASH (FRAXINUS EXCELSIOR L.). Evolution; International Journal of Organic Evolution, 2004, 58, 976-988.	2.3	136
14	Plant selfâ€incompatibility systems: a molecular evolutionary perspective. New Phytologist, 2005, 168, 61-69.	7.3	136
15	Genetic variation in the endangered wild apple (Malus sylvestris (L.) Mill.) in Belgium as revealed by amplified fragment length polymorphism and microsatellite markers. Molecular Ecology, 2003, 12, 845-857.	3.9	134
16	QUANTIFYING GENE FLOW FROM SPATIAL GENETIC STRUCTURE DATA IN A METAPOPULATION OF CHAMAECRISTA FASCICULATA (LEGUMINOSAE). Evolution; International Journal of Organic Evolution, 2003, 57, 995-1007.	2.3	125
17	Assessment of genetic diversity within and among germplasm accessions in cultivated sorghum using microsatellite markers. Theoretical and Applied Genetics, 2000, 100, 918-925.	3.6	119
18	Nuclear and chloroplast DNA phylogeography reveals vicariance among European populations of the model species for the study of metal tolerance, <i>Arabidopsis halleri</i> (Brassicaceae). New Phytologist, 2012, 193, 916-928.	7.3	112

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19	Contrasted Patterns of Molecular Evolution in Dominant and Recessive Self-Incompatibility Haplotypes in Arabidopsis. PLoS Genetics, 2012, 8, e1002495.	3.5	91
20	Does Speciation between Arabidopsis halleri and Arabidopsis lyrata Coincide with Major Changes in a Molecular Target of Adaptation?. PLoS ONE, 2011, 6, e26872.	2.5	87
21	Evolutionary Dynamics of Sporophytic Self-Incompatibility Alleles in Plants. Genetics, 1997, 147, 835-846.	2.9	84
22	MATE AVAILABILITY AND FECUNDITY SELECTION IN MULTI-ALLELIC SELF-INCOMPATIBILITY SYSTEMS IN PLANTS. Evolution; International Journal of Organic Evolution, 1998, 52, 19-29.	2.3	79
23	Can we continue to neglect genomic variation in introgression rates when inferring the history of speciation? A case study in a <i><scp>M</scp>ytilus</i> hybrid zone. Journal of Evolutionary Biology, 2014, 27, 1662-1675.	1.7	79
24	The evolution of selfing from outcrossing ancestors in Brassicaceae: what have we learned from variation at the <i>Sâ€</i>locus?. Journal of Evolutionary Biology, 2014, 27, 1372-1385.	1.7	76
25	A General Model to Explore Complex Dominance Patterns in Plant Sporophytic Self-Incompatibility Systems. Genetics, 2007, 175, 1351-1369.	2.9	70
26	Assessment of genetic structure within and among Bulgarian populations of the common ash (Fraxinus excelsior L.). Molecular Ecology, 2001, 10, 1615-1623.	3.9	66
27	Evolution under strong balancing selection: how many codons determine specificity at the female self-incompatibility gene SRK in Brassicaceae?. BMC Evolutionary Biology, 2007, 7, 132.	3.2	66
28	DOES FREQUENCY-DEPENDENT SELECTION WITH COMPLEX DOMINANCE INTERACTIONS ACCURATELY PREDICT ALLELIC FREQUENCIES AT THE SELF-INCOMPATIBILITY LOCUS IN<i>ARABIDOPSIS HALLERI</i>?. Evolution; International Journal of Organic Evolution, 2008, 62, 2545-2557.	2.3	66
29	Elucidation of the genetic architecture of selfâ€incompatibility in olive: Evolutionary consequences and perspectives for orchard management. Evolutionary Applications, 2017, 10, 867-880.	3.1	66
30	Assessing population genetic structure of sorghum landraces from North-western Morocco using allozyme and microsatellite markers. Theoretical and Applied Genetics, 1999, 99, 157-163.	3.6	65
31	Allozyme variation in relation to ecotypic differentiation and population size in marginal populations of Silene nutans. Heredity, 1997, 78, 552-560.	2.6	64
32	The effect of hitch-hiking on genes linked to a balanced polymorphism in a subdivided population. Genetical Research, 2000, 76, 63-73.	0.9	63
33	Genetic structure and mating systems of metallicolous and nonmetallicolous populations of Thlaspi caerulescens. New Phytologist, 2003, 157, 633-641.	7.3	61
34	Dominance hierarchy arising from the evolution of a complex small RNA regulatory network. Science, 2014, 346, 1200-1205.	12.6	61
35	PATTERNS OF ALLOZYME VARIATION IN DIPLOID AND TETRAPLOID CENTAUREA JACEA AT DIFFERENT SPATIAL SCALES. Evolution; International Journal of Organic Evolution, 2001, 55, 943.	2.3	60
36	Allelic Genealogies in Sporophytic Self-Incompatibility Systems in Plants. Genetics, 1998, 150, 1187-1198.	2.9	60

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37	Mate Availability and Fecundity Selection in Multi-Allelic Self- Incompatibility Systems in Plants. Evolution; International Journal of Organic Evolution, 1998, 52, 19.	2.3	59
38	Recent and Ancient Signature of Balancing Selection around the S-Locus in Arabidopsis halleri and A. lyrata. Molecular Biology and Evolution, 2013, 30, 435-447.	8.9	55
39	Secondary Evolution of a Self-Incompatibility Locus in the Brassicaceae Genus Leavenworthia. PLoS Biology, 2013, 11, e1001560.	5.6	54
40	Factor analysis of the relationships between several physico-chemical and microbiological characteristics of some Belgian agricultural soils. Soil Biology and Biochemistry, 1989, 21, 53-58.	8.8	52
41	Evidence for Convergent Nucleotide Evolution and High Allelic Turnover Rates at the complementary sex determiner Gene of Western and Asian Honeybees. Molecular Biology and Evolution, 2008, 25, 696-708.	8.9	50
42	Patterns of Polymorphism at the Self-Incompatibility Locus in 1,083 Arabidopsis thaliana Genomes. Molecular Biology and Evolution, 2017, 34, 1878-1889.	8.9	48
43	Genetic diversity in Lima bean (Phaseolus lunatus L.) as revealed by RAPD markers. Euphytica, 1997, 95, 157-165.	1.2	47
44	Allozyme segregation and inter-cytotype reproductive barriers in the polyploid complex Centaurea jacea. Heredity, 2001, 87, 136-145.	2.6	47
45	Molecular Evolution within and between Self-Incompatibility Specificities. Molecular Biology and Evolution, 2010, 27, 11-20.	8.9	47
46	How and when didArabidopsis thaliana become highly self-fertilising. BioEssays, 2005, 27, 472-476.	2.5	46
47	High paternal diversity in the selfâ€incompatible herb<i>Arabidopsis halleri</i>despite clonal reproduction and spatially restricted pollen dispersal. Molecular Ecology, 2008, 17, 1577-1588.	3.9	44
48	EVOLUTION OF DOMINANCE IN SPOROPHYTIC SELF-INCOMPATIBILITY SYSTEMS: I. GENETIC LOAD AND COEVOLUTION OF LEVELS OF DOMINANCE IN POLLEN AND PISTIL. Evolution; International Journal of Organic Evolution, 2009, 63, 2427-2437.	2.3	44
49	Patterns of allozymic variation within Calluna vulgaris populations at seed bank and adult stages. Heredity, 1999, 82, 432-440.	2.6	43
50	Unequal allelic frequencies at the selfâ€incompatibility locus within local populations of <i>Prunus avium</i> L.: an effect of population structure?. Journal of Evolutionary Biology, 2008, 21, 889-899.	1.7	42
51	Effect of balancing selection on spatial genetic structure within populations: theoretical investigations on the self-incompatibility locus and empirical studies in Arabidopsis halleri. Heredity, 2011, 106, 319-329.	2.6	42
52	Molecular evidence for an Andean origin and a secondary gene pool for the Lima bean (Phaseolus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.6	41
53	In situ estimation of outcrossing rate in sorghum landraces using microsatellite markers. Euphytica, 2004, 138, 205-212.	1.2	37
54	A comparative study of allozyme variation of peripheral and central populations of Silene nutans L. (Caryophyllaceae) from Western Europe: implications for conservation. Plant Systematics and Evolution, 2003, 242, 49-61.	0.9	33

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55	Allozyme diversity and genetic structure in Southâ€Western populations of heather, Calluna vulgaris. New Phytologist, 1997, 137, 325-334.	7.3	32
56	A Morphometric Study of Populations of the Centaurea jacea Complex (Asteraceae) in Belgium. Plant Biology, 2002, 4, 403-412.	3.8	32
57	Self-Incompatibility in Brassicaceae: Identification and Characterization of <i>SRK</i>-Like Sequences Linked to the <i>S</i>-Locus in the Tribe Biscutelleae. G3: Genes, Genomes, Genetics, 2014, 4, 983-992.	1.8	32
58	DILS: Demographic inferences with linked selection by using ABC. Molecular Ecology Resources, 2021, 21, 2629-2644.	4.8	32
59	Hitch-hiking to a locus under balancing selection: high sequence diversity and low population subdivision at the S-locus genomic region in<i>Arabidopsis halleri</i>. Genetical Research, 2008, 90, 37-46.	0.9	31
60	An experimental study of the S-Allee effect in the self-incompatible plant Biscutella neustriaca. Conservation Genetics, 2010, 11, 497-508.	1.5	30
61	Distinction between cultivated and wild chicory gene pools using AFLP markers. Theoretical and Applied Genetics, 2003, 107, 713-718.	3.6	29
62	Genomic consequences of selection on self-incompatibility genes. Current Opinion in Plant Biology, 2008, 11, 116-122.	7.1	29
63	Evolution of selfâ€incompatibility in the Brassicaceae: Lessons from a textbook example of natural selection. Evolutionary Applications, 2020, 13, 1279-1297.	3.1	29
64	Spatial autocorrelation of allozyme and quantitative markers within a natural population of Centaurea jacea (Asteraceae). Journal of Evolutionary Biology, 2000, 13, 656-667.	1.7	26
65	Patterns of morphological and allozyme variation in sorghum landraces of Northwestern Morocco. Genetic Resources and Crop Evolution, 1998, 45, 541-548.	1.6	25
66	Higher impact of female than male migration on population structure in large mammals. Molecular Ecology, 2000, 9, 1159-1163.	3.9	24
67	Controlling for genetic identity of varieties, pollen contamination and stigma receptivity is essential to characterize the selfâ€incompatibility system of <i>Olea europaea</i> L.. Evolutionary Applications, 2017, 10, 860-866.	3.1	24
68	Maintenance of Adaptive Dynamics and No Detectable Load in a Range-Edge Outcrossing Plant Population. Molecular Biology and Evolution, 2021, 38, 1820-1836.	8.9	24
69	Phylogenetic study on wild allies of Lima bean,Phaseolus lunatus (Fabaceae), and implications on its origin. Plant Systematics and Evolution, 1999, 218, 43-54.	0.9	23
70	Gradual Molecular Evolution of a Sex Determination Switch through Incomplete Penetrance of Femaleness. Current Biology, 2013, 23, 2559-2564.	3.9	22
71	Allozyme variation in relation to ecotypic differentiation and population size in marginal populations of Silene nutans. Heredity, 1997, 78, 552-560.	2.6	21
72	Isolation by distance in a continuous population: reconciliation between spatial autocorrelation analysis and population genetics models. Heredity, 1999, 83, 145-154.	2.6	20

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73	Genotyping and De Novo Discovery of Allelic Variants at the Brassicaceae Self-Incompatibility Locus from Short-Read Sequencing Data. Molecular Biology and Evolution, 2020, 37, 1193-1201.	8.9	19
74	The population genetics of Armeria maritima (Mill.) Willd. on the River South Tyne, UK. New Phytologist, 1989, 112, 281-293.	7.3	17
75	Wholeâ€genome sequencing and genome regions of special interest: Lessons from major histocompatibility complex, sex determination, and plant selfâ€incompatibility. Molecular Ecology, 2021, 30, 6072-6086.	3.9	17
76	Whatâ€™s good for you may be good for me: evidence for adaptive introgression of multiple traits in wild sunflower. New Phytologist, 2010, 187, 6-9.	7.3	14
77	A numerical taxonomic study of Armeria maritima (Plumbaginaceae) in North America and Greenland. Canadian Journal of Botany, 1995, 73, 1583-1595.	1.1	13
78	The unusual <i>S</i> locus of <i>Leavenworthia</i> is composed of two sets of paralogous loci. New Phytologist, 2017, 216, 1247-1255.	7.3	13
79	Flavonoid profiles variation in Armeria maritima (Mill.) Willd.. Biochemical Systematics and Ecology, 1995, 23, 319-329.	1.3	12
80	Trait Transitions in Explicit Ecological and Genomic Contexts: Plant Mating Systems as Case Studies. Advances in Experimental Medicine and Biology, 2014, 781, 7-36.	1.6	12
81	Base-Pairing Requirements for Small RNA-Mediated Gene Silencing of Recessive Self-Incompatibility Alleles in<i>Arabidopsis halleri</i>. Genetics, 2020, 215, 653-664.	2.9	12
82	Diversification dynamics of freshwater bivalves (Unionidae: Parreysiinae: Coelaturini) indicate historic hydrographic connections throughout the East African Rift System. Molecular Phylogenetics and Evolution, 2020, 148, 106816.	2.7	11
83	Asymmetrical diversification of the receptor-ligand interaction controlling self-incompatibility in Arabidopsis. ELife, 2019, 8, .	6.0	11
84	Impact of whole genome triplication on the evolutionary history and the functional dynamics of regulatory genes involved in Brassica self-incompatibility signalling pathway. Plant Reproduction, 2020, 33, 43-58.	2.2	10
85	NUCLEAR MICROSATELLITES REVEAL CONTRASTING PATTERNS OF GENETIC STRUCTURE BETWEEN WESTERN AND SOUTHEASTERN EUROPEAN POPULATIONS OF THE COMMON ASH (FRAXINUS EXCELSIOR L). Evolution; International Journal of Organic Evolution, 2004, 58, 976.	2.3	9
86	Immune failure reveals vulnerability of populations exposed to pollution in the bioindicator species Hediste diversicolor. Science of the Total Environment, 2018, 613-614, 1527-1542.	8.0	9
87	Adaptive divergence in shell morphology in an ongoing gastropod radiation from Lake Malawi. BMC Evolutionary Biology, 2020, 20, 5.	3.2	6
88	When the genetic architecture matters: evolutionary and ecological implications of self versus nonself recognition in plant selfâ€incompatibility. New Phytologist, 2021, 231, 1304-1307.	7.3	5
89	PATTERNS OF ALLOZYME VARIATION IN DIPLOID AND TETRAPLOID CENTAUREA JACEA AT DIFFERENT SPATIAL SCALES. Evolution; International Journal of Organic Evolution, 2007, 55, 943-954.	2.3	4
90	Intriguing small-scale spatial distribution of chloropastic and nuclear diversity in the endangered plant Biscutella neustriaca (Brassicaceae). Conservation Genetics, 2013, 14, 65-77.	1.5	3