Martin A Lysak

List of Publications by Year
in descending order

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126 papers	10,919 citations	36203 51 h-index	34900 98 g-index
138 all docs	138 docs citations	138 times ranked	8266 citing authors

#	Article	IF	Citations
1	Chloroplast phylogenomics in Camelina (Brassicaceae) reveals multiple origins of polyploid species and the maternal lineage of C. sativa. Horticulture Research, 2022, 9, .	2.9	14
2	Ancient Biosyntheses in an Oil Crop: Glucosinolate Profiles in Limnanthes alba and Its Relatives (Limnanthaceae, Brassicales). Journal of Agricultural and Food Chemistry, 2022, 70, 1134-1147.	2.4	5
3	Genomes, repeatomes and interphase chromosome organization in the meadowfoam family (Limnanthaceae, Brassicales). Plant Journal, 2022, 110, 1462-1475.	2.8	2
4	Celebrating Mendel, McClintock, and Darlington: On end-to-end chromosome fusions and nested chromosome fusions. Plant Cell, 2022, 34, 2475-2491.	3.1	7
5	Intact ribosomal DNA arrays of Potentilla origin detected in Erythronium nucleus suggest recent eudicotâ€toâ€monocot horizontal transfer. New Phytologist, 2022, 235, 1246-1259.	3.5	3
6	Evolution of an Apomixis-Specific Allele Class in Supernumerary Chromatin of Apomictic Boechera. Frontiers in Plant Science, 2022, 13, .	1.7	3
7	Transfer of two Arabidella and two Cuphonotus species to the genus Lemphoria (Brassicaceae) and a description of the new species L. queenslandica. Phytotaxa, 2022, 549, 235-240.	0.1	1
8	Genome diploidization associates with cladogenesis, trait disparity, and plastid gene evolution. Plant Physiology, 2022, 190, 403-420.	2.3	3
9	Recurrent Plant-Specific Duplications of KNL2 and its Conserved Function as a Kinetochore Assembly Factor. Molecular Biology and Evolution, 2022, 39, .	3.5	7
10	The evolutionary history ofCardamine bulbiferashows a successful rapid postglacial Eurasian range expansion in the absence of sexual reproduction. Annals of Botany, 2022, 130, 245-263.	1.4	1
11	The chromosomeâ€level genome sequence and karyotypic evolution of Megadenia pygmaea (Brassicaceae). Molecular Ecology Resources, 2021, 21, 871-879.	2.2	7
12	The Evolution of Chromosome Numbers: Mechanistic Models and Experimental Approaches. Genome Biology and Evolution, 2021, 13, .	1.1	38
13	The genome of Draba nivalis shows signatures of adaptation to the extreme environmental stresses of the Arctic. Molecular Ecology Resources, 2021, 21, 661-676.	2.2	14
14	Linked by Ancestral Bonds: Multiple Whole-Genome Duplications and Reticulate Evolution in a Brassicaceae Tribe. Molecular Biology and Evolution, 2021, 38, 1695-1714.	3.5	21
15	Genome structure and apomixis in Phoenicaulis (Brassicaceae; Boechereae). Journal of Systematics and Evolution, 2021, 59, 83-92.	1.6	7
16	Allele Sorting as a Novel Approach to Resolving the Origin of Allotetraploids Using Hyb-Seq Data: A Case Study of the Balkan Mountain Endemic Cardamine barbaraeoides. Frontiers in Plant Science, 2021, 12, 659275.	1.7	17
17	The best of both worlds: Combining lineageâ€specific and universal bait sets in targetâ€enrichment hybridization reactions. Applications in Plant Sciences, 2021, 9, .	0.8	22
18	Gradual evolution of allopolyploidy in Arabidopsis suecica. Nature Ecology and Evolution, 2021, 5, 1367-1381.	3.4	64

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19	Nuclear organization in crucifer genomes: nucleolusâ€associated telomere clustering is not a universal interphase configuration in Brassicaceae. Plant Journal, 2021, 108, 528-540.	2.8	15
20	Genome evolution of the psammophyte Pugionium for desert adaptation and further speciation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	22
21	Genome structure and evolution in the cruciferous tribe Thlaspideae (Brassicaceae). Plant Journal, 2021, , .	2.8	3
22	The genetic and epigenetic landscape of the Arabidopsis centromeres. Science, 2021, 374, eabi7489.	6.0	188
23	Current status of the multinational Arabidopsis community. Plant Direct, 2020, 4, e00248.	0.8	13
24	So Closely Related and Yet So Different: Strong Contrasts Between the Evolutionary Histories of Species of the Cardamine pratensis Polyploid Complex in Central Europe. Frontiers in Plant Science, 2020, 11, 588856.	1.7	18
25	Genomic Blocks in Aethionema arabicum Support Arabideae as Next Diverging Clade in Brassicaceae. Frontiers in Plant Science, 2020, 11, 719.	1.7	12
26	Chromosomal Evolution and Apomixis in the Cruciferous Tribe Boechereae. Frontiers in Plant Science, 2020, 11, 514.	1.7	10
27	Genome Evolution in Arabideae Was Marked by Frequent Centromere Repositioning. Plant Cell, 2020, 32, 650-665.	3.1	32
28	Evolution of Tandem Repeats Is Mirroring Post-polyploid Cladogenesis in Heliophila (Brassicaceae). Frontiers in Plant Science, 2020, 11, 607893.	1.7	13
29	Origin and Evolution of Diploid and Allopolyploid Camelina Genomes was Accompanied by Chromosome Shattering. Plant Cell, 2019, 31, tpc.00366.2019.	3.1	61
30	Genome invasion by a hypomethylated satellite repeat in Australian crucifer Ballantinia antipoda. Plant Journal, 2019, 99, 1066-1079.	2.8	3
31	The large genome size variation in the Hesperis clade was shaped by the prevalent proliferation of DNA repeats and rarer genome downsizing. Annals of Botany, 2019, 124, 103-120.	1.4	26
32	The story of promiscuous crucifers: origin and genome evolution of an invasive species, Cardamine occulta (Brassicaceae), and its relatives. Annals of Botany, 2019, 124, 209-220.	1.4	36
33	Camelina neglecta (Brassicaceae, Camelineae), a new diploid species from Europe. PhytoKeys, 2019, 115, 51-57.	0.4	22
34	Healthy Roots and Leaves: Comparative Genome Structure of Horseradish and Watercress. Plant Physiology, 2019, 179, 66-73.	2.3	7
35	Brassicales: an update on chromosomal evolution and ancient polyploidy. Plant Systematics and Evolution, 2018, 304, 757-762.	0.3	12
36	Post-polyploid diploidization and diversification through dysploid changes. Current Opinion in Plant Biology, 2018, 42, 55-65.	3.5	171

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37	Cytogenetics, a Science Linking Genomics and Breeding: The Brassica Model. Compendium of Plant Genomes, 2018, , 21-39.	0.3	4
38	Phylogeny and systematics of the tribe Thlaspideae (Brassicaceae) and the recognition of two new genera. Taxon, 2018, 67, 324-340.	0.4	16
39	Hybridizationâ€facilitated genome merger and repeated chromosome fusion after 8Âmillion years. Plant Journal, 2018, 96, 748-760.	2.8	21
40	The Aquilegia genome provides insight into adaptive radiation and reveals an extraordinarily polymorphic chromosome with a unique history. ELife, 2018, 7, .	2.8	120
41	Unstable Inheritance of 45S rRNA Genes inArabidopsis thaliana. G3: Genes, Genomes, Genetics, 2017, 7, 1201-1209.	0.8	43
42	Young inversion with multiple linked QTLs under selection in a hybrid zone. Nature Ecology and Evolution, 2017, 1, 119.	3.4	94
43	Diverse genome organization following 13 independent mesopolyploid events in Brassicaceae contrasts with convergent patterns of gene retention. Plant Journal, 2017, 91, 3-21.	2.8	95
44	Multispeed genome diploidization and diversification after an ancient allopolyploidization. Molecular Ecology, 2017, 26, 6445-6462.	2.0	44
45	A taxonomic Revision of the genus Graellsia (Brassicaceae, tribe Thlaspideae). Phytotaxa, 2017, 313, 105.	0.1	3
46	Monophyletic Origin and Evolution of the Largest Crucifer Genomes. Plant Physiology, 2017, 174, 2062-2071.	2.3	34
47	A taxonomic revision of the genus Pseudocamelina (Brasssicaceae, tribe Thlaspideae). Phytotaxa, 2017, 313, 117.	0.1	3
48	Epistatic and allelic interactions control expression of ribosomal RNA gene clusters in Arabidopsis thaliana. Genome Biology, 2017, 18, 75.	3.8	36
49	Comparative paleogenomics of crucifers: ancestral genomic blocks revisited. Current Opinion in Plant Biology, 2016, 30, 108-115.	3.5	84
50	How diploidization turned a tetraploid into a pseudotriploid. American Journal of Botany, 2016, 103, 1187-1196.	0.8	41
51	Painting of Arabidopsis Chromosomes with Chromosomeâ€Specific BAC Clones. Current Protocols in Plant Biology, 2016, 1, 359-371.	2.8	46
52	Chromosome Preparation for Cytogenetic Analyses in Arabidopsis. Current Protocols in Plant Biology, 2016, 1, 43-51.	2.8	54
53	chromDraw: an R package for visualization of linear and circular karyotypes. Chromosome Research, 2016, 24, 217-223.	1.0	7
54	Repeated Whole-Genome Duplication, Karyotype Reshuffling, and Biased Retention of Stress-Responding Genes in Buckler Mustard. Plant Cell, 2016, 28, 17-27.	3.1	49

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55	Genome expansion of Arabis alpina linked with retrotransposition and reduced symmetric DNA methylation. Nature Plants, 2015, 1, 14023.	4.7	156
56	Analysis of the giant genomes of <scp>F</scp>ritillaria (<scp>L</scp>iliaceae) indicates that a lack of <scp>DNA</scp> removal characterizes extreme expansions in genome size. New Phytologist, 2015, 208, 596-607.	3.5	122
57	A Time-Calibrated Road Map of Brassicaceae Species Radiation and Evolutionary History. Plant Cell, 2015, 27, tpc.15.00482.	3.1	200
58	Genome Structure of the Heavy Metal Hyperaccumulator Noccaea caerulescens and Its Stability on Metalliferous and Nonmetalliferous Soils. Plant Physiology, 2015, 169, 674-689.	2.3	51
59	Karyotype evolution in apomictic Boechera and the origin of the aberrant chromosomes. Plant Journal, 2015, 82, 785-793.	2.8	42
60	Catastrophic chromosomal restructuring during genome elimination in plants. ELife, 2015, 4, .	2.8	104
61	BrassiBase: Introduction to a Novel Knowledge Database on Brassicaceae Evolution. Plant and Cell Physiology, 2014, 55, e3-e3.	1.5	117
62	Chromatin features of plant telomeric sequences at terminal vs. internal positions. Frontiers in Plant Science, 2014, 5, 593.	1.7	33
63	Cardamine hirsuta: a versatile genetic system for comparative studies. Plant Journal, 2014, 78, 1-15.	2.8	78
64	The widespread crucifer species <scp>C</scp>ardamine flexuosa is an allotetraploid with a conserved subgenomic structure. New Phytologist, 2014, 201, 982-992.	3.5	67
65	Multiple hybridization events in Cardamine (Brassicaceae) during the last 150 years: revisiting a textbook example of neoallopolyploidy. Annals of Botany, 2014, 113, 817-830.	1.4	46
66	When fathers are instant losers: homogenization of rDNA loci in recently formed Cardamine Â Ã—Âschulzii trigenomic allopolyploid. New Phytologist, 2014, 203, 1096-1108.	3.5	45
67	Live and let die: centromere loss during evolution of plant chromosomes. New Phytologist, 2014, 203, 1082-1089.	3.5	32
68	From transposon to chromosome and polyploidy. An update on cytogenetics and genomics of Arabidopsis. Chromosome Research, 2014, 22, 99-101.	1.0	1
69	An atlas of over 90,000 conserved noncoding sequences provides insight into crucifer regulatory regions. Nature Genetics, 2013, 45, 891-898.	9.4	350
70	Mechanisms of Chromosome Rearrangements. , 2013, , 137-147.		36
71	Analysis of Plant Meiotic Chromosomes by Chromosome Painting. Methods in Molecular Biology, 2013, 990, 13-24.	0.4	55
72	The Capsella rubella genome and the genomic consequences of rapid mating system evolution. Nature Genetics, 2013, 45, 831-835.	9.4	374

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73	The More the Merrier: Recent Hybridization and Polyploidy in Cardamine. Plant Cell, 2013, 25, 3280-3295.	3.1	88
74	Deciphering the Diploid Ancestral Genome of the MesohexaploidBrassica rapaÂ Â. Plant Cell, 2013, 25, 1541-1554.	3.1	309
75	Massive genomic variation and strong selection in Arabidopsis thaliana lines from Sweden. Nature Genetics, 2013, 45, 884-890.	9.4	371
76	Phylogenetic analyses of ITS and rbcL DNA sequences for sixteen genera of Australian and New Zealand Brassicaceae result in the expansion of the tribe Microlepidieae. Taxon, 2012, 61, 970-979.	0.4	13
77	WholeÂgenome triplication and species radiation in the southern African tribe Heliophileae (Brassicaceae). Taxon, 2012, 61, 989-1000.	0.4	29
78	Cabbage family affairs: the evolutionary history of Brassicaceae. Trends in Plant Science, 2011, 16, 108-116.	4.3	341
79	Interpretation of karyotype evolution should consider chromosome structural constraints. Trends in Genetics, 2011, 27, 207-216.	2.9	252
80	Molecular phylogeny and systematics of the tribe Chorisporeae (Brassicaceae). Plant Systematics and Evolution, 2011, 294, 65-86.	0.3	20
81	Diverse retrotransposon families and an AT-rich satellite DNA revealed in giant genomes of Fritillaria lilies. Annals of Botany, 2011, 107, 255-268.	1.4	78
82	Phylogeny, Genome, and Karyotype Evolution of Crucifers (Brassicaceae). , 2011, , 1-31.		31
83	Island species radiation and karyotypic stasis in Pachycladonallopolyploids. BMC Evolutionary Biology, 2010, 10, 367.	3.2	52
84	Reciprocal and Multi-Species Chromosome BAC Painting in Crucifers (Brassicaceae). Cytogenetic and Genome Research, 2010, 129, 184-189.	0.6	20
85	Fast Diploidization in Close Mesopolyploid Relatives ofArabidopsisÂ Â. Plant Cell, 2010, 22, 2277-2290.	3.1	168
86	A bicontinental origin of polyploid Australian/New Zealand Lepidium species (Brassicaceae)? Evidence from genomic in situ hybridization. Annals of Botany, 2009, 104, 681-688.	1.4	29
87	Comparative Cytogenetics of Wild Crucifers (Brassicaceae). , 2009, , 177-205.		7
88	The Dynamic Ups and Downs of Genome Size Evolution in Brassicaceae. Molecular Biology and Evolution, 2008, 26, 85-98.	3.5	158
89	Chromosomal Phylogeny and Karyotype Evolution in x=7 Crucifer Species (Brassicaceae). Plant Cell, 2008, 20, 2559-2570.	3.1	213
90	Supernetwork Identifies Multiple Events of Plastid trnF(GAA) Pseudogene Evolution in the Brassicaceae. Molecular Biology and Evolution, 2007, 24, 63-73.	3.5	124

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91	Ancestral Chromosomal Blocks Are Triplicated in Brassiceae Species with Varying Chromosome Number and Genome Size. Plant Physiology, 2007, 145, 402-410.	2.3	165
92	Punctuated genome size evolution in Liliaceae. Journal of Evolutionary Biology, 2007, 20, 2296-2308.	0.8	82
93	Mechanisms of chromosome number reduction in Arabidopsis thaliana and related Brassicaceae species. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 5224-5229.	3.3	360
94	Cytogenetic Analyses of Arabidopsis. , 2006, 323, 173-186.		52
95	The ABC's of comparative genomics in the Brassicaceae: building blocks of crucifer genomes. Trends in Plant Science, 2006, 11, 535-542.	4.3	535
96	Chromosome arrangement and nuclear architecture but not centromeric sequences are conserved betweenArabidopsis thalianaandArabidopsis lyrata. Plant Journal, 2006, 48, 771-783.	2.8	61
97	Towards the era of comparative evolutionary genomics in Brassicaceae. Plant Systematics and Evolution, 2006, 259, 175-198.	0.3	55
98	Nuclear DNA Content Variation among Central European Koeleria Taxa. Annals of Botany, 2006, 98, 117-122.	1.4	30
99	Chromosome triplication found across the tribe Brassiceae. Genome Research, 2005, 15, 516-525.	2.4	598
100	The Origin, Evolution and Proposed Stabilization of the Terms 'Genome Size' and 'C-Value' to Describe Nuclear DNA Contents. Annals of Botany, 2005, 95, 255-260.	1.4	622
101	Chromosomal localization of rDNA in the Brassicaceae. Genome, 2005, 48, 341-346.	0.9	42
102	Genomic in situ hybridization in plants with small genomes is feasible and elucidates the chromosomal parentage in interspecific Arabidopsis hybrids. Genome, 2004, 47, 954-960.	0.9	31
103	Chromosome territory arrangement and homologous pairing in nuclei of Arabidopsis thaliana are predominantly random except for NOR-bearing chromosomes. Chromosoma, 2004, 113, 258-269.	1.0	206
104	Karyo-taxonomic study of the genusPseudolysimachion (Scrophulariaceae) in the Czech Republic and Slovakia. Folia Geobotanica, 2004, 39, 173-203.	0.4	13
105	Preparation of HMW DNA from Plant Nuclei and Chromosomes Isolated from Root Tips. Biologia Plantarum, 2003, 46, 369-373.	1.9	67
106	Recent progress in chromosome painting of Arabidopsis and related species. Chromosome Research, 2003, 11, 195-204.	1.0	92
107	FISH analysis of meiosis in Arabidopsis allopolyploids. Chromosome Research, 2003, 11, 217-226.	1.0	81
108	Variation in DNAâ€ploidy Levels of Reynoutria Taxa in the Czech Republic. Annals of Botany, 2003, 92, 265-272.	1.4	63

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109	Interphase chromosomes in Arabidopsis are organized as well defined chromocenters from which euchromatin loops emanate. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14584-14589.	3.3	429
110	Chromosome painting in Arabidopsis thaliana. Plant Journal, 2002, 28, 689-697.	2.8	156
111	Development and Characterization of Microsatellite Markers from Chromosome 1-Specific DNA Libraries of Vicia Faba. Biologia Plantarum, 2002, 45, 337-345.	1.9	87
112	Sorting of plant chromosomes. Methods in Cell Biology, 2001, 64, 3-31.	0.5	18
113	A taxonomic study of theVaccinium sect.Oxycoccus (Hill) W.D.J. Kock (Ericaceae) in the Czech Republic and adjacent territories. Folia Geobotanica, 2001, 36, 303-320.	0.4	30
114	Heterogeneity of rDNA distribution and genome size in Silene spp. Chromosome Research, 2001, 9, 387-393.	1.0	78
115	Localisation of DNA sequences on plant chromosomes using PRINS and C-PRINS. Cytotechnology, 2001, 23, 71-82.	0.7	26
116	Rapid identification and determination of purity of flow-sorted plant chromosomes using C-PRINS. Cytometry, 2000, 41, 102-108.	1.8	31
117	Nuclear Î³-Tubulin during Acentriolar Plant Mitosis. Plant Cell, 2000, 12, 433-442.	3.1	62
118	Limited Genome Size Variation in Sesleria albicans. Annals of Botany, 2000, 86, 399-403.	1.4	57
119	Flow Sorting of Mitotic Chromosomes in Common Wheat (Triticum aestivum L.). Genetics, 2000, 156, 2033-2041.	1.2	200
120	Flow karyotyping and sorting of mitotic chromosomes of barley (Hordeum vulgare L.). Chromosome Research, 1999, 7, 431-444.	1.0	83
121	Flow cytometric analysis of nuclear DNA content in Musa. Theoretical and Applied Genetics, 1999, 98, 1344-1350.	1.8	92
122	Isolation of chromosomes from Pisum sativum L. hairy root cultures and their analysis by flow cytometry. Plant Science, 1998, 137, 205-215.	1.7	40
123	Plant Genome Size Estimation by Flow Cytometry: Inter-laboratory Comparison*1. Annals of Botany, 1998, 82, 17-26.	1.4	266
124	Estimation of nuclear DNA content inSesleria(Poaceae). Caryologia, 1998, 51, 123-132.	0.2	159
125	Morphometric and karyological analysis of a population ofSesleria sadleriana Janka in the Biele Karpaty Mountains (Slovakia). Folia Geobotanica, 1997, 32, 47-55.	0.4	12
126	Icelandic accession of Arabidopsis thaliana confirmed with cytogenetic markers and its orign inferred from whole-genome sequencing. Icelandic Agricultural Sciences, 0, 30, 29-38.	0.0	4