Raphael mercier

List of Publications by Year
in descending order

63	6,056	76294	114418
papers	citations	40	63
		h-index	g-index

74	74	74	3432
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Molecular Biology of Meiosis in Plants. Annual Review of Plant Biology, 2015, 66, 297-327.	8.6	494
2	A male-expressed rice embryogenic trigger redirected for asexual propagation through seeds. Nature, 2019, 565, 91-95.	13.7	324
3	Turning Meiosis into Mitosis. PLoS Biology, 2009, 7, e1000124.	2.6	293
4	FANCM Limits Meiotic Crossovers. Science, 2012, 336, 1588-1590.	6.0	252
5	Clonal seeds from hybrid rice by simultaneous genome engineering of meiosis and fertilization genes. Nature Biotechnology, 2019, 37, 283-286.	9.4	250
6	AtREC8 and AtSCC3 are essential to the monopolar orientation of the kinetochores during meiosis. Journal of Cell Science, 2005, 118, 4621-4632.	1.2	226
7	Zip4/Spo22 Is Required for Class I CO Formation but Not for Synapsis Completion in Arabidopsis thaliana. PLoS Genetics, 2007, 3, e83.	1.5	186
8	Two Meiotic Crossover Classes Cohabit in Arabidopsis. Current Biology, 2005, 15, 692-701.	1.8	179
9	SWITCH1 (SWI1): a novel protein required for the establishment of sister chromatid cohesion and for bivalent formation at meiosis. Genes and Development, 2001, 15, 1859-1871.	2.7	156
10	Unleashing meiotic crossovers in hybrid plants. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2431-2436.	3.3	155
11	AtMSH5 partners AtMSH4 in the class I meiotic crossover pathway in Arabidopsis thaliana, but is not required for synapsis. Plant Journal, 2008, 55, 28-39.	2.8	140
12	A High Throughput Genetic Screen Identifies New Early Meiotic Recombination Functions in Arabidopsis thaliana. PLoS Genetics, 2009, 5, e1000654.	1.5	140
13	The CYCLIN-A CYCA1;2/TAM Is Required for the Meiosis I to Meiosis II Transition and Cooperates with OSD1 for the Prophase to First Meiotic Division Transition. PLoS Genetics, 2010, 6, e1000989.	1.5	139
14	Multiple mechanisms limit meiotic crossovers: TOP3Î± and two BLM homologs antagonize crossovers in parallel to FANCM. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4713-4718.	3.3	138
15	AAA-ATPase FIDGETIN-LIKE 1 and Helicase FANCM Antagonize Meiotic Crossovers by Distinct Mechanisms. PLoS Genetics, 2015, 11, e1005369.	1.5	133
16	The meiotic protein SWI1 is required for axial element formation and recombination initiation inArabidopsis. Development (Cambridge), 2003, 130, 3309-3318.	1.2	130
17	An Easy Protocol for Studying Chromatin and Recombination Protein Dynamics during <i>Arabidopsis</i><i>thaliana</i> Meiosis: Immunodetection of Cohesins, Histones and MLH1. Cytogenetic and Genome Research, 2010, 129, 143-153.	0.6	130
18	The Interplay of RecA-related Proteins and the MND1â€“HOP2 Complex during Meiosis in Arabidopsis thaliana. PLoS Genetics, 2007, 3, e176.	1.5	129

#	Article	IF	Citations
19	Mutations in AtPS1 (Arabidopsis thaliana Parallel Spindle 1) Lead to the Production of Diploid Pollen Grains. PLoS Genetics, 2008, 4, e1000274.	1.5	125
20	Sex-Specific Crossover Distributions and Variations in Interference Level along Arabidopsis thaliana Chromosome 4. PLoS Genetics, 2007, 3, e106.	1.5	123
21	Meiosis in plants: ten years of gene discovery. Cytogenetic and Genome Research, 2008, 120, 281-290.	0.6	117
22	The synaptonemal complex imposes crossover interference and heterochiasmy in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	116
23	Synthetic Clonal Reproduction Through Seeds. Science, 2011, 331, 876-876.	6.0	115
24	Unleashing meiotic crossovers in crops. Nature Plants, 2018, 4, 1010-1016.	4.7	110
25	Massive crossover elevation via combination of HEI10 and recq4a recq4b during Arabidopsis meiosis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2437-2442.	3.3	107
26	The Arabidopsis thaliana MND1 homologue plays a key role in meiotic homologous pairing, synapsis and recombination. Journal of Cell Science, 2006, 119, 2486-2496.	1.2	103
27	Turning rice meiosis into mitosis. Cell Research, 2016, 26, 1242-1254.	5.7	103
28	The road to crossovers: plants have their say. Trends in Genetics, 2007, 23, 91-99.	2.9	99
29	OSD1 Promotes Meiotic Progression via APC/C Inhibition and Forms a Regulatory Network with TDM and CYCA1;2/TAM. PLoS Genetics, 2012, 8, e1002865.	1.5	93
30	FANCM-associated proteins MHF1 and MHF2, but not the other Fanconi anemia factors, limit meiotic crossovers. Nucleic Acids Research, 2014, 42, 9087-9095.	6.5	93
31	FIGL1 and its novel partner FLIP form a conserved complex that regulates homologous recombination. PLoS Genetics, 2018, 14, e1007317.	1.5	81
32	SAMBA, a plant-specific anaphase-promoting complex/cyclosome regulator is involved in early development and A-type cyclin stabilization. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13853-13858.	3.3	80
33	SHOC1, an XPF Endonuclease-Related Protein, Is Essential for the Formation of Class I Meiotic Crossovers. Current Biology, 2008, 18, 1432-1437.	1.8	67
34	Centromeric Cohesion Is Protected Twice at Meiosis, by SHUGOSHINs at Anaphase I and by PATRONUS at Interkinesis. Current Biology, 2013, 23, 2090-2099.	1.8	67
35	RMI1 and TOP3Î± limit meiotic CO formation through their C-terminal domains. Nucleic Acids Research, 2017, 45, gkw1210.	6.5	54
36	Mutations of the AtYAK1 Kinase Suppress TOR Deficiency in Arabidopsis. Cell Reports, 2019, 27, 3696-3708.e5.	2.9	54

#	Article	IF	Citations
37	Haploid Meiosis in Arabidopsis: Double-Strand Breaks Are Formed and Repaired but Without Synapsis and Crossovers. PLoS ONE, 2013, 8, e72431.	1.1	53
38	A TOR-YAK1 signaling axis controls cell cycle, meristem activity and plant growth in Arabidopsis. Development (Cambridge), 2019, 146, .	1.2	50
39	SHOC1 and PTD form an XPFâ€“ERCC1-like complex that is required for formation of class I crossovers. Journal of Cell Science, 2011, 124, 2687-2691.	1.2	49
40	Tinkering with meiosis. Journal of Experimental Botany, 2013, 64, 55-65.	2.4	46
41	Non conservation of the meiotic function of the Ski8/Rec103 homolog inArabidopsis. Genes To Cells, 2006, 11, 615-622.	0.5	43
42	TDM1 Regulation Determines the Number of Meiotic Divisions. PLoS Genetics, 2016, 12, e1005856.	1.5	40
43	MCM8 Is Required for a Pathway of Meiotic Double-Strand Break Repair Independent of DMC1 in Arabidopsis thaliana. PLoS Genetics, 2013, 9, e1003165.	1.5	39
44	A strategy to investigate the plant meiotic proteome. Cytogenetic and Genome Research, 2005, 109, 181-189.	0.6	38
45	Regulation of carotenoid and ABA accumulation during the development and germination of Nicotiana plumbaginifolia seeds. Planta, 2006, 224, 622-632.	1.6	38
46	Reciprocal chromosome translocation associated with TDNA-insertion mutation in Arabidopsis: genetic and cytological analyses of consequences for gametophyte development and for construction of doubly mutant lines. Planta, 2009, 229, 731-745.	1.6	36
47	Meiotic Recombination and Crossovers in Plants. Genome Dynamics, 2008, 5, 14-25.	2.4	30
48	The Kinesin AtPSS1 Promotes Synapsis and is Required for Proper Crossover Distribution in Meiosis. PLoS Genetics, 2014, 10, e1004674.	1.5	30
49	Aperture number influences pollen survival in Arabidopsis mutants. American Journal of Botany, 2016, 103, 452-459.	0.8	28
50	Antagonism between BRCA2 and FIGL1 regulates homologous recombination. Nucleic Acids Research, 2019, 47, 5170-5180.	6.5	28
51	The megabase-scale crossover landscape is largely independent of sequence divergence. Nature Communications, 2022, 13, .	5.8	25
52	Engineering Apomixis: Clonal Seeds Approaching the Fields. Annual Review of Plant Biology, 2022, 73, 201-225.	8.6	24
53	How to characterize meiotic functions in plants?. Biochimie, 2001, 83, 1023-1028.	1.3	22
54	Patterns of Recombination and MLH1 Foci Density Along Mouse Chromosomes: Modeling Effects of Interference and Obligate Chiasma. Genetics, 2007, 176, 1453-1467.	1.2	22

#	Article	IF	Citations
55	Patronus is the elusive plant securin, preventing chromosome separation by antagonizing separase. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16018-16027.	3.3	22
56	Outcrossing as an Explanation of the Apparent Unconventional Genetic Behavior ofArabidopsis thaliana hthMutants. Genetics, 2008, 180, 2295-2297.	1.2	14
57	Large genetic screens for gynogenesis and androgenesis haploid inducers in Arabidopsis thaliana failed to identify mutants. Frontiers in Plant Science, 2015, 6, 147.	1.7	13
58	What limits meiotic crossovers?. Cell Cycle, 2012, 11, 3527-3528.	1.3	12
59	The HEM Lines: A New Library of Homozygous Arabidopsis thaliana EMS Mutants and its Potential to Detect Meiotic Phenotypes. Frontiers in Plant Science, 2018, 9, 1339.	1.7	11
60	Identifying Meiotic Mutants in Arabidopsis thaliana. Methods in Molecular Biology, 2013, 990, 227-234.	0.4	8
61	DEFECTIVE EMBRYO AND MERISTEMS genes are required for cell division and gamete viability in Arabidopsis. PLoS Genetics, 2021, 17, e1009561.	1.5	3
62	Meiosis: Recombination and the Control of Cell Division. , 2013, , 121-136.		1
63	Donâ€™t Forget Your Sister: Directing Double-Strand Break Repair at Meiosis. Developmental Cell, 2020, 53, 374-376.	3.1	0