

# Raphael mercier

## List of Publications by Year in descending order

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63  
papers

6,056  
citations

76294

40  
h-index

114418

63  
g-index

74  
all docs

74  
docs citations

74  
times ranked

3432  
citing authors

#	ARTICLE	IF	CITATIONS
1	Engineering Apomixis: Clonal Seeds Approaching the Fields. <i>Annual Review of Plant Biology</i> , 2022, 73, 201-225.	8.6	24
2	The megabase-scale crossover landscape is largely independent of sequence divergence. <i>Nature Communications</i> , 2022, 13, .	5.8	25
3	The synaptonemal complex imposes crossover interference and heterochiasmy in <i>Arabidopsis</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	116
4	DEFECTIVE EMBRYO AND MERISTEMS genes are required for cell division and gamete viability in <i>Arabidopsis</i> . <i>PLoS Genetics</i> , 2021, 17, e1009561.	1.5	3
5	Don't Forget Your Sister: Directing Double-Strand Break Repair at Meiosis. <i>Developmental Cell</i> , 2020, 53, 374-376.	3.1	0
6	A TOR-YAK1 signaling axis controls cell cycle, meristem activity and plant growth in <i>Arabidopsis</i> . <i>Development (Cambridge)</i> , 2019, 146, .	1.2	50
7	Mutations of the AtYAK1 Kinase Suppress TOR Deficiency in <i>Arabidopsis</i> . <i>Cell Reports</i> , 2019, 27, 3696-3708.e5.	2.9	54
8	Antagonism between BRCA2 and FIGL1 regulates homologous recombination. <i>Nucleic Acids Research</i> , 2019, 47, 5170-5180.	6.5	28
9	Patronus is the elusive plant securin, preventing chromosome separation by antagonizing separase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 16018-16027.	3.3	22
10	Clonal seeds from hybrid rice by simultaneous genome engineering of meiosis and fertilization genes. <i>Nature Biotechnology</i> , 2019, 37, 283-286.	9.4	250
11	A male-expressed rice embryogenic trigger redirected for asexual propagation through seeds. <i>Nature</i> , 2019, 565, 91-95.	13.7	324
12	Massive crossover elevation via combination of <i>HEI10</i> and <i>recq4a recq4b</i> during <i>Arabidopsis</i> meiosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2437-2442.	3.3	107
13	Unleashing meiotic crossovers in hybrid plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2431-2436.	3.3	155
14	Unleashing meiotic crossovers in crops. <i>Nature Plants</i> , 2018, 4, 1010-1016.	4.7	110
15	The HEM Lines: A New Library of Homozygous <i>Arabidopsis thaliana</i> EMS Mutants and its Potential to Detect Meiotic Phenotypes. <i>Frontiers in Plant Science</i> , 2018, 9, 1339.	1.7	11
16	FIGL1 and its novel partner FLIP form a conserved complex that regulates homologous recombination. <i>PLoS Genetics</i> , 2018, 14, e1007317.	1.5	81
17	RMI1 and TOP3 limit meiotic CO formation through their C-terminal domains. <i>Nucleic Acids Research</i> , 2017, 45, gkw1210.	6.5	54
18	TDM1 Regulation Determines the Number of Meiotic Divisions. <i>PLoS Genetics</i> , 2016, 12, e1005856.	1.5	40

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19	Turning rice meiosis into mitosis. <i>Cell Research</i> , 2016, 26, 1242-1254.	5.7	103
20	Aperture number influences pollen survival in <i>Arabidopsis</i> mutants. <i>American Journal of Botany</i> , 2016, 103, 452-459.	0.8	28
21	Large genetic screens for gynogenesis and androgenesis haploid inducers in <i>Arabidopsis thaliana</i> failed to identify mutants. <i>Frontiers in Plant Science</i> , 2015, 6, 147.	1.7	13
22	Multiple mechanisms limit meiotic crossovers: TOP3 $\hat{+}$ and two BLM homologs antagonize crossovers in parallel to FANCM. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 4713-4718.	3.3	138
23	The Molecular Biology of Meiosis in Plants. <i>Annual Review of Plant Biology</i> , 2015, 66, 297-327.	8.6	494
24	AAA-ATPase FIDGETIN-LIKE 1 and Helicase FANCM Antagonize Meiotic Crossovers by Distinct Mechanisms. <i>PLoS Genetics</i> , 2015, 11, e1005369.	1.5	133
25	The Kinesin AtPSS1 Promotes Synapsis and is Required for Proper Crossover Distribution in Meiosis. <i>PLoS Genetics</i> , 2014, 10, e1004674.	1.5	30
26	FANCM-associated proteins MHF1 and MHF2, but not the other Fanconi anemia factors, limit meiotic crossovers. <i>Nucleic Acids Research</i> , 2014, 42, 9087-9095.	6.5	93
27	Tinkering with meiosis. <i>Journal of Experimental Botany</i> , 2013, 64, 55-65.	2.4	46
28	Meiosis: Recombination and the Control of Cell Division. , 2013, , 121-136.		1
29	Centromeric Cohesion Is Protected Twice at Meiosis, by SHUGOSHINs at Anaphase I and by PATRONUS at Interkinesis. <i>Current Biology</i> , 2013, 23, 2090-2099.	1.8	67
30	Identifying Meiotic Mutants in <i>Arabidopsis thaliana</i> . <i>Methods in Molecular Biology</i> , 2013, 990, 227-234.	0.4	8
31	MCM8 Is Required for a Pathway of Meiotic Double-Strand Break Repair Independent of DMC1 in <i>Arabidopsis thaliana</i> . <i>PLoS Genetics</i> , 2013, 9, e1003165.	1.5	39
32	Haploid Meiosis in <i>Arabidopsis</i> : Double-Strand Breaks Are Formed and Repaired but Without Synapsis and Crossovers. <i>PLoS ONE</i> , 2013, 8, e72431.	1.1	53
33	OSD1 Promotes Meiotic Progression via APC/C Inhibition and Forms a Regulatory Network with TDM and CYCA1;2/TAM. <i>PLoS Genetics</i> , 2012, 8, e1002865.	1.5	93
34	What limits meiotic crossovers?. <i>Cell Cycle</i> , 2012, 11, 3527-3528.	1.3	12
35	SAMBA, a plant-specific anaphase-promoting complex/cyclosome regulator is involved in early development and A-type cyclin stabilization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 13853-13858.	3.3	80
36	FANCM Limits Meiotic Crossovers. <i>Science</i> , 2012, 336, 1588-1590.	6.0	252

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37	Synthetic Clonal Reproduction Through Seeds. <i>Science</i> , 2011, 331, 876-876.	6.0	115
38	SHOC1 and PTD form an XPF-ERCC1-like complex that is required for formation of class I crossovers. <i>Journal of Cell Science</i> , 2011, 124, 2687-2691.	1.2	49
39	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. <i>PLoS Genetics</i> , 2010, 6, e1000989.	1.5	139
40	An Easy Protocol for Studying Chromatin and Recombination Protein Dynamics during <i>Arabidopsis thaliana</i> Meiosis: Immunodetection of Cohesins, Histones and MLH1. <i>Cytogenetic and Genome Research</i> , 2010, 129, 143-153.	0.6	130
41	A High Throughput Genetic Screen Identifies New Early Meiotic Recombination Functions in <i>Arabidopsis thaliana</i> . <i>PLoS Genetics</i> , 2009, 5, e1000654.	1.5	140
42	Turning Meiosis into Mitosis. <i>PLoS Biology</i> , 2009, 7, e1000124.	2.6	293
43	Reciprocal chromosome translocation associated with TDNA-insertion mutation in <i>Arabidopsis</i> : genetic and cytological analyses of consequences for gametophyte development and for construction of doubly mutant lines. <i>Planta</i> , 2009, 229, 731-745.	1.6	36
44	AtMSH5 partners AtMSH4 in the class I meiotic crossover pathway in <i>Arabidopsis thaliana</i> , but is not required for synapsis. <i>Plant Journal</i> , 2008, 55, 28-39.	2.8	140
45	SHOC1, an XPF Endonuclease-Related Protein, Is Essential for the Formation of Class I Meiotic Crossovers. <i>Current Biology</i> , 2008, 18, 1432-1437.	1.8	67
46	Meiosis in plants: ten years of gene discovery. <i>Cytogenetic and Genome Research</i> , 2008, 120, 281-290.	0.6	117
47	Meiotic Recombination and Crossovers in Plants. <i>Genome Dynamics</i> , 2008, 5, 14-25.	2.4	30
48	Outcrossing as an Explanation of the Apparent Unconventional Genetic Behavior of <i>Arabidopsis thaliana</i> hth Mutants. <i>Genetics</i> , 2008, 180, 2295-2297.	1.2	14
49	Mutations in AtPS1 ( <i>Arabidopsis thaliana</i> Parallel Spindle 1) Lead to the Production of Diploid Pollen Grains. <i>PLoS Genetics</i> , 2008, 4, e1000274.	1.5	125
50	Zip4/Spo22 Is Required for Class I CO Formation but Not for Synapsis Completion in <i>Arabidopsis thaliana</i> . <i>PLoS Genetics</i> , 2007, 3, e83.	1.5	186
51	The Interplay of RecA-related Proteins and the MND1-HOP2 Complex during Meiosis in <i>Arabidopsis thaliana</i> . <i>PLoS Genetics</i> , 2007, 3, e176.	1.5	129
52	Sex-Specific Crossover Distributions and Variations in Interference Level along <i>Arabidopsis thaliana</i> Chromosome 4. <i>PLoS Genetics</i> , 2007, 3, e106.	1.5	123
53	Patterns of Recombination and MLH1 Foci Density Along Mouse Chromosomes: Modeling Effects of Interference and Obligate Chiasma. <i>Genetics</i> , 2007, 176, 1453-1467.	1.2	22
54	The road to crossovers: plants have their say. <i>Trends in Genetics</i> , 2007, 23, 91-99.	2.9	99

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55	Non conservation of the meiotic function of the Ski8/Rec103 homolog in Arabidopsis. Genes To Cells, 2006, 11, 615-622.	0.5	43
56	Regulation of carotenoid and ABA accumulation during the development and germination of Nicotiana plumbaginifolia seeds. Planta, 2006, 224, 622-632.	1.6	38
57	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
58	Two Meiotic Crossover Classes Cohabit in Arabidopsis. Current Biology, 2005, 15, 692-701.	1.8	179
59	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
60	A strategy to investigate the plant meiotic proteome. Cytogenetic and Genome Research, 2005, 109, 181-189.	0.6	38
61	The meiotic protein SWI1 is required for axial element formation and recombination initiation in Arabidopsis. Development (Cambridge), 2003, 130, 3309-3318.	1.2	130
62	How to characterize meiotic functions in plants?. Biochimie, 2001, 83, 1023-1028.	1.3	22
63	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