JamesÂ D Higgins

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Sporophytic control of pollen meiotic progression is mediated by tapetum expression of <i>ABORTED MICROSPORES</i>. Journal of Experimental Botany, 2022, 73, 5543-5558.	4.8	6
2	FANCM promotes class I interfering crossovers and suppresses class II non-interfering crossovers in wheat meiosis. Nature Communications, 2022, 13, .	12.8	21
3	Distal Bias of Meiotic Crossovers in Hexaploid Bread Wheat Reflects Spatio-Temporal Asymmetry of the Meiotic Program. Frontiers in Plant Science, 2021, 12, 631323.	3.6	22
4	ZYP1 is required for obligate cross-over formation and cross-over interference in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	78
5	Crossover-active regions of the wheat genome are distinguished by DMC1, the chromosome axis, H3K27me3, and signatures of adaptation. Genome Research, 2021, 31, 1614-1628.	5.5	18
6	A novel allele of ASY3 is associated with greater meiotic stability in autotetraploid Arabidopsis lyrata. PLoS Genetics, 2020, 16, e1008900.	3.5	26
7	Rice OsBRCA2 Is Required for DNA Double-Strand Break Repair in Meiotic Cells. Frontiers in Plant Science, 2020, 11, 600820.	3.6	8
8	Analysis of meiotic segregation by triple-color fish on both total and motile sperm fractions in a t(1p;18) river buffalo bull. PLoS ONE, 2020, 15, e0232592.	2.5	7
9	<i>MutS homologue 4</i> and <i>MutS homologue 5</i> Maintain the Obligate Crossover in Wheat Despite Stepwise Gene Loss following Polyploidization. Plant Physiology, 2020, 183, 1545-1558.	4.8	24
10	Interacting Genomic Landscapes of REC8-Cohesin, Chromatin, and Meiotic Recombination in Arabidopsis. Plant Cell, 2020, 32, 1218-1239.	6.6	57
11	A Cytological Analysis of Wheat Meiosis Targeted by Virus-Induced Gene Silencing (VIGS). Methods in Molecular Biology, 2020, 2061, 319-330.	0.9	8
12	<scp>MSH</scp> 2 shapes the meiotic crossover landscape in relation to interhomolog polymorphism in Arabidopsis. EMBO Journal, 2020, 39, e104858.	7.8	44
13	A Multiprotein Complex Regulates Interference-Sensitive Crossover Formation in Rice. Plant Physiology, 2019, 181, 221-235.	4.8	20
14	Analysis of the recombination landscape of hexaploid bread wheat reveals genes controlling recombination and gene conversion frequency. Genome Biology, 2019, 20, 69.	8.8	79
15	Interspecific introgression mediates adaptation to whole genome duplication. Nature Communications, 2019, 10, 5218.	12.8	59
16	Sexual-lineage-specific DNA methylation regulates meiosis in Arabidopsis. Nature Genetics, 2018, 50, 130-137.	21.4	153
17	MeioCapture: an efficient method for staging and isolation of meiocytes in the prophase I sub-stages of meiosis in wheat. BMC Plant Biology, 2018, 18, 293.	3.6	9
18	Resolvase OsGEN1 Mediates DNA Repair by Homologous Recombination. Plant Physiology, 2017, 173, 1316-1329.	4.8	22

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19	Recent autopolyploidization in a naturalized population of Mimulus guttatus (Phrymaceae). Botanical Journal of the Linnean Society, 2017, , .	1.6	8
20	<scp>CENH</scp>3 morphogenesis reveals dynamic centromere associations during synaptonemal complex formation and the progression through male meiosis in hexaploid wheat. Plant Journal, 2017, 89, 235-249.	5.7	34
21	The DNA Topoisomerase VIâ€"B Subunit OsMTOPVIB Is Essential for Meiotic Recombination Initiation in Rice. Molecular Plant, 2016, 9, 1539-1541.	8.3	30
22	MEIOTIC F-BOX Is Essential for Male Meiotic DNA Double-Strand Break Repair in Rice. Plant Cell, 2016, 28, 1879-1893.	6.6	50
23	A spontaneous mutation in MutLâ€Homolog 3 (Hv<scp>MLH</scp>3) affects synapsis and crossover resolution in the barley desynaptic mutant <i>des10</i>. New Phytologist, 2016, 212, 693-707.	7.3	44
24	Meiosis evolves: adaptation to external and internal environments. New Phytologist, 2015, 208, 306-323.	7.3	148
25	Arabidopsis PCH2 Mediates Meiotic Chromosome Remodeling and Maturation of Crossovers. PLoS Genetics, 2015, 11, e1005372.	3.5	97
26	The Synaptonemal Complex Protein ZYP1 Is Required for Imposition of Meiotic Crossovers in Barley. Plant Cell, 2014, 26, 729-740.	6.6	88
27	Cytological techniques to analyze meiosis in Arabidopsis arenosa for investigating adaptation to polyploidy. Frontiers in Plant Science, 2014, 4, 546.	3.6	31
28	Factors Underlying Restricted Crossover Localization in Barley Meiosis. Annual Review of Genetics, 2014, 48, 29-47.	7.6	60
29	Meiotic Adaptation to Genome Duplication in Arabidopsis arenosa. Current Biology, 2013, 23, 2151-2156.	3.9	217
30	Arabidopsis meiotic crossover hot spots overlap with H2A.Z nucleosomes at gene promoters. Nature Genetics, 2013, 45, 1327-1336.	21.4	321
31	Analyzing Meiosis in Barley. Methods in Molecular Biology, 2013, 990, 135-144.	0.9	9
32	Quantitative high resolution mapping of HvMLH3 foci in barley pachytene nuclei reveals a strong distal bias and weak interference. Journal of Experimental Botany, 2013, 64, 2139-2154.	4.8	23
33	Replication Protein A2c Coupled with Replication Protein A1c Regulates Crossover Formation during Meiosis in Rice Â Â. Plant Cell, 2013, 25, 3885-3899.	6.6	44
34	Inter-Homolog Crossing-Over and Synapsis in Arabidopsis Meiosis Are Dependent on the Chromosome Axis Protein AtASY3. PLoS Genetics, 2012, 8, e1002507.	3.5	170
35	The Fanconi Anemia Ortholog FANCM Ensures Ordered Homologous Recombination in Both Somatic and Meiotic Cells in Arabidopsis. Plant Cell, 2012, 24, 1448-1464.	6.6	94
36	Spatiotemporal Asymmetry of the Meiotic Program Underlies the Predominantly Distal Distribution of Meiotic Crossovers in Barley. Plant Cell, 2012, 24, 4096-4109.	6.6	185

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37	The RecQ helicase AtRECQ4A is required to remove interâ€chromosomal telomeric connections that arise during meiotic recombination in Arabidopsis. Plant Journal, 2011, 65, 492-502.	5.7	37
38	Pathways to meiotic recombination in Arabidopsis thaliana. New Phytologist, 2011, 190, 523-544.	7.3	208
39	Retinoblastoma protein is essential for early meiotic events in<i>Arabidopsis</i>. EMBO Journal, 2011, 30, 744-755.	7.8	41
40	ASY1 coordinates early events in the plant meiotic recombination pathway. Cytogenetic and Genome Research, 2008, 120, 302-312.	1.1	62
41	Expression and functional analysis of <i>AtMUS81</i> in Arabidopsis meiosis reveals a role in the second pathway of crossingâ€over. Plant Journal, 2008, 54, 152-162.	5.7	148
42	AtMSH5 partners AtMSH4 in the class I meiotic crossover pathway in <i>Arabidopsis thaliana</i>, but is not required for synapsis. Plant Journal, 2008, 55, 28-39.	5.7	140
43	Control of meiotic recombination in <i>Arabidopsis</i>: role of the MutL and MutS homologues. Biochemical Society Transactions, 2006, 34, 542-544.	3.4	35
44	The Production of Marker-Free Genetically Engineered Broccoli with Sense and Antisense ACC synthase 1 and ACC oxidases 1 and 2 to Extend Shelf-Life. Molecular Breeding, 2006, 17, 7-20.	2.1	30
45	Chromosome synapsis in Arabidopsis: analysis of the transverse filament protein ZYP1 reveals novel functions for the synaptonemal complex. Chromosoma, 2006, 115, 212-219.	2.2	50
46	The <i>Arabidopsis</i> synaptonemal complex protein ZYP1 is required for chromosome synapsis and normal fidelity of crossing over. Genes and Development, 2005, 19, 2488-2500.	5.9	378
47	A strategy to investigate the plant meiotic proteome. Cytogenetic and Genome Research, 2005, 109, 181-189.	1.1	38
48	The <i>Arabidopsis MutS</i> homolog <i>AtMSH4</i> functions at an early step in recombination: evidence for two classes of recombination in <i>Arabidopsis</i>. Genes and Development, 2004, 18, 2557-2570.	5.9	308
49	Herbicidal action of 2-hydroxy-3-alkyl-1,4-naphthoquinones. Pest Management Science, 2002, 58, 234-242.	3.4	14