Christopher A Makaroff

List of Publications by Year
in descending order

79 papers	3,867 citations	94433 37 h-index	123424 61 g-index
79 all docs	79 docs citations	79 times ranked	2815 citing authors

#	Article	IF	Citations
1	Revised and Improved Procedure for Immunolocalization of Male Meiotic Chromosomal Proteins and Spindle in Plants without the Use of Enzymes. Plants, 2018, 7, 93.	3.5	0
2	In Favor of Establishment: Regulation of Chromatid Cohesion in Plants. Frontiers in Plant Science, 2017, 8, 846.	3.6	30
3	The PHD Finger Protein MMD1/DUET Ensures the Progression of Male Meiotic Chromosome Condensation and Directly Regulates the Expression of the Condensin Gene CAP-D3. Plant Cell, 2016, 28, 1894-1909.	6.6	46
4	The Opposing Actions of Arabidopsis CHROMOSOME TRANSMISSION FIDELITY7 and WINGS APART-LIKE1 and 2 Differ in Mitotic and Meiotic Cells. Plant Cell, 2016, 28, 521-536.	6.6	5
5	Overexpression of a truncated CTF7 construct leads to pleiotropic defects in reproduction and vegetative growth in Arabidopsis. BMC Plant Biology, 2015, 15, 74.	3.6	3
6	Arabidopsis thaliana Glyoxalase 2-1 Is Required during Abiotic Stress but Is Not Essential under Normal Plant Growth. PLoS ONE, 2014, 9, e95971.	2.5	39
7	Arabidopsis thaliana WAPL Is Essential for the Prophase Removal of Cohesin during Meiosis. PLoS Genetics, 2014, 10, e1004497.	3.5	47
8	Expression of Epitope-Tagged SYN3 Cohesin Proteins Can Disrupt Meiosis in Arabidopsis. Journal of Genetics and Genomics, 2014, 41, 153-164.	3.9	7
9	Immunolocalization Protocols for Visualizing Meiotic Proteins in Arabidopsis thaliana: Method 3. Methods in Molecular Biology, 2013, 990, 109-118.	0.9	4
10	Arabidopsis CHROMOSOME TRANSMISSION FIDELITY 7 (AtCTF7 / ECO1) is required for DNA repair, mitosis and meiosis. Plant Journal, 2013, 75, 927-940.	5.7	34
11	Arabidopsis ETHE1 Encodes a Sulfur Dioxygenase That Is Essential for Embryo and Endosperm Development. Plant Physiology, 2012, 160, 226-236.	4.8	62
12	Hunting Down SYN3 in Chloroplasts of Arabidopsis thaliana. Microscopy and Microanalysis, 2012, 18, 92-93.	0.4	0
13	The Arabidopsis SYN3 cohesin protein is important for early meiotic events. Plant Journal, 2012, 71, 147-160.	5.7	28
14	Plant Cohesins, Common Themes and Unique Roles. Current Protein and Peptide Science, 2011, 12, 93-104.	1.4	13
15	The Radially Swollen 4 Separase Mutation of Arabidopsis thaliana Blocks Chromosome Disjunction and Disrupts the Radial Microtubule System in Meiocytes. PLoS ONE, 2011, 6, e19459.	2.5	20
16	Plant Cohesins, Common Themes and Unique Roles. Current Protein and Peptide Science, 2011, 999, 1-12.	1.4	0
17	The metal ion requirements of Arabidopsis thaliana Glx2-2 for catalytic activity. Journal of Biological Inorganic Chemistry, 2010, 15, 249-258.	2.6	9
18	Proper Levels of the Arabidopsis Cohesion Establishment Factor CTF7 Are Essential for Embryo and Megagametophyte, But Not Endosperm, Development Â. Plant Physiology, 2010, 154, 820-832.	4.8	13

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19	Converting GLX2-1 into an Active Glyoxalase II. Biochemistry, 2010, 49, 8228-8236.	2.5	9
20	Arabidopsis Separase Functions beyond the Removal of Sister Chromatid Cohesion during Meiosis. Plant Physiology, 2009, 151, 323-333.	4.8	21
21	Human Glyoxalase II Contains an Fe(II)Zn(II) Center but Is Active as a Mononuclear Zn(II) Enzyme. Biochemistry, 2009, 48, 5426-5434.	2.5	24
22	Arabidopsis thaliana Mitochondrial Glyoxalase 2-1 Exhibits Î²-Lactamase Activity. Biochemistry, 2009, 48, 8491-8493.	2.5	19
23	Arabidopsis thaliana GLX2-1 contains a dinuclear metal binding site, but is not a glyoxalase 2. Biochemical Journal, 2009, 417, 323-330.	3.7	12
24	Spectroscopic studies on Arabidopsis ETHE1, a glyoxalase II-like protein. Journal of Inorganic Biochemistry, 2008, 102, 1825-1830.	3.5	16
25	SWI1 Is Required for Meiotic Chromosome Remodeling Events. Molecular Plant, 2008, 1, 620-633.	8.3	38
26	Methyl recycling activities are co-ordinately regulated during plant development. Journal of Experimental Botany, 2007, 58, 1083-1098.	4.8	44
27	Side Chain and Backbone Dynamics of Phospholamban in Phospholipid Bilayers Utilizing ²H and ¹⁵N Solid-State NMR Spectroscopy. Biochemistry, 2007, 46, 11695-11706.	2.5	20
28	The Arabidopsis cohesin protein SYN3 localizes to the nucleolus and is essential for gametogenesis. Plant Journal, 2007, 50, 1020-1034.	5.7	33
29	Structure of an ETHE1-like protein fromArabidopsis thaliana. Acta Crystallographica Section D: Biological Crystallography, 2006, 62, 964-970.	2.5	40
30	ASK1, a SKP1 homolog, is required for nuclear reorganization, presynaptic homolog juxtaposition and the proper distribution of cohesin during meiosis in Arabidopsis. Plant Molecular Biology, 2006, 62, 99-110.	3.9	43
31	TheArabidopsis SKP1homologASK1controls meiotic chromosome remodeling and release of chromatin from the nuclear membrane and nucleolus. Journal of Cell Science, 2006, 119, 3754-3763.	2.0	49
32	Arabidopsis Separase AESP Is Essential for Embryo Development and the Release of Cohesin during Meiosis. Plant Cell, 2006, 18, 1213-1225.	6.6	69
33	The SYN3 mutation affects megagametogenesis and seed development in Arabidopsis thaliana. FASEB Journal, 2006, 20, A894.	0.5	0
34	The dsy10 mutation affects sister chromatid cohesion and synapsis during meiosis in A. thaliana. FASEB Journal, 2006, 20, A894.	0.5	0
35	Structural Studies on a Mitochondrial Glyoxalase II. Journal of Biological Chemistry, 2005, 280, 40668-40675.	3.4	79
36	The AtRAD51C Gene Is Required for Normal Meiotic Chromosome Synapsis and Double-Stranded Break Repair in Arabidopsis. Plant Physiology, 2005, 138, 965-976.	4.8	90

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37	Characterization of Arabidopsis thaliana SMC1 and SMC3: evidence that AtSMC3 may function beyond chromosome cohesion. Journal of Cell Science, 2005, 118, 3037-3048.	2.0	115
38	The binding of iron and zinc to glyoxalase II occurs exclusively as di-metal centers and is unique within the metallo-Î²-lactamase family. Journal of Biological Inorganic Chemistry, 2004, 9, 429-438.	2.6	46
39	Characterization of an unusual Ds transposable element in Arabidopsis thaliana: Insertion of an abortive circular transposition intermediate. Plant Molecular Biology, 2004, 55, 905-917.	3.9	9
40	Characterization of an unusual Ds transposable element in Arabidopsis thaliana: insertion of an abortive circular transposition intermediate. Plant Molecular Biology, 2004, 55, 905-917.	3.9	5
41	TheArabidopsisSYN1 cohesin protein is required for sister chromatid arm cohesion and homologous chromosome pairing. Journal of Cell Science, 2003, 116, 2999-3007.	2.0	220
42	Flexible Metal Binding of the Metallo-Î²-lactamase Domain:Â Glyoxalase II Incorporates Iron, Manganese, and Zinc in Vivoâ€. Biochemistry, 2003, 42, 11777-11786.	2.5	82
43	Explaining the inhibition of glyoxalase II by 9-fluorenylmethoxycarbonyl-protected glutathione derivatives. Archives of Biochemistry and Biophysics, 2003, 414, 271-278.	3.0	6
44	The Arabidopsis MALE MEIOCYTE DEATH1 Gene Encodes a PHD-Finger Protein That Is Required for Male Meiosis. Plant Cell, 2003, 15, 1281-1295.	6.6	168
45	The meiotic protein SWI1 is required for axial element formation and recombination initiation inArabidopsis. Development (Cambridge), 2003, 130, 3309-3318.	2.5	130
46	The Arabidopsis MALE MEIOCYTE DEATH1 gene encodes a PHD-finger protein that is required for male meiosis. Plant Cell, 2003, 15, 1281-95.	6.6	73
47	Cloning and characterization of two Arabidopsis genes that belong to the RAD21/REC8 family of chromosome cohesin proteins. Gene, 2001, 271, 99-108.	2.2	60
48	The dsy10 Mutation of Arabidopsis results in desynapsis and a general breakdown in meiosis. Sexual Plant Reproduction, 2001, 14, 63-67.	2.2	21
49	DEX1, a Novel Plant Protein, Is Required for Exine Pattern Formation during Pollen Development in Arabidopsis. Plant Physiology, 2001, 127, 1739-1749.	4.8	185
50	Arabidopsis Glyoxalase II Contains a Zinc/Iron Binuclear Metal Center That Is Essential for Substrate Binding and Catalysis. Journal of Biological Chemistry, 2001, 276, 4788-4795.	3.4	85
51	Isolation and Characterization of SYN1, a RAD21-Like Gene Essential for Meiosis in Arabidopsis. Plant Cell, 1999, 11, 417.	6.6	3
52	Integrin-Like Proteins are Localized to Plasma Membrane Fractions, not Plastids, in Arabidopsis. Plant and Cell Physiology, 1999, 40, 173-183.	3.1	34
53	Isolation and Characterization of SYN1, a RAD21-like Gene Essential for Meiosis in Arabidopsis. Plant Cell, 1999, 11, 417-430.	6.6	206
54	The radish (Raphanus sativus L.) mitochondrial cox2 gene contains an ACG at the predicted translation initiation site. Current Genetics, 1998, 34, 79-87.	1.7	16

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55	Analysis of the four cox2 genes found in turnip (Brassica campestris, Brassicaceae) mitochondria. American Journal of Botany, 1998, 85, 153-161.	1.7	13
56	Glyoxalase II from A. thaliana requires Zn(II) for catalytic activity. FEBS Letters, 1997, 418, 351-354.	2.8	57
57	Immunolocalization of integrin-like proteins in Arabidopsis and Chara. Physiologia Plantarum, 1997, 99, 7-14.	5.2	51
58	Molecular characterization of glyoxalase II from Arabidopsis thaliana. Plant Molecular Biology, 1997, 35, 471-481.	3.9	74
59	A comparative ultrastructural analysis of exine pattern development in wild-typeArabidopsis and a mutant defective in pattern formation. Protoplasma, 1997, 198, 53-65.	2.1	107
60	A defect in synapsis causes male sterility in a Tâ€ÐNAâ€tagged Arabidopsis thaliana mutant. Plant Journal, 1997, 11, 659-669.	5.7	85
61	Immunolocalization of integrin-like proteins in Arabidopsis and Chara. Physiologia Plantarum, 1997, 99, 7-14.	5.2	4
62	Characterization of the radish mitochondrialnad3/rps12 locus: analysis of recombination repeats and RNA editing. Current Genetics, 1996, 29, 564-571.	1.7	8
63	Characterization of three male-sterile mutants of Arabidopsis thaliana exhibiting alterations in meiosis. Sexual Plant Reproduction, 1996, 9, 1.	2.2	60
64	Characterization of the radish mitochondrial nad3/rps12 locus: analysis of recombination repeats and RNA editing. Current Genetics, 1996, 29, 564-571.	1.7	0
65	Ultrastructure of microsporogenesis and microgametogenesis inArabidopsis thaliana (L.) Heynh. ecotype Wassilewskija (Brassicaceae). Protoplasma, 1995, 185, 7-21.	2.1	250
66	Cytoplasmic Male Sterility in Brassica species. Advances in Cellular and Molecular Biology of Plants, 1995, , 515-555.	0.2	9
67	Intron loss from the NADH dehydrogenase subunit 4 gene of lettuce mitochondrial DNA: evidence for homologous recombination of a cDNA intermediate. Molecular Genetics and Genomics, 1994, 243, 97-105.	2.4	54
68	Organ-specific reduction in the abundance of a mitochondrial protein accompanies fertility restoration in cytoplasmic male-sterile radish. Plant Molecular Biology, 1994, 26, 935-946.	3.9	78
69	Subunit 6 of the Fo-ATP synthase complex from cytoplasmic male-sterile radish: RNA editing and NH2-terminal protein sequencing. Plant Molecular Biology, 1994, 24, 129-141.	3.9	28
70	Characterization of the radish mitochondrial orfB locus: possible relationship with male sterility in Ogura radish. Current Genetics, 1993, 24, 156-163.	1.7	104
71	Variable intron content of the NADH dehydrogenase subunit 4 gene of plant mitochondria. Current Genetics, 1992, 21, 423-430.	1.7	34
72	Novel mitochondrial genomes in Brassica napus somatic hybrids. Current Genetics, 1992, 22, 243-249.	1.7	48

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73	Atrazine-resistant cytoplasmic male-sterile-nigra broccoli obtained by protoplast fusion between cytoplasmic male-sterile Brassica oleracea and atrazine-resistant Brassica campestris. Theoretical and Applied Genetics, 1991, 83, 201-208.	3.6	39
74	The role of coxI-associated repeated sequences in plant mitochondrial DNA rearrangements and radish cytoplasmic male sterility. Current Genetics, 1991, 19, 183-190.	1.7	47
75	Characterization of radish mitochondrial atpA: influence of nuclear background on transcription of atpA-associated sequences and relationship with male sterility. Plant Molecular Biology, 1990, 15, 735-746.	3.9	62
76	Extensive mitochondrial specific transcription of theBrassica campestrismitochondrial genome. Nucleic Acids Research, 1987, 15, 5141-5156.	14.5	92
77	Alkaline opening of imidazole ring of 7-methylguanosine. 1. Analysis of the resulting pyrimidine derivatives. Chemico-Biological Interactions, 1982, 41, 217-233.	4.0	22
78	Alkaline opening of imidazole ring of 7-methylguanosine. 2. Further studies on reaction mechanisms and products. Chemico-Biological Interactions, 1982, 41, 235-249.	4.0	33
79	Purification and characterization of Escherichia coli formamidopyrimidine-DNA glycosylase that excises damaged 7-methylguanine from deoxyribonucleic acid. Biochemistry, 1981, 20, 5201-5207.	2.5	78