

Christopher A Makaroff

List of Publications by Year in descending order

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79
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3,867
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94433

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79
docs citations

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times ranked

2815
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrastructure of microsporogenesis and microgametogenesis in <i>Arabidopsis thaliana</i> (L.) Heynh. ecotype Wassilewskija (Brassicaceae). <i>Protoplasma</i> , 1995, 185, 7-21.	2.1	250
2	The <i>Arabidopsis</i> SYN1 cohesin protein is required for sister chromatid arm cohesion and homologous chromosome pairing. <i>Journal of Cell Science</i> , 2003, 116, 2999-3007.	2.0	220
3	Isolation and Characterization of SYN1, a RAD21-like Gene Essential for Meiosis in <i>Arabidopsis</i> . <i>Plant Cell</i> , 1999, 11, 417-430.	6.6	206
4	DEX1, a Novel Plant Protein, Is Required for Exine Pattern Formation during Pollen Development in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2001, 127, 1739-1749.	4.8	185
5	The <i>Arabidopsis</i> MALE MEIOCYTE DEATH1 Gene Encodes a PHD-Finger Protein That Is Required for Male Meiosis. <i>Plant Cell</i> , 2003, 15, 1281-1295.	6.6	168
6	The meiotic protein SWI1 is required for axial element formation and recombination initiation in <i>Arabidopsis</i> . <i>Development (Cambridge)</i> , 2003, 130, 3309-3318.	2.5	130
7	Characterization of <i>Arabidopsis thaliana</i> SMC1 and SMC3: evidence that AtSMC3 may function beyond chromosome cohesion. <i>Journal of Cell Science</i> , 2005, 118, 3037-3048.	2.0	115
8	A comparative ultrastructural analysis of exine pattern development in wild-type <i>Arabidopsis</i> and a mutant defective in pattern formation. <i>Protoplasma</i> , 1997, 198, 53-65.	2.1	107
9	Characterization of the radish mitochondrial orfB locus: possible relationship with male sterility in <i>Ogura radish</i> . <i>Current Genetics</i> , 1993, 24, 156-163.	1.7	104
10	Extensive mitochondrial specific transcription of the <i>Brassica campestris</i> mitochondrial genome. <i>Nucleic Acids Research</i> , 1987, 15, 5141-5156.	14.5	92
11	The AtRAD51C Gene Is Required for Normal Meiotic Chromosome Synapsis and Double-Stranded Break Repair in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2005, 138, 965-976.	4.8	90
12	A defect in synapsis causes male sterility in a DNA-tagged <i>Arabidopsis thaliana</i> mutant. <i>Plant Journal</i> , 1997, 11, 659-669.	5.7	85
13	<i>Arabidopsis</i> Glyoxalase II Contains a Zinc/Iron Binuclear Metal Center That Is Essential for Substrate Binding and Catalysis. <i>Journal of Biological Chemistry</i> , 2001, 276, 4788-4795.	3.4	85
14	Flexible Metal Binding of the Metallo- β -lactamase Domain: Glyoxalase II Incorporates Iron, Manganese, and Zinc in Vivo. <i>Biochemistry</i> , 2003, 42, 11777-11786.	2.5	82
15	Structural Studies on a Mitochondrial Glyoxalase II. <i>Journal of Biological Chemistry</i> , 2005, 280, 40668-40675.	3.4	79
16	Purification and characterization of <i>Escherichia coli</i> formamidopyrimidine-DNA glycosylase that excises damaged 7-methylguanine from deoxyribonucleic acid. <i>Biochemistry</i> , 1981, 20, 5201-5207.	2.5	78
17	Organ-specific reduction in the abundance of a mitochondrial protein accompanies fertility restoration in cytoplasmic male-sterile radish. <i>Plant Molecular Biology</i> , 1994, 26, 935-946.	3.9	78
18	Molecular characterization of glyoxalase II from <i>Arabidopsis thaliana</i> . <i>Plant Molecular Biology</i> , 1997, 35, 471-481.	3.9	74

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19	The Arabidopsis MALE MEIOCYTE DEATH1 gene encodes a PHD-finger protein that is required for male meiosis. <i>Plant Cell</i> , 2003, 15, 1281-95.	6.6	73
20	<i>Arabidopsis</i> Separase AESP Is Essential for Embryo Development and the Release of Cohesin during Meiosis. <i>Plant Cell</i> , 2006, 18, 1213-1225.	6.6	69
21	Characterization of radish mitochondrial atpA: influence of nuclear background on transcription of atpA-associated sequences and relationship with male sterility. <i>Plant Molecular Biology</i> , 1990, 15, 735-746.	3.9	62
22	Arabidopsis ETHE1 Encodes a Sulfur Dioxygenase That Is Essential for Embryo and Endosperm Development. <i>Plant Physiology</i> , 2012, 160, 226-236.	4.8	62
23	Characterization of three male-sterile mutants of <i>Arabidopsis thaliana</i> exhibiting alterations in meiosis. <i>Sexual Plant Reproduction</i> , 1996, 9, 1.	2.2	60
24	Cloning and characterization of two <i>Arabidopsis</i> genes that belong to the RAD21/REC8 family of chromosome cohesin proteins. <i>Gene</i> , 2001, 271, 99-108.	2.2	60
25	Glyoxalase II from <i>A. thaliana</i> requires Zn(II) for catalytic activity. <i>FEBS Letters</i> , 1997, 418, 351-354.	2.8	57
26	Intron loss from the NADH dehydrogenase subunit 4 gene of lettuce mitochondrial DNA: evidence for homologous recombination of a cDNA intermediate. <i>Molecular Genetics and Genomics</i> , 1994, 243, 97-105.	2.4	54
27	Immunolocalization of integrin-like proteins in <i>Arabidopsis</i> and <i>Chara</i> . <i>Physiologia Plantarum</i> , 1997, 99, 7-14.	5.2	51
28	The <i>Arabidopsis</i> SKP1 homolog ASK1 controls meiotic chromosome remodeling and release of chromatin from the nuclear membrane and nucleolus. <i>Journal of Cell Science</i> , 2006, 119, 3754-3763.	2.0	49
29	Novel mitochondrial genomes in <i>Brassica napus</i> somatic hybrids. <i>Current Genetics</i> , 1992, 22, 243-249.	1.7	48
30	The role of coxl-associated repeated sequences in plant mitochondrial DNA rearrangements and radish cytoplasmic male sterility. <i>Current Genetics</i> , 1991, 19, 183-190.	1.7	47
31	<i>Arabidopsis thaliana</i> WAPL Is Essential for the Prophase Removal of Cohesin during Meiosis. <i>PLoS Genetics</i> , 2014, 10, e1004497.	3.5	47
32	The binding of iron and zinc to glyoxalase II occurs exclusively as di-metal centers and is unique within the metallo- β -lactamase family. <i>Journal of Biological Inorganic Chemistry</i> , 2004, 9, 429-438.	2.6	46
33	The PHD Finger Protein MMD1/DUET Ensures the Progression of Male Meiotic Chromosome Condensation and Directly Regulates the Expression of the Condensin Gene <i>CAP-D3</i> . <i>Plant Cell</i> , 2016, 28, 1894-1909.	6.6	46
34	Methyl recycling activities are co-ordinately regulated during plant development. <i>Journal of Experimental Botany</i> , 2007, 58, 1083-1098.	4.8	44
35	ASK1, a SKP1 homolog, is required for nuclear reorganization, presynaptic homolog juxtaposition and the proper distribution of cohesin during meiosis in <i>Arabidopsis</i> . <i>Plant Molecular Biology</i> , 2006, 62, 99-110.	3.9	43
36	Structure of an ETHE1-like protein from <i>Arabidopsis thaliana</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2006, 62, 964-970.	2.5	40

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37	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
38	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
39	SWI1 Is Required for Meiotic Chromosome Remodeling Events. Molecular Plant, 2008, 1, 620-633.	8.3	38
40	Variable intron content of the NADH dehydrogenase subunit 4 gene of plant mitochondria. Current Genetics, 1992, 21, 423-430.	1.7	34
41	Integrin-Like Proteins are Localized to Plasma Membrane Fractions, not Plastids, in Arabidopsis. Plant and Cell Physiology, 1999, 40, 173-183.	3.1	34
42	Arabidopsis CHROMOSOME TRANSMISSION FIDELITY 7 (AtCTF7 / ECO1) is required for DNA repair, mitosis and meiosis. Plant Journal, 2013, 75, 927-940.	5.7	34
43	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
44	The Arabidopsis cohesin protein SYN3 localizes to the nucleolus and is essential for gametogenesis. Plant Journal, 2007, 50, 1020-1034.	5.7	33
45	In Favor of Establishment: Regulation of Chromatid Cohesion in Plants. Frontiers in Plant Science, 2017, 8, 846.	3.6	30
46	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
47	The Arabidopsis SYN3 cohesin protein is important for early meiotic events. Plant Journal, 2012, 71, 147-160.	5.7	28
48	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
49	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
50	The dsy10 Mutation of Arabidopsis results in desynapsis and a general breakdown in meiosis. Sexual Plant Reproduction, 2001, 14, 63-67.	2.2	21
51	Arabidopsis Separase Functions beyond the Removal of Sister Chromatid Cohesion during Meiosis. Plant Physiology, 2009, 151, 323-333.	4.8	21
52	Side Chain and Backbone Dynamics of Phospholamban in Phospholipid Bilayers Utilizing ² H and ¹⁵ N Solid-State NMR Spectroscopy. Biochemistry, 2007, 46, 11695-11706.	2.5	20
53	The Radially Swollen 4 Separase Mutation of Arabidopsis thaliana Blocks Chromosome Disjunction and Disrupts the Radial Microtubule System in Meicytes. PLoS ONE, 2011, 6, e19459.	2.5	20
54	Arabidopsis thaliana Mitochondrial Glyoxalase 2-1 Exhibits β -Lactamase Activity. Biochemistry, 2009, 48, 8491-8493.	2.5	19

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55	The radish (<i>Raphanus sativus</i> L.) mitochondrial <i>cox2</i> gene contains an ACG at the predicted translation initiation site. <i>Current Genetics</i> , 1998, 34, 79-87.	1.7	16
56	Spectroscopic studies on <i>Arabidopsis</i> ETHE1, a glyoxalase II-like protein. <i>Journal of Inorganic Biochemistry</i> , 2008, 102, 1825-1830.	3.5	16
57	Analysis of the four <i>cox2</i> genes found in turnip (<i>Brassica campestris</i> , Brassicaceae) mitochondria. <i>American Journal of Botany</i> , 1998, 85, 153-161.	1.7	13
58	Proper Levels of the <i>Arabidopsis</i> Cohesion Establishment Factor CTF7 Are Essential for Embryo and Megagametophyte, But Not Endosperm, Development. <i>Plant Physiology</i> , 2010, 154, 820-832.	4.8	13
59	Plant Cohesins, Common Themes and Unique Roles. <i>Current Protein and Peptide Science</i> , 2011, 12, 93-104.	1.4	13
60	<i>Arabidopsis thaliana</i> GLX2-1 contains a dinuclear metal binding site, but is not a glyoxalase 2. <i>Biochemical Journal</i> , 2009, 417, 323-330.	3.7	12
61	Characterization of an unusual Ds transposable element in <i>Arabidopsis thaliana</i> : Insertion of an abortive circular transposition intermediate. <i>Plant Molecular Biology</i> , 2004, 55, 905-917.	3.9	9
62	The metal ion requirements of <i>Arabidopsis thaliana</i> Glx2-2 for catalytic activity. <i>Journal of Biological Inorganic Chemistry</i> , 2010, 15, 249-258.	2.6	9
63	Converting GLX2-1 into an Active Glyoxalase II. <i>Biochemistry</i> , 2010, 49, 8228-8236.	2.5	9
64	Cytoplasmic Male Sterility in Brassica species. <i>Advances in Cellular and Molecular Biology of Plants</i> , 1995, , 515-555.	0.2	9
65	Characterization of the radish mitochondrial <i>nad3/rps12</i> locus: analysis of recombination repeats and RNA editing. <i>Current Genetics</i> , 1996, 29, 564-571.	1.7	8
66	Expression of Epitope-Tagged SYN3 Cohesin Proteins Can Disrupt Meiosis in <i>Arabidopsis</i> . <i>Journal of Genetics and Genomics</i> , 2014, 41, 153-164.	3.9	7
67	Explaining the inhibition of glyoxalase II by 9-fluorenylmethoxycarbonyl-protected glutathione derivatives. <i>Archives of Biochemistry and Biophysics</i> , 2003, 414, 271-278.	3.0	6
68	The Opposing Actions of <i>Arabidopsis</i> CHROMOSOME TRANSMISSION FIDELITY7 and WINGS APART-LIKE1 and 2 Differ in Mitotic and Meiotic Cells. <i>Plant Cell</i> , 2016, 28, 521-536.	6.6	5
69	Characterization of an unusual Ds transposable element in <i>Arabidopsis thaliana</i> : insertion of an abortive circular transposition intermediate. <i>Plant Molecular Biology</i> , 2004, 55, 905-917.	3.9	5
70	Immunolocalization Protocols for Visualizing Meiotic Proteins in <i>Arabidopsis thaliana</i> : Method 3. <i>Methods in Molecular Biology</i> , 2013, 990, 109-118.	0.9	4
71	Immunolocalization of integrin-like proteins in <i>Arabidopsis</i> and <i>Chara</i> . <i>Physiologia Plantarum</i> , 1997, 99, 7-14.	5.2	4
72	Isolation and Characterization of SYN1, a RAD21-Like Gene Essential for Meiosis in <i>Arabidopsis</i> . <i>Plant Cell</i> , 1999, 11, 417.	6.6	3

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73	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
74	Hunting Down SYN3 in Chloroplasts of Arabidopsis thaliana. Microscopy and Microanalysis, 2012, 18, 92-93.	0.4	0
75	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
76	The SYN3 mutation affects megagametogenesis and seed development in Arabidopsis thaliana. FASEB Journal, 2006, 20, A894.	0.5	0
77	The dsy10 mutation affects sister chromatid cohesion and synapsis during meiosis in A. thaliana. FASEB Journal, 2006, 20, A894.	0.5	0
78	Plant Cohesins, Common Themes and Unique Roles. Current Protein and Peptide Science, 2011, 999, 1-12.	1.4	0
79	Characterization of the radish mitochondrial nad3/rps12 locus: analysis of recombination repeats and RNA editing. Current Genetics, 1996, 29, 564-571.	1.7	0