Katherine W Osteryoung

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Genome, Functional Gene Annotation, and Nuclear Transformation of the Heterokont Oleaginous Alga Nannochloropsis oceanica CCMP1779. PLoS Genetics, 2012, 8, e1003064.	3.5	376
2	Chloroplast Division in Higher Plants Requires Members of Two Functionally Divergent Gene Families with Homology to Bacterial ftsZ. Plant Cell, 1998, 10, 1991-2004.	6.6	323
3	Conserved cell and organelle division. Nature, 1995, 376, 473-474.	27.8	286
4	The Division of Endosymbiotic Organelles. Science, 2003, 302, 1698-1704.	12.6	281
5	Ftsz Ring Formation at the Chloroplast Division Site in Plants. Journal of Cell Biology, 2001, 153, 111-120.	5.2	272
6	ARC5, a cytosolic dynamin-like protein from plants, is part of the chloroplast division machinery. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 4328-4333.	7.1	250
7	ARC6 Is a J-Domain Plastid Division Protein and an Evolutionary Descendant of the Cyanobacterial Cell Division Protein Ftn2[W]. Plant Cell, 2003, 15, 1918-1933.	6.6	237
8	Exceptional Sensitivity of Rubisco Activase to Thermal Denaturation in Vitro and in Vivo. Plant Physiology, 2001, 127, 1053-1064.	4.8	234
9	Analysis of carotenoid biosynthetic gene expression during marigold petal development. Plant Molecular Biology, 2001, 45, 281-293.	3.9	209
10	A homologue of the bacterial cell division site-determining factor MinD mediates placement of the chloroplast division apparatus. Current Biology, 2000, 10, 507-516.	3.9	204
11	Identification of cyanobacterial cell division genes by comparative and mutational analyses. Molecular Microbiology, 2005, 56, 126-143.	2.5	159
12	Division and Dynamic Morphology of Plastids. Annual Review of Plant Biology, 2014, 65, 443-472.	18.7	154
13	PDV1 and PDV2 Mediate Recruitment of the Dynamin-Related Protein ARC5 to the Plastid Division Site. Plant Cell, 2006, 18, 2517-2530.	6.6	149
14	Elevated ATPase Activity of KaiC Applies a Circadian Checkpoint on Cell Division in Synechococcus elongatus. Cell, 2010, 140, 529-539.	28.9	136
15	Colocalization of Plastid Division Proteins in the Chloroplast Stromal Compartment Establishes a New Functional Relationship between FtsZ1 and FtsZ2 in Higher Plants. Plant Physiology, 2001, 127, 1656-1666.	4.8	130
16	Chloroplast Division and Morphology Are Differentially Affected by Overexpression of FtsZ1 and FtsZ2 Genes in Arabidopsis. Plant Physiology, 2000, 124, 1668-1677.	4.8	120
17	THEPLASTIDDIVISIONMACHINE. Annual Review of Plant Biology, 2001, 52, 315-333.	14.3	120
18	<i>Arabidopsis</i> ARC6 Coordinates the Division Machineries of the Inner and Outer Chloroplast Membranes through Interaction with PDV2 in the Intermembrane Space. Plant Cell, 2008, 20, 2460-2470.	6.6	115

#	Article	IF	Citations
19	The Endosomal Protein CHARGED MULTIVESICULAR BODY PROTEIN1 Regulates the Autophagic Turnover of Plastids in Arabidopsis. Plant Cell, 2015, 27, 391-402.	6.6	112
20	FZL, an FZO-like protein in plants, is a determinant of thylakoid and chloroplast morphology. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6759-6764.	7.1	111
21	PARC6, a novel chloroplast division factor, influences FtsZ assembly and is required for recruitment of PDV1 during chloroplast division in Arabidopsis. Plant Journal, 2009, 59, 700-711.	5.7	107
22	Chloroplast Division. Traffic, 2007, 8, 451-461.	2.7	97
23	The Molecular Machinery of Chloroplast Division. Plant Physiology, 2018, 176, 138-151.	4.8	95
24	Plastid division: across time and space. Current Opinion in Plant Biology, 2008, 11, 577-584.	7.1	91
25	Arabidopsis FtsZ2-1 and FtsZ2-2 Are Functionally Redundant, But FtsZ-Based Plastid Division Is Not Essential for Chloroplast Partitioning or Plant Growth and Development. Molecular Plant, 2009, 2, 1211-1222.	8.3	84
26	Plastid chaperonin proteins Cpn60Î± and Cpn60Î² are required for plastid division in Arabidopsis thaliana. BMC Plant Biology, 2009, 9, 38.	3.6	84
27	Protein gradients on the nucleoid position the carbon-fixing organelles of cyanobacteria. ELife, 2018, 7, .	6.0	82
28	New Connections across Pathways and Cellular Processes: Industrialized Mutant Screening Reveals Novel Associations between Diverse Phenotypes in Arabidopsis Â Â. Plant Physiology, 2008, 146, 1482-1500.	4.8	79
29	FtsZ in chloroplast division: structure, function and evolution. Current Opinion in Cell Biology, 2013, 25, 461-470.	5.4	74
30	Early divergence of the FtsZ1 and FtsZ2 plastid division gene families in photosynthetic eukaryotes. Gene, 2003, 320, 97-108.	2.2	69
31	GTP-dependent Heteropolymer Formation and Bundling of Chloroplast FtsZ1 and FtsZ2. Journal of Biological Chemistry, 2010, 285, 20634-20643.	3.4	60
32	Effects of Mutations in Arabidopsis FtsZ1 on Plastid Division, FtsZ Ring Formation and Positioning, and FtsZ Filament Morphology in Vivo. Plant and Cell Physiology, 2007, 48, 775-791.	3.1	58
33	Plastid division: evidence for a prokaryotically derived mechanism. Current Opinion in Plant Biology, 1998, 1, 475-479.	7.1	56
34	<i>In vivo</i> quantitative relationship between plastid division proteins FtsZ1 and FtsZ2 and identification of ARC6 and ARC3 in a native FtsZ complex. Biochemical Journal, 2008, 412, 367-378.	3.7	52
35	Distinct functions of chloroplast FtsZ1 and FtsZ2 in Z-ring structure and remodeling. Journal of Cell Biology, 2012, 199, 623-637.	5.2	50
36	Chloroplast Division Protein ARC3 Regulates Chloroplast FtsZ-Ring Assembly and Positioning in <i>Arabidopsis</i> through Interaction with FtsZ2. Plant Cell, 2013, 25, 1787-1802.	6.6	47

#	Article	IF	Citations
37	<i>FtsHi1/ARC1</i> is an essential gene in Arabidopsis that links chloroplast biogenesis and division. Plant Journal, 2012, 72, 856-867.	5.7	42
38	Roles of Arabidopsis PARC6 in Coordination of the Chloroplast Division Complex and Negative Regulation of FtsZ Assembly. Plant Physiology, 2016, 170, 250-262.	4.8	40
39	<i>REDUCED CHLOROPLAST COVERAGE</i> genes from <i>Arabidopsis thaliana</i> help to establish the size of the chloroplast compartment. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1116-25.	7.1	39
40	Thylakoid-Bound Polysomes and a Dynamin-Related Protein, FZL, Mediate Critical Stages of the Linear Chloroplast Biogenesis Program in Greening Arabidopsis Cotyledons. Plant Cell, 2018, 30, 1476-1495.	6.6	39
41	Nonâ€invasive, wholeâ€plant imaging of chloroplast movement and chlorophyll fluorescence reveals photosynthetic phenotypes independent of chloroplast photorelocation defects in chloroplast division mutants. Plant Journal, 2015, 84, 428-442.	5.7	37
42	Chloroplast FtsZ assembles into a contractible ring via tubulin-like heteropolymerization. Nature Plants, 2016, 2, 16095.	9.3	36
43	CLUMPED CHLOROPLASTS 1 is required for plastid separation in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18530-18535.	7.1	35
44	Robust <scp>M</scp>inâ€system oscillation in the presence of internal photosynthetic membranes in cyanobacteria. Molecular Microbiology, 2017, 103, 483-503.	2.5	35
45	ORHis, a Natural Variant of OR, Specifically Interacts with Plastid Division Factor ARC3 to Regulate Chromoplast Number and Carotenoid Accumulation. Molecular Plant, 2020, 13, 864-878.	8.3	35
46	Engineering Cyanobacterial Cell Morphology for Enhanced Recovery and Processing of Biomass. Applied and Environmental Microbiology, 2017, 83, .	3.1	31
47	Variations in chloroplast movement and chlorophyll fluorescence among chloroplast division mutants under light stress. Journal of Experimental Botany, 2017, 68, 3541-3555.	4.8	30
48	Organelle Fission. Crossing the Evolutionary Divide: Fig. 1.. Plant Physiology, 2000, 123, 1213-1216.	4.8	28
49	Conserved Dynamics of Chloroplast Cytoskeletal FtsZ Proteins Across Photosynthetic Lineages. Plant Physiology, 2018, 176, 295-306.	4.8	25
50	A J-Like Protein Influences Fatty Acid Composition of Chloroplast Lipids in Arabidopsis. PLoS ONE, 2011, 6, e25368.	2.5	24
51	Functional Analysis of the Chloroplast Division Complex Using<i>Schizosaccharomyces pombe</i>as a Heterologous Expression System. Microscopy and Microanalysis, 2016, 22, 275-289.	0.4	17
52	The Chloroplast Tubulin Homologs FtsZA and FtsZB from the Red Alga Galdieria sulphuraria Co-assemble into Dynamic Filaments. Journal of Biological Chemistry, 2017, 292, 5207-5215.	3.4	14
53	From Endosymbiosis to Synthetic Photosynthetic Life. Plant Physiology, 2010, 154, 593-597.	4.8	13
54	ARC3 Activation by PARC6 Promotes FtsZ-Ring Remodeling at the Chloroplast Division Site. Plant Cell, 2019, 31, 862-885.	6.6	13

#	Article	IF	Citations
55	Orthogonal Degron System for Controlled Protein Degradation in Cyanobacteria. ACS Synthetic Biology, 2021, 10, 1667-1681.	3.8	13
56	Immunofluorescence Microscopy for Localization of Arabidopsis Chloroplast Proteins. Methods in Molecular Biology, 2011, 774, 33-58.	0.9	11
57	Allelic Variation in the Chloroplast Division Gene <i>FtsZ2-2</i> Leads to Natural Variation in Chloroplast Size. Plant Physiology, 2019, 181, 1059-1074.	4.8	8
58	The Arabidopsis thaliana chloroplast division protein FtsZ1 counterbalances FtsZ2 filament stability inÂvitro. Journal of Biological Chemistry, 2021, 296, 100627.	3.4	6
59	The chloroplast division protein ARC6 acts to inhibit disassembly of GDP-bound FtsZ2. Journal of Biological Chemistry, 2018, 293, 10692-10706.	3.4	4
60	Crystal structure of a conserved domain in the intermembrane space region of the plastid division protein ARC6. Protein Science, 2016, 25, 523-529.	7.6	3
61	Chloroplast Division: A Work of ARTEMIS. Current Biology, 2002, 12, R844-R845.	3.9	0
62	Protein Gradients on the Nucleoid Position the Carbon-Fixing Organelles of Cyanobacteria. SSRN Electronic Journal, 0, , .	0.4	0