Simona Eicke

List of Publications by Year in descending order

22 papers	1,762 citations	430874 18 h-index	677142 22 g-index
24 all docs	24 docs citations	24 times ranked	1980 citing authors

#	Article	IF	Citations
1	Î²-AMYLASE4, a Noncatalytic Protein Required for Starch Breakdown, Acts Upstream of Three Active Î²-Amylases in Arabidopsis Chloroplasts Â. Plant Cell, 2008, 20, 1040-1058.	6.6	285
2	STARCH-EXCESS4 Is a Laforin-Like Phosphoglucan Phosphatase Required for Starch Degradation in Arabidopsis thaliana Â Â. Plant Cell, 2009, 21, 334-346.	6.6	208
3	PROTEIN TARGETING TO STARCH Is Required for Localising GRANULE-BOUND STARCH SYNTHASE to Starch Granules and for Normal Amylose Synthesis in Arabidopsis. PLoS Biology, 2015, 13, e1002080.	5.6	139
4	Evidence for Distinct Mechanisms of Starch Granule Breakdown in Plants. Journal of Biological Chemistry, 2006, 281, 12050-12059.	3.4	131
5	Starch Granule Biosynthesis in Arabidopsis Is Abolished by Removal of All Debranching Enzymes but Restored by the Subsequent Removal of an Endoamylase. Plant Cell, 2009, 20, 3448-3466.	6.6	129
6	Blocking the Metabolism of Starch Breakdown Products in Arabidopsis Leaves Triggers Chloroplast Degradation. Molecular Plant, 2009, 2, 1233-1246.	8.3	127
7	Starch synthase 4 is essential for coordination of starch granule formation with chloroplast division during Arabidopsis leaf expansion. New Phytologist, 2013, 200, 1064-1075.	7.3	93
8	Plastid thylakoid architecture optimizes photosynthesis in diatoms. Nature Communications, 2017, 8, 15885.	12.8	93
9	Plastidial NAD-Dependent Malate Dehydrogenase Is Critical for Embryo Development and Heterotrophic Metabolism in Arabidopsis. Plant Physiology, 2014, 164, 1175-1190.	4.8	78
10	The Starch Granule-Associated Protein EARLY STARVATION1 Is Required for the Control of Starch Degradation in Arabidopsis thaliana Leaves. Plant Cell, 2016, 28, 1472-1489.	6.6	64
11	Two Plastidial Coiled-Coil Proteins Are Essential for Normal Starch Granule Initiation in Arabidopsis. Plant Cell, 2018, 30, 1523-1542.	6.6	62
12	The Simultaneous Abolition of Three Starch Hydrolases Blocks Transient Starch Breakdown in Arabidopsis. Journal of Biological Chemistry, 2012, 287, 41745-41756.	3.4	56
13	Distinct Functions of STARCH SYNTHASE 4 Domains in Starch Granule Formation. Plant Physiology, 2018, 176, 566-581.	4.8	50
14	STARCH SYNTHASE5, a Noncanonical Starch Synthase-Like Protein, Promotes Starch Granule Initiation in Arabidopsis. Plant Cell, 2020, 32, 2543-2565.	6.6	49
15	Genetic Evidence That Chain Length and Branch Point Distributions Are Linked Determinants of Starch Granule Formation in Arabidopsis Â Â. Plant Physiology, 2014, 165, 1457-1474.	4.8	46
16	A multifaceted analysis reveals two distinct phases of chloroplast biogenesis during de-etiolation in Arabidopsis. ELife, 2021, 10, .	6.0	41
17	Diurnal Leaf Starch Content: An Orphan Trait in Forage Legumes. Agronomy, 2017, 7, 16.	3.0	32
18	LIKE SEX4 1 Acts as a Î²-Amylase-Binding Scaffold on Starch Granules during Starch Degradation. Plant Cell, 2019, 31, 2169-2186.	6.6	26

#	Article	IF	Citations
19	Coalescence and directed anisotropic growth of starch granule initials in subdomains of Arabidopsis thaliana chloroplasts. Nature Communications, 2021, 12, 6944.	12.8	21
20	Distinct plastid fructose bisphosphate aldolases function in photosynthetic and non-photosynthetic metabolism in Arabidopsis. Journal of Experimental Botany, 2021, 72, 3739-3755.	4.8	19
21	Increasing the carbohydrate storage capacity of plants by engineering a glycogen-like polymer pool in the cytosol. Metabolic Engineering, 2017, 40, 23-32.	7.0	7
22	Ectopic maltase alleviates dwarf phenotype and improves plant frost tolerance of maltose transporter mutants. Plant Physiology, 2021, 186, 315-329.	4.8	5