Joerg Fettke

List of Publications by Year in Descending Order

52 papers	1,370 citations	22 h-index	36 g-index
56 ext. papers	1,636 ext. citations	5.4 avg, IF	4.54 L-index

#	Paper	IF	Citations
52	A review of starch, a unique biopolymer - Structure, metabolism and in planta modifications.. *Plant Science*, **2022**, 318, 111223	5.3	6
51	Carbon pathways during transitory starch degradation in Arabidopsis differentially affect the starch granule number and morphology in the dpe2/phs1 mutant background.. *Plant Physiology and Biochemistry*, **2022**, 180, 35-41	5.4	0
50	Indication that starch and sucrose are biomarkers for oil yield in oil palm (Elaeis guineensis Jacq.). *Food Chemistry*, **2022**, 393, 133361	8.5	0
49	Starch-A complex and undeciphered biopolymer. *Journal of Plant Physiology*, **2021**, 258-259, 153389	3.6	6
48	Starch Granules in Mesophyll and Guard Cells Show Similar Morphology but Differences in Size and Number. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	1
47	Starch granule initiation in Arabidopsis thaliana chloroplasts. *Plant Journal*, **2021**, 107, 688-697	6.9	7
46	Effect of Short-Term Cold Treatment on Carbohydrate Metabolism in Potato Leaves. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	5
45	Identification of Two Arabidopsis thaliana Plasma Membrane Transporters Able to Transport Glucose 1-Phosphate. *Plant and Cell Physiology*, **2020**, 61, 381-392	4.9	2
44	Starch and Glycogen Analyses: Methods and Techniques. *Biomolecules*, **2020**, 10,	5.9	11
43	Do carbohydrate metabolism and partitioning contribute to the higher salt tolerance of Hordeum marinum compared to Hordeum vulgare?. *Acta Physiologiae Plantarum*, **2019**, 41, 1	2.6	8
42	Canavanine-Induced Decrease in Nitric Oxide Synthesis Alters Activity of Antioxidant System but Does Not Impact S-Nitrosoglutathione Catabolism in Tomato Roots. *Frontiers in Plant Science*, **2019**, 10, 1077	6.2	6
41	EARLY STARVATION1 specifically affects the phosphorylation action of starch-related dikinases. *Plant Journal*, **2018**, 95, 126-137	6.9	7
40	Parameters of Starch Granule Genesis in Chloroplasts of. *Frontiers in Plant Science*, **2018**, 9, 761	6.2	19
39	Changes of proteins during dormancy and bud development of sweet cherry (Prunus avium L.). *Scientia Horticulturae*, **2018**, 239, 41-49	4.1	3
38	Starch Synthase 4 and Plastidal Phosphorylase Differentially Affect Starch Granule Number and Morphology. *Plant Physiology*, **2017**, 174, 73-85	6.6	26
37	Protein carbonylation linked to wheat seedling tolerance to water deficiency. *Environmental and Experimental Botany*, **2017**, 137, 84-95	5.9	5
36	Reduced starch granule number per chloroplast in the dpe2/phs1 mutant is dependent on initiation of starch degradation. *PLoS ONE*, **2017**, 12, e0187985	3.7	11

35	Proteomic analysis of S-nitrosylated and S-glutathionylated proteins in wheat seedlings with different dehydration tolerances. *Plant Physiology and Biochemistry*, **2016**, 108, 507-518	5.4	18
34	Modification of the endogenous NO level influences apple embryos dormancy by alterations of nitrated and biotinylated protein patterns. *Planta*, **2016**, 244, 877-91	4.7	15
33	Reduction of the plastidial phosphorylase in potato (Solanum tuberosum L.) reveals impact on storage starch structure during growth at low temperature. *Plant Physiology and Biochemistry*, **2016**, 100, 141-149	5.4	17
32	Starch phosphorylation: insights and perspectives. *Cellular and Molecular Life Sciences*, **2016**, 73, 2753-64	10.3	37
31	Intracellular and cell-to-apoplast compartmentation of carbohydrate metabolism. *Trends in Plant Science*, **2015**, 20, 490-7	13.1	23
30	Loss of cytosolic phosphoglucose isomerase affects carbohydrate metabolism in leaves and is essential for fertility of Arabidopsis. *Plant Physiology*, **2014**, 166, 753-65	6.6	28
29	Heterologous expression of AtPAP2 in transgenic potato influences carbon metabolism and tuber development. *FEBS Letters*, **2014**, 588, 3726-31	3.8	19
28	Analysis of the functional interaction of Arabidopsis starch synthase and branching enzyme isoforms reveals that the cooperative action of SSI and BEs results in glucans with polymodal chain length distribution similar to amylopectin. *PLoS ONE*, **2014**, 9, e102364	3.7	30
27	Reduction of the cytosolic phosphoglucomutase in Arabidopsis reveals impact on plant growth, seed and root development, and carbohydrate partitioning. *PLoS ONE*, **2014**, 9, e112468	3.7	33
26	The glucan phosphorylation mediated by Eglucan, water dikinase (GWD) is also essential in the light phase for a functional transitory starch turn-over. *Plant Signaling and Behavior*, **2014**, 9, e28892	2.5	19
25	Phosphorylation of transitory starch by Eglucan, water dikinase during starch turnover affects the surface properties and morphology of starch granules. *New Phytologist*, **2014**, 203, 495-507	9.8	45
24	Double knockout mutants of Arabidopsis grown under normal conditions reveal that the plastidial phosphorylase isozyme participates in transitory starch metabolism. *Plant Physiology*, **2014**, 164, 907-21	6.6	50
23	Carbon transitions from either Calvin cycle or transitory starch to heteroglycans as revealed by (14) C-labeling experiments using protoplasts from Arabidopsis. *Physiologia Plantarum*, **2013**, 149, 25-44	4.6	8
22	Feedback inhibition of starch degradation in Arabidopsis leaves mediated by trehalose 6-phosphate. *Plant Physiology*, **2013**, 163, 1142-63	6.6	124
21	Starch Synthesizing Reactions and Paths: in vitro and in vivo Studies. *Journal of Applied Glycoscience (1999)*, **2013**, 60, 3-20	1	26
20	The plastidial glucan, water dikinase (GWD) catalyses multiple phosphotransfer reactions. *FEBS Journal*, **2012**, 279, 1953-66	5.7	11
19	Secretory leukocyte protease inhibitor (SLPI) might contaminate murine monoclonal antibodies after purification on protein G. *Journal of Biotechnology*, **2012**, 158, 34-5	3.7	9
18	Two carbon fluxes to reserve starch in potato (Solanum tuberosum L.) tuber cells are closely interconnected but differently modulated by temperature. *Journal of Experimental Botany*, **2012**, 63, 3011-29	7	29

17	Identification of a novel heteroglycan-interacting protein, HIP 1.3, from Arabidopsis thaliana. *Journal of Plant Physiology*, **2011**, 168, 1415-25	3.6	15
16	Starch-related cytosolic heteroglycans in roots from Arabidopsis thaliana. *Journal of Plant Physiology*, **2011**, 168, 1406-14	3.6	12
15	Expression of human c-reactive protein in different systems and its purification from Leishmania tarentolae. *Protein Expression and Purification*, **2011**, 78, 55-60	2	20
14	Glucose-1-phosphate transport into protoplasts and chloroplasts from leaves of Arabidopsis. *Plant Physiology*, **2011**, 155, 1723-34	6.6	56
13	Starch-related carbon fluxes in roots and leaves of Arabidopsis thaliana. *Plant Signaling and Behavior*, **2011**, 6, 1060-2	2.5	2
12	Glucose 1-phosphate is efficiently taken up by potato (Solanum tuberosum) tuber parenchyma cells and converted to reserve starch granules. *New Phytologist*, **2010**, 185, 663-75	9.8	55
11	The Laforin-like dual-specificity phosphatase SEX4 from Arabidopsis hydrolyzes both C6- and C3-phosphate esters introduced by starch-related dikinases and thereby affects phase transition of alpha-glucans. *Plant Physiology*, **2010**, 152, 711-22	6.6	65
10	Eukaryotic starch degradation: integration of plastidial and cytosolic pathways. *Journal of Experimental Botany*, **2009**, 60, 2907-22	7	81
9	The two plastidial starch-related dikinases sequentially phosphorylate glucosyl residues at the surface of both the A- and B-type allomorphs of crystallized maltodextrins but the mode of action differs. *Plant Physiology*, **2009**, 150, 962-76	6.6	51
8	Cytosolic heteroglycans in photoautotrophic and in heterotrophic plant cells. *Phytochemistry*, **2009**, 70, 696-702	4	20
7	Glucan, water dikinase phosphorylates crystalline maltodextrins and thereby initiates solubilization. *Plant Journal*, **2008**, 55, 323-34	6.9	83
6	Alterations in cytosolic glucose-phosphate metabolism affect structural features and biochemical properties of starch-related heteroglycans. *Plant Physiology*, **2008**, 148, 1614-29	6.6	25
5	Glucan, water dikinase phosphorylates crystalline maltodextrins and thereby initiates solubilization. *Plant Journal*, **2008**, 080414150319983	6.9	2
4	A transglucosidase necessary for starch degradation and maltose metabolism in leaves at night acts on cytosolic heteroglycans (SHG). *Plant Journal*, **2006**, 46, 668-84	6.9	60
3	Identification, subcellular localization and biochemical characterization of water-soluble heteroglycans (SHG) in leaves of Arabidopsis thaliana L.: distinct SHG reside in the cytosol and in the apoplast. *Plant Journal*, **2005**, 43, 568-85	6.9	73
2	Analysis of cytosolic heteroglycans from leaves of transgenic potato (Solanum tuberosum L.) plants that under- or overexpress the Pho 2 phosphorylase isozyme. *Plant and Cell Physiology*, **2005**, 46, 1987-2004	4.9	41
1	The glycan substrate of the cytosolic (Pho 2) phosphorylase isozyme from Pisum sativum L.: identification, linkage analysis and subcellular localization. *Plant Journal*, **2004**, 39, 933-46	6.9	45