Julia Buitink

List of Publications by Year in Descending Order

70 papers	4,279 citations	34 h-index	65 g-index
79 ext. papers	4,953 ext. citations	5.7 avg, IF	5.36 L-index

#	Paper	IF	Citations
70	New Technologies for the Deployment of Extended Biocontrol **2022**, 245-255		
69	Gene co-expression analysis of tomato seed maturation reveals tissue-specific regulatory networks and hubs associated with the acquisition of desiccation tolerance and seed vigour. *BMC Plant Biology*, **2021**, 21, 124	5.3	4
68	Genetic determinants of seed protein plasticity in response to the environment in Medicago truncatula. *Plant Journal*, **2021**, 106, 1298-1311	6.9	0
67	Genome-Wide Association Studies of Seed Performance Traits in Response to Heat Stress in Uncover as a Regulator of Seed Germination Plasticity. *Frontiers in Plant Science*, **2021**, 12, 673072	6.2	2
66	Dataset for transcriptome and physiological response of mature tomato seed tissues to light and heat during fruit ripening. *Data in Brief*, **2021**, 34, 106671	1.2	
65	Dataset for the metabolic and physiological characterization of seeds from oilseed rape (L.) plants grown under single or combined effects of drought and clubroot pathogen. *Data in Brief*, **2021**, 37, 107247	1.2	1
64	RNA sequencing data for responses to drought stress and/or clubroot infection in developing seeds of. *Data in Brief*, **2021**, 38, 107392	1.2	
63	Molecular and environmental factors regulating seed longevity. *Biochemical Journal*, **2020**, 477, 305-323	3.8	28
62	A role for auxin signaling in the acquisition of longevity during seed maturation. *New Phytologist*, **2020**, 225, 284-296	9.8	17
61	The seed-specific heat shock factor A9 regulates the depth of dormancy in Medicago truncatula seeds via ABA signalling. *Plant, Cell and Environment*, **2020**, 43, 2508-2522	8.4	6
60	Deep learning-based detection of seedling development. *Plant Methods*, **2020**, 16, 103	5.8	12
59	A Seed-Specific Regulator of Triterpene Saponin Biosynthesis in. *Plant Cell*, **2020**, 32, 2020-2042	11.6	10
58	A physiological perspective of late maturation processes and establishment of seed quality in Medicago truncatula seeds **2019**, 44-54		1
57	Late seed maturation improves the preservation of seedling emergence during storage in soybean. *Journal of Seed Science*, **2018**, 40, 185-192	1	9
56	Letters to the twenty-first century botanist. Second series: What is a seed? 2. Regulation of desiccation tolerance and longevity in developing seeds: two faces of the same coin *Botany Letters*, **2018**, 165, 181-185	1.1	5
55	Whole-genome landscape of Medicago truncatula symbiotic genes. *Nature Plants*, **2018**, 4, 1017-1025	11.5	99
54	Genome-wide association studies with proteomics data reveal genes important for synthesis, transport and packaging of globulins in legume seeds. *New Phytologist*, **2017**, 214, 1597-1613	9.8	29

53	Molecular characterization of the acquisition of longevity during seed maturation in soybean. *PLoS ONE*, **2017**, 12, e0180282	3.7	41
52	Late seed maturation: drying without dying. *Journal of Experimental Botany*, **2017**, 68, 827-841	7	120
51	ABI5 Is a Regulator of Seed Maturation and Longevity in Legumes. *Plant Cell*, **2016**, 28, 2735-2754	11.6	62
50	Key genes involved in desiccation tolerance and dormancy across life forms. *Plant Science*, **2016**, 251, 162-168	5.3	24
49	Foreword. Special issue on desiccation biology. *Planta*, **2015**, 242, 367	4.7	1
48	Introduction to desiccation biology: from old borders to new frontiers. *Planta*, **2015**, 242, 369-78	4.7	42
47	A gene co-expression network predicts functional genes controlling the re-establishment of desiccation tolerance in germinated Arabidopsis thaliana seeds. *Planta*, **2015**, 242, 435-49	4.7	37
46	Identification of a molecular dialogue between developing seeds of Medicago truncatula and seedborne xanthomonads. *Journal of Experimental Botany*, **2015**, 66, 3737-52	7	15
45	Inference of Longevity-Related Genes from a Robust Coexpression Network of Seed Maturation Identifies Regulators Linking Seed Storability to Biotic Defense-Related Pathways. *Plant Cell*, **2015**, 27, 2692-708	11.6	80
44	Time-series analysis of the transcriptome of the re-establishment of desiccation tolerance by ABA in germinated Arabidopsis thaliana seeds. *Genomics Data*, **2015**, 5, 154-6		2
43	A regulatory network-based approach dissects late maturation processes related to the acquisition of desiccation tolerance and longevity of Medicago truncatula seeds. *Plant Physiology*, **2013**, 163, 757-74	6.6	119
42	An emerging picture of the seed desiccome: confirmed regulators and newcomers identified using transcriptome comparison. *Frontiers in Plant Science*, **2013**, 4, 497	6.2	25
41	LEA polypeptide profiling of recalcitrant and orthodox legume seeds reveals ABI3-regulated LEA protein abundance linked to desiccation tolerance. *Journal of Experimental Botany*, **2013**, 64, 4559-73	7	89
40	Legume adaptation to sulfur deficiency revealed by comparing nutrient allocation and seed traits in Medicago truncatula. *Plant Journal*, **2013**, 76, 982-96	6.9	23
39	A role for an endosperm-localized subtilase in the control of seed size in legumes. *New Phytologist*, **2012**, 196, 738-751	9.8	36
38	Temporal profiling of the heat-stable proteome during late maturation of Medicago truncatula seeds identifies a restricted subset of late embryogenesis abundant proteins associated with longevity. *Plant, Cell and Environment*, **2012**, 35, 1440-55	8.4	93
37	Quantitative trait loci analysis reveals a correlation between the ratio of sucrose/raffinose family oligosaccharides and seed vigour in Medicago truncatula. *Plant, Cell and Environment*, **2011**, 34, 1473-87	8.4	59
36	The reduction of seed-specific dehydrins reduces seed longevity in Arabidopsis thaliana. *Seed Science Research*, **2011**, 21, 165-173	1.3	67

35	MtPM25 is an atypical hydrophobic late embryogenesis-abundant protein that dissociates cold and desiccation-aggregated proteins. *Plant, Cell and Environment*, **2010**, 33, 418-30	8.4	81
34	The MtSNF4b subunit of the sucrose non-fermenting-related kinase complex connects after-ripening and constitutive defense responses in seeds of Medicago truncatula. *Plant Journal*, **2010**, 61, 792-803	6.9	15
33	Characterization of dormancy behaviour in seeds of the model legume Medicago truncatula. *Seed Science Research*, **2010**, 20, 97-107	1.3	28
32	Dormancy in Plant Seeds. *Topics in Current Genetics*, **2010**, 43-67		24
31	Desiccation tolerance: From genomics to the field. *Plant Science*, **2010**, 179, 554-564	5.3	106
30	Intracellular glasses and seed survival in the dry state. *Comptes Rendus - Biologies*, **2008**, 331, 788-95	1.4	113
29	The regulatory gamma subunit SNF4b of the sucrose non-fermenting-related kinase complex is involved in longevity and stachyose accumulation during maturation of Medicago truncatula seeds. *Plant Journal*, **2007**, 51, 47-59	6.9	58
28	Comparative analysis of the heat stable proteome of radicles of Medicago truncatula seeds during germination identifies late embryogenesis abundant proteins associated with desiccation tolerance. *Plant Physiology*, **2006**, 140, 1418-36	6.6	168
27	Transcriptome profiling uncovers metabolic and regulatory processes occurring during the transition from desiccation-sensitive to desiccation-tolerant stages in Medicago truncatula seeds. *Plant Journal*, **2006**, 47, 735-50	6.9	114
26	Changes in DNA and microtubules during loss and re-establishment of desiccation tolerance in germinating Medicago truncatula seeds. *Journal of Experimental Botany*, **2005**, 56, 2119-30	7	76
25	The role of sugars and hexose phosphorylation in regulating the re-establishment of desiccation tolerance in germinated radicles of Cucumis sativa and Medicago truncatula. *Physiologia Plantarum*, **2004**, 122, 200-209	4.6	6
24	Starvation, osmotic stress and desiccation tolerance lead to expression of different genes of the regulatory and subunits of the SnRK1 complex in germinating seeds of Medicago truncatula. *Plant, Cell and Environment*, **2004**, 27, 55-67	8.4	23
23	Glass formation in plant anhydrobiotes: survival in the dry state. *Cryobiology*, **2004**, 48, 215-28	2.7	270
22	The re-establishment of desiccation tolerance in germinated radicles of Medicago truncatula Gaertn. seeds. *Seed Science Research*, **2003**, 13, 273-286	1.3	83
21	Are sugar-sensing pathways involved in desiccation tolerance? **2003**, 271-277		
20	Mechanisms of plant desiccation tolerance. *Trends in Plant Science*, **2001**, 6, 431-8	13.1	973
19	Pulsed EPR spin-probe study of intracellular glasses in seed and pollen. *Journal of Magnetic Resonance*, **2000**, 142, 364-8	3	14
18	The effects of moisture and temperature on the ageing kinetics of pollen: interpretation based on cytoplasmic mobility. *Plant, Cell and Environment*, **2000**, 23, 967-974	8.4	15

17	Molecular mobility in the cytoplasm: an approach to describe and predict lifespan of dry germplasm. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 2385-90	11.5	65
16	Dehydration-induced redistribution of amphiphilic molecules between cytoplasm and lipids is associated with desiccation tolerance in seeds. *Plant Physiology*, **2000**, 124, 1413-26	6.6	24
15	Is there a role for oligosaccharides in seed longevity? An assessment of intracellular glass stability. *Plant Physiology*, **2000**, 122, 1217-24	6.6	90
14	A study of water relations in neem (Azadirachta indica) seed that is characterized by complex storage behaviour. *Journal of Experimental Botany*, **2000**, 51, 635-43	7	30
13	Molecular mobility in the cytoplasm of lettuce radicles correlates with longevity. *Seed Science Research*, **2000**, 10, 285-292	1.3	6
12	Metabolic dysfunction and unabated respiration precede the loss of membrane integrity during dehydration of germinating radicles. *Plant Physiology*, **2000**, 122, 597-608	6.6	98
11	High critical temperature above T(g) may contribute to the stability of biological systems. *Biophysical Journal*, **2000**, 79, 1119-28	2.9	121
10	Axes and cotyledons of recalcitrant seeds of Castanea sativa Mill. exhibit contrasting responses of respiration to drying in relation to desiccation sensitivity. *Journal of Experimental Botany*, **1999**, 50, 1515-1524	7	55
9	Characterization of molecular mobility in seed tissues: an electron paramagnetic resonance spin probe study. *Biophysical Journal*, **1999**, 76, 3315-22	2.9	43
8	A Model of the Effect of Temperature and Moisture on Pollen Longevity in Air-dry Storage Environments. *Annals of Botany*, **1999**, 83, 167-173	4.1	16
7	Storage behavior of Typha latifolia pollen at low water contents: Interpretation on the basis of water activity and glass concepts. *Physiologia Plantarum*, **1998**, 103, 145-153	4.6	44
6	Induction of defense-related responses in Cf9 tomato cells by the AVR9 elicitor peptide of cladosporium fulvum is developmentally regulated. *Plant Physiology*, **1998**, 117, 809-20	6.6	47
5	Influence of water content and temperature on molecular mobility and intracellular glasses in seeds and pollen. *Plant Physiology*, **1998**, 118, 531-41	6.6	111
4	Membrane Stabilization in the Dry State. *Comparative Biochemistry and Physiology A, Comparative Physiology*, **1997**, 117, 335-341		94
3	Calorimetric Properties of Dehydrating Pollen (Analysis of a Desiccation-Tolerant and an Intolerant Species). *Plant Physiology*, **1996**, 111, 235-242	6.6	81
2	The Glassy State in Dry Seeds and Pollen193-214		3
1	Axes and cotyledons of recalcitrant seeds of Castanea sativa Mill. exhibit contrasting responses of respiration to drying in relation to desiccation sensitivity		21