

# Julia Buitink

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Mechanisms of plant desiccation tolerance. <i>Trends in Plant Science</i> , <b>2001</b> , 6, 431-8	13.1	973
69	Glass formation in plant anhydrobiotes: survival in the dry state. <i>Cryobiology</i> , <b>2004</b> , 48, 215-28	2.7	270
68	Comparative analysis of the heat stable proteome of radicles of <i>Medicago truncatula</i> seeds during germination identifies late embryogenesis abundant proteins associated with desiccation tolerance. <i>Plant Physiology</i> , <b>2006</b> , 140, 1418-36	6.6	168
67	High critical temperature above T(g) may contribute to the stability of biological systems. <i>Biophysical Journal</i> , <b>2000</b> , 79, 1119-28	2.9	121
66	Late seed maturation: drying without dying. <i>Journal of Experimental Botany</i> , <b>2017</b> , 68, 827-841	7	120
65	A regulatory network-based approach dissects late maturation processes related to the acquisition of desiccation tolerance and longevity of <i>Medicago truncatula</i> seeds. <i>Plant Physiology</i> , <b>2013</b> , 163, 757-74	6.6	119
64	Transcriptome profiling uncovers metabolic and regulatory processes occurring during the transition from desiccation-sensitive to desiccation-tolerant stages in <i>Medicago truncatula</i> seeds. <i>Plant Journal</i> , <b>2006</b> , 47, 735-50	6.9	114
63	Intracellular glasses and seed survival in the dry state. <i>Comptes Rendus - Biologies</i> , <b>2008</b> , 331, 788-95	1.4	113
62	Influence of water content and temperature on molecular mobility and intracellular glasses in seeds and pollen. <i>Plant Physiology</i> , <b>1998</b> , 118, 531-41	6.6	111
61	Desiccation tolerance: From genomics to the field. <i>Plant Science</i> , <b>2010</b> , 179, 554-564	5.3	106
60	Whole-genome landscape of <i>Medicago truncatula</i> symbiotic genes. <i>Nature Plants</i> , <b>2018</b> , 4, 1017-1025	11.5	99
59	Metabolic dysfunction and unabated respiration precede the loss of membrane integrity during dehydration of germinating radicles. <i>Plant Physiology</i> , <b>2000</b> , 122, 597-608	6.6	98
58	Membrane Stabilization in the Dry State. <i>Comparative Biochemistry and Physiology A, Comparative Physiology</i> , <b>1997</b> , 117, 335-341		94
57	Temporal profiling of the heat-stable proteome during late maturation of <i>Medicago truncatula</i> seeds identifies a restricted subset of late embryogenesis abundant proteins associated with longevity. <i>Plant, Cell and Environment</i> , <b>2012</b> , 35, 1440-55	8.4	93
56	Is there a role for oligosaccharides in seed longevity? An assessment of intracellular glass stability. <i>Plant Physiology</i> , <b>2000</b> , 122, 1217-24	6.6	90
55	LEA polypeptide profiling of recalcitrant and orthodox legume seeds reveals ABI3-regulated LEA protein abundance linked to desiccation tolerance. <i>Journal of Experimental Botany</i> , <b>2013</b> , 64, 4559-73	7	89
54	The re-establishment of desiccation tolerance in germinated radicles of <i>Medicago truncatula</i> Gaertn. seeds. <i>Seed Science Research</i> , <b>2003</b> , 13, 273-286	1.3	83

53	MtPM25 is an atypical hydrophobic late embryogenesis-abundant protein that dissociates cold and desiccation-aggregated proteins. <i>Plant, Cell and Environment</i> , <b>2010</b> , 33, 418-30	8.4	81
52	Calorimetric Properties of Dehydrating Pollen (Analysis of a Desiccation-Tolerant and an Intolerant Species). <i>Plant Physiology</i> , <b>1996</b> , 111, 235-242	6.6	81
51	Inference of Longevity-Related Genes from a Robust Coexpression Network of Seed Maturation Identifies Regulators Linking Seed Storability to Biotic Defense-Related Pathways. <i>Plant Cell</i> , <b>2015</b> , 27, 2692-708	11.6	80
50	Changes in DNA and microtubules during loss and re-establishment of desiccation tolerance in germinating <i>Medicago truncatula</i> seeds. <i>Journal of Experimental Botany</i> , <b>2005</b> , 56, 2119-30	7	76
49	The reduction of seed-specific dehydrins reduces seed longevity in <i>Arabidopsis thaliana</i> . <i>Seed Science Research</i> , <b>2011</b> , 21, 165-173	1.3	67
48	Molecular mobility in the cytoplasm: an approach to describe and predict lifespan of dry germplasm. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2000</b> , 97, 2385-90	11.5	65
47	ABI5 Is a Regulator of Seed Maturation and Longevity in Legumes. <i>Plant Cell</i> , <b>2016</b> , 28, 2735-2754	11.6	62
46	Quantitative trait loci analysis reveals a correlation between the ratio of sucrose/raffinose family oligosaccharides and seed vigour in <i>Medicago truncatula</i> . <i>Plant, Cell and Environment</i> , <b>2011</b> , 34, 1473-87	8.4	59
45	The regulatory gamma subunit SNF4b of the sucrose non-fermenting-related kinase complex is involved in longevity and stachyose accumulation during maturation of <i>Medicago truncatula</i> seeds. <i>Plant Journal</i> , <b>2007</b> , 51, 47-59	6.9	58
44	Axes and cotyledons of recalcitrant seeds of <i>Castanea sativa</i> Mill. exhibit contrasting responses of respiration to drying in relation to desiccation sensitivity. <i>Journal of Experimental Botany</i> , <b>1999</b> , 50, 1515-1524	7.1524	55
43	Induction of defense-related responses in Cf9 tomato cells by the AVR9 elicitor peptide of <i>Cladosporium fulvum</i> is developmentally regulated. <i>Plant Physiology</i> , <b>1998</b> , 117, 809-20	6.6	47
42	Storage behavior of <i>Typha latifolia</i> pollen at low water contents: Interpretation on the basis of water activity and glass concepts. <i>Physiologia Plantarum</i> , <b>1998</b> , 103, 145-153	4.6	44
41	Characterization of molecular mobility in seed tissues: an electron paramagnetic resonance spin probe study. <i>Biophysical Journal</i> , <b>1999</b> , 76, 3315-22	2.9	43
40	Introduction to desiccation biology: from old borders to new frontiers. <i>Planta</i> , <b>2015</b> , 242, 369-78	4.7	42
39	Molecular characterization of the acquisition of longevity during seed maturation in soybean. <i>PLoS ONE</i> , <b>2017</b> , 12, e0180282	3.7	41
38	A gene co-expression network predicts functional genes controlling the re-establishment of desiccation tolerance in germinated <i>Arabidopsis thaliana</i> seeds. <i>Planta</i> , <b>2015</b> , 242, 435-49	4.7	37
37	A role for an endosperm-localized subtilase in the control of seed size in legumes. <i>New Phytologist</i> , <b>2012</b> , 196, 738-751	9.8	36
36	A study of water relations in neem ( <i>Azadirachta indica</i> ) seed that is characterized by complex storage behaviour. <i>Journal of Experimental Botany</i> , <b>2000</b> , 51, 635-43	7	30

35	Genome-wide association studies with proteomics data reveal genes important for synthesis, transport and packaging of globulins in legume seeds. <i>New Phytologist</i> , <b>2017</b> , 214, 1597-1613	9.8	29
34	Characterization of dormancy behaviour in seeds of the model legume <i>Medicago truncatula</i> . <i>Seed Science Research</i> , <b>2010</b> , 20, 97-107	1.3	28
33	Molecular and environmental factors regulating seed longevity. <i>Biochemical Journal</i> , <b>2020</b> , 477, 305-323	3.8	28
32	An emerging picture of the seed desiccome: confirmed regulators and newcomers identified using transcriptome comparison. <i>Frontiers in Plant Science</i> , <b>2013</b> , 4, 497	6.2	25
31	Key genes involved in desiccation tolerance and dormancy across life forms. <i>Plant Science</i> , <b>2016</b> , 251, 162-168	5.3	24
30	Dormancy in Plant Seeds. <i>Topics in Current Genetics</i> , <b>2010</b> , 43-67		24
29	Dehydration-induced redistribution of amphiphilic molecules between cytoplasm and lipids is associated with desiccation tolerance in seeds. <i>Plant Physiology</i> , <b>2000</b> , 124, 1413-26	6.6	24
28	Legume adaptation to sulfur deficiency revealed by comparing nutrient allocation and seed traits in <i>Medicago truncatula</i> . <i>Plant Journal</i> , <b>2013</b> , 76, 982-96	6.9	23
27	Starvation, osmotic stress and desiccation tolerance lead to expression of different genes of the regulatory $\beta$ and $\beta$ subunits of the SnRK1 complex in germinating seeds of <i>Medicago truncatula</i> . <i>Plant, Cell and Environment</i> , <b>2004</b> , 27, 55-67	8.4	23
26	Axes and cotyledons of recalcitrant seeds of <i>Castanea sativa</i> Mill. exhibit contrasting responses of respiration to drying in relation to desiccation sensitivity		21
25	A role for auxin signaling in the acquisition of longevity during seed maturation. <i>New Phytologist</i> , <b>2020</b> , 225, 284-296	9.8	17
24	A Model of the Effect of Temperature and Moisture on Pollen Longevity in Air-dry Storage Environments. <i>Annals of Botany</i> , <b>1999</b> , 83, 167-173	4.1	16
23	Identification of a molecular dialogue between developing seeds of <i>Medicago truncatula</i> and seedborne xanthomonads. <i>Journal of Experimental Botany</i> , <b>2015</b> , 66, 3737-52	7	15
22	The MtSNF4b subunit of the sucrose non-fermenting-related kinase complex connects after-ripening and constitutive defense responses in seeds of <i>Medicago truncatula</i> . <i>Plant Journal</i> , <b>2010</b> , 61, 792-803	6.9	15
21	The effects of moisture and temperature on the ageing kinetics of pollen: interpretation based on cytoplasmic mobility. <i>Plant, Cell and Environment</i> , <b>2000</b> , 23, 967-974	8.4	15
20	Pulsed EPR spin-probe study of intracellular glasses in seed and pollen. <i>Journal of Magnetic Resonance</i> , <b>2000</b> , 142, 364-8	3	14
19	Deep learning-based detection of seedling development. <i>Plant Methods</i> , <b>2020</b> , 16, 103	5.8	12
18	A Seed-Specific Regulator of Triterpene Saponin Biosynthesis in. <i>Plant Cell</i> , <b>2020</b> , 32, 2020-2042	11.6	10

17	Late seed maturation improves the preservation of seedling emergence during storage in soybean. <i>Journal of Seed Science</i> , <b>2018</b> , 40, 185-192	1	9
16	The role of sugars and hexose phosphorylation in regulating the re-establishment of desiccation tolerance in germinated radicles of <i>Cucumis sativa</i> and <i>Medicago truncatula</i> . <i>Physiologia Plantarum</i> , <b>2004</b> , 122, 200-209	4.6	6
15	Molecular mobility in the cytoplasm of lettuce radicles correlates with longevity. <i>Seed Science Research</i> , <b>2000</b> , 10, 285-292	1.3	6
14	The seed-specific heat shock factor A9 regulates the depth of dormancy in <i>Medicago truncatula</i> seeds via ABA signalling. <i>Plant, Cell and Environment</i> , <b>2020</b> , 43, 2508-2522	8.4	6
13	Letters to the twenty-first century botanist. Second series: What is a seed? II. Regulation of desiccation tolerance and longevity in developing seeds: two faces of the same coin <i>Botany Letters</i> , <b>2018</b> , 165, 181-185	1.1	5
12	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. <i>BMC Plant Biology</i> , <b>2021</b> , 21, 124	5.3	4
11	The Glassy State in Dry Seeds and Pollen 193-214		3
10	Time-series analysis of the transcriptome of the re-establishment of desiccation tolerance by ABA in germinated <i>Arabidopsis thaliana</i> seeds. <i>Genomics Data</i> , <b>2015</b> , 5, 154-6		2
9	Genome-Wide Association Studies of Seed Performance Traits in Response to Heat Stress in <i>Arabidopsis thaliana</i> Uncover as a Regulator of Seed Germination Plasticity. <i>Frontiers in Plant Science</i> , <b>2021</b> , 12, 673072	6.2	2
8	Foreword. Special issue on desiccation biology. <i>Planta</i> , <b>2015</b> , 242, 367	4.7	1
7	A physiological perspective of late maturation processes and establishment of seed quality in <i>Medicago truncatula</i> seeds <b>2019</b> , 44-54		1
6	Dataset for the metabolic and physiological characterization of seeds from oilseed rape ( <i>L.</i> ) plants grown under single or combined effects of drought and clubroot pathogen. <i>Data in Brief</i> , <b>2021</b> , 37, 107247	1.2	1
5	Genetic determinants of seed protein plasticity in response to the environment in <i>Medicago truncatula</i> . <i>Plant Journal</i> , <b>2021</b> , 106, 1298-1311	6.9	0
4	Are sugar-sensing pathways involved in desiccation tolerance? <b>2003</b> , 271-277		
3	Dataset for transcriptome and physiological response of mature tomato seed tissues to light and heat during fruit ripening. <i>Data in Brief</i> , <b>2021</b> , 34, 106671	1.2	
2	RNA sequencing data for responses to drought stress and/or clubroot infection in developing seeds of. <i>Data in Brief</i> , <b>2021</b> , 38, 107392	1.2	
1	New Technologies for the Deployment of Extended Biocontrol <b>2022</b> , 245-255		