Olivier Leprince

List of Publications by Year in Descending Order

56 papers	3,149 citations	31 h-index	56 g-index
62 ext. papers	3,605 ext. citations	5.6 avg, IF	5.08 L-index

#	Paper	IF	Citations
56	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
55	RNA sequencing data for heat stress response in isolated seed tissues. *Data in Brief*, **2021**, 35, 106726	1.2	1
54	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
53	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	
52	Molecular and environmental factors regulating seed longevity. *Biochemical Journal*, **2020**, 477, 305-323	3.8	28
51	A role for auxin signaling in the acquisition of longevity during seed maturation. *New Phytologist*, **2020**, 225, 284-296	9.8	17
50	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
49	A physiological perspective of late maturation processes and establishment of seed quality in Medicago truncatula seeds **2019**, 44-54		1
48	Late seed maturation improves the preservation of seedling emergence during storage in soybean. *Journal of Seed Science*, **2018**, 40, 185-192	1	9
47	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
46	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
45	Molecular characterization of the acquisition of longevity during seed maturation in soybean. *PLoS ONE*, **2017**, 12, e0180282	3.7	41
44	Late seed maturation: drying without dying. *Journal of Experimental Botany*, **2017**, 68, 827-841	7	120
43	ABI5 Is a Regulator of Seed Maturation and Longevity in Legumes. *Plant Cell*, **2016**, 28, 2735-2754	11.6	62
42	Foreword. Special issue on desiccation biology. *Planta*, **2015**, 242, 367	4.7	1
41	Introduction to desiccation biology: from old borders to new frontiers. *Planta*, **2015**, 242, 369-78	4.7	42
40	Identification of a molecular dialogue between developing seeds of Medicago truncatula and seedborne xanthomonads. *Journal of Experimental Botany*, **2015**, 66, 3737-52	7	15

39	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
38	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
37	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
36	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
35	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
34	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
33	The reduction of seed-specific dehydrins reduces seed longevity in Arabidopsis thaliana. *Seed Science Research*, **2011**, 21, 165-173	1.3	67
32	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
31	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
30	LEA Proteins: Versatility of Form and Function. *Topics in Current Genetics*, **2010**, 91-108		61
29	Characterization of dormancy behaviour in seeds of the model legume Medicago truncatula. *Seed Science Research*, **2010**, 20, 97-107	1.3	28
28	Desiccation tolerance: From genomics to the field. *Plant Science*, **2010**, 179, 554-564	5.3	106
27	Intracellular glasses and seed survival in the dry state. *Comptes Rendus - Biologies*, **2008**, 331, 788-95	1.4	113
26	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
25	Variable desiccation tolerance in Acer pseudoplatanus seeds in relation to developmental conditions: a case of phenotypic recalcitrance?. *Functional Plant Biology*, **2006**, 33, 59-66	2.7	58
24	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
23	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
22	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

21	Developmental heat sum influences recalcitrant seed traits in Aesculus hippocastanum across Europe. *New Phytologist*, **2004**, 162, 157-166	9.8	98
20	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
19	Glass formation in plant anhydrobiotes: survival in the dry state. *Cryobiology*, **2004**, 48, 215-28	2.7	270
18	The re-establishment of desiccation tolerance in germinated radicles of Medicago truncatula Gaertn. seeds. *Seed Science Research*, **2003**, 13, 273-286	1.3	83
17	Non-disaccharide-based mechanisms of protection during drying. *Cryobiology*, **2001**, 43, 151-67	2.7	91
16	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
15	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
14	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
13	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
12	The responses of cytochrome redox state and energy metabolism to dehydration support a role for cytoplasmic viscosity in desiccation tolerance. *Plant Physiology*, **1998**, 118, 1253-64	6.6	42
11	Oleosins prevent oil-body coalescence during seed imbibition as suggested by a low-temperature scanning electron microscope study of desiccation-tolerant and -sensitive oilseeds. *Planta*, **1997**, 204, 109-119	4.7	91
10	Changes in chromatin structure associated with germination of maize and their relation with desiccation tolerance. *Plant, Cell and Environment*, **1995**, 18, 619-629	8.4	9
9	The expression of desiccation-induced damage in orthodox seeds is a function of oxygen and temperature. *Physiologia Plantarum*, **1995**, 94, 233-240	4.6	28
8	The expression of desiccation-induced damage in orthodox seeds is a function of oxygen and temperature. *Physiologia Plantarum*, **1995**, 94, 233-240	4.6	32
7	The mechanisms of desiccation tolerance in developing seeds. *Seed Science Research*, **1993**, 3, 231-246	1.3	207
6	Respiratory pathways in germinating maize radicles correlated with desiccation tolerance and soluble sugars. *Physiologia Plantarum*, **1992**, 85, 581-588	4.6	33
5	Respiratory pathways in germinating maize radicles correlated with desiccation tolerance and soluble sugars. *Physiologia Plantarum*, **1992**, 85, 581-588	4.6	3
4	Changes in starch and soluble sugars in relation to the acquisition of desiccation tolerance during maturation of Brassica campestris seed. *Plant, Cell and Environment*, **1990**, 13, 539-546	8.4	81

3	The role of free radicals and radical processing systems in loss of desiccation tolerance in germinating maize (Zea mays L.). *New Phytologist*, **1990**, 116, 573-580	9.8	106
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