Thomas Roach

List of Publications by Year in Descending Order

38 papers	1,200 citations	19 h-index	34 g-index
43 ext. papers	1,498 ext. citations	5.6 avg, IF	4.73 L-index

#	Paper	IF	Citations
38	Does oxygen affect ageing mechanisms of Pinus densiflora seeds? A matter of cytoplasmic physical state.. *Journal of Experimental Botany*, **2022**,	7	3
37	Acquisition of desiccation tolerance in Haematococcus pluvialis requires photosynthesis and coincides with lipid and astaxanthin accumulation. *Algal Research*, **2022**, 64, 102699	5	2
36	Apoplastic lipid barriers regulated by conserved homeobox transcription factors extend seed longevity in multiple plant species. *New Phytologist*, **2021**, 231, 679-694	9.8	2
35	Redox feedback regulation of ANAC089 signaling alters seed germination and stress response. *Cell Reports*, **2021**, 35, 109263	10.6	1
34	Shedding light on the dark side of xanthophyll cycles. *New Phytologist*, **2021**, 230, 1336-1344	9.8	7
33	Frozen in the dark: interplay of night-time activity of xanthophyll cycle, xylem attributes, and desiccation tolerance in fern resistance to winter. *Journal of Experimental Botany*, **2021**, 72, 3168-3184	7	6
32	AtFAHD1a: A New Player Influencing Seed Longevity and Dormancy in Arabidopsis?. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	3
31	Photoprotection in lichens: adaptations of photobionts to high light. *Lichenologist*, **2021**, 53, 21-33	1.1	11
30	The non-photochemical quenching protein LHCSR3 prevents oxygen-dependent photoinhibition in Chlamydomonas reinhardtii. *Journal of Experimental Botany*, **2020**, 71, 2650-2660	7	21
29	Hydrogen Peroxide Metabolism in Interkingdom Interaction Between Bacteria and Wheat Seeds and Seedlings. *Molecular Plant-Microbe Interactions*, **2020**, 33, 336-348	3.6	6
28	LHCSR3-Type NPQ Prevents Photoinhibition and Slowed Growth under Fluctuating Light in. *Plants*, **2020**, 9,	4.5	3
27	Changes in Photosynthetic Electron Transport during Leaf Senescence in Two Barley Varieties Grown in Contrasting Growth Regimes. *Plant and Cell Physiology*, **2020**, 61, 1986-1994	4.9	2
26	Photosynthetic Regulatory Mechanisms for Efficiency and Prevention of Photo-Oxidative Stress **2019**, 273-306		11
25	Abscisic acid-determined seed vigour differences do not influence redox regulation during ageing. *Biochemical Journal*, **2019**, 476, 965-974	3.8	11
24	Distress and eustress of reactive electrophiles and relevance to light stress acclimation via stimulation of thiol/disulphide-based redox defences. *Free Radical Biology and Medicine*, **2018**, 122, 65-73	7.8	25
23	Redox poise and metabolite changes in bread wheat seeds are advanced by priming with hot steam. *Biochemical Journal*, **2018**, 475, 3725-3743	3.8	10
22	Changes in tocochromanols and glutathione reveal differences in the mechanisms of seed ageing under seedbank conditions and controlled deterioration in barley. *Environmental and Experimental Botany*, **2018**, 156, 8-15	5.9	22

21	LHCSR3 affects de-coupling and re-coupling of LHCII to PSII during state transitions in Chlamydomonas reinhardtii. *Scientific Reports*, **2017**, 7, 43145	4.9	11
20	Changes in low-molecular-weight thiol-disulphide redox couples are part of bread wheat seed germination and early seedling growth. *Free Radical Research*, **2017**, 51, 568-581	4	19
19	Chlamydomonas reinhardtii responding to high light: a role for 2-propenal (acrolein). *Physiologia Plantarum*, **2017**, 161, 75-87	4.6	22
18	Drought affects the heat-hardening capacity of alpine plants as indicated by changes in xanthophyll cycle pigments, singlet oxygen scavenging, □tocopherol and plant hormones. *Environmental and Experimental Botany*, **2017**, 133, 159-175	5.9	24
17	Formation of chloroplast protrusions and catalase activity in alpine Ranunculus glacialis under elevated temperature and different CO2/O2 ratios. *Protoplasma*, **2015**, 252, 1613-9	3.4	11
16	Diurnal changes in the xanthophyll cycle pigments of freshwater algae correlate with the environmental hydrogen peroxide concentration rather than non-photochemical quenching. *Annals of Botany*, **2015**, 116, 519-27	4.1	16
15	A proposed interplay between peroxidase, amine oxidase and lipoxygenase in the wounding-induced oxidative burst in Pisum sativum seedlings. *Phytochemistry*, **2015**, 112, 130-8	4	28
14	Glutathione redox state, tocochromanols, fatty acids, antioxidant enzymes and protein carbonylation in sunflower seed embryos associated with after-ripening and ageing. *Annals of Botany*, **2015**, 116, 669-78	4.1	41
13	High light-induced hydrogen peroxide production in Chlamydomonas reinhardtii is increased by high CO2 availability. *Plant Journal*, **2015**, 81, 759-66	6.9	39
12	Regulation of photosynthetic electron transport and photoinhibition. *Current Protein and Peptide Science*, **2014**, 15, 351-62	2.8	164
11	Acetate in mixotrophic growth medium affects photosystem II in Chlamydomonas reinhardtii and protects against photoinhibition. *Biochimica Et Biophysica Acta - Bioenergetics*, **2013**, 1827, 1183-90	4.6	42
10	A dual strategy to cope with high light in Chlamydomonas reinhardtii. *Plant Cell*, **2013**, 25, 545-57	11.6	147
9	Mutants impaired in vacuolar metal mobilization identify chloroplasts as a target for cadmium hypersensitivity in Arabidopsis thaliana. *Plant, Cell and Environment*, **2013**, 36, 804-17	8.4	40
8	Down-regulation of catalase activity allows transient accumulation of a hydrogen peroxide signal in Chlamydomonas reinhardtii. *Plant, Cell and Environment*, **2013**, 36, 1204-13	8.4	46
7	The role of the PsbS protein in the protection of photosystems I and II against high light in Arabidopsis thaliana. *Biochimica Et Biophysica Acta - Bioenergetics*, **2012**, 1817, 2158-65	4.6	54
6	Evidence for a role of VIPP1 in the structural organization of the photosynthetic apparatus in Chlamydomonas. *Plant Cell*, **2012**, 24, 637-59	11.6	89
5	Extracellular superoxide production associated with secondary root growth following desiccation of Pisum sativum seedlings. *Journal of Plant Physiology*, **2011**, 168, 1870-3	3.6	12
4	Extracellular production of reactive oxygen species during seed germination and early seedling growth in Pisum sativum. *Journal of Plant Physiology*, **2010**, 167, 805-11	3.6	114

3	Extracellular superoxide production, viability and redox poise in response to desiccation in recalcitrant Castanea sativa seeds. *Plant, Cell and Environment*, **2010**, 33, 59-75	8.4	72
2	An oxidative burst of superoxide in embryonic axes of recalcitrant sweet chestnut seeds as induced by excision and desiccation. *Physiologia Plantarum*, **2008**, 133, 131-9	4.6	62
1	Cytoplasmic physical state governs the influence of oxygen on Pinus densiflora seed ageing		1