# Thomas Roach

## List of Publications by Citations



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|---|---|---|---|
| 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 | Regulation of photosynthetic electron transport and photoinhibition. *Current Protein and Peptide Science*, **2014**, 15, 351-62 | 2.8 | 164 |
| 37 | A dual strategy to cope with high light in Chlamydomonas reinhardtii. *Plant Cell*, **2013**, 25, 545-57 | 11.6 | 147 |
| 36 | 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 |
| 35 | 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 |
| 34 | 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 |
| 33 | 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 |
| 32 | 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 |
| 31 | 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 |
| 30 | 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 |
| 29 | 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 |
| 28 | 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 |
| 27 | High light-induced hydrogen peroxide production in Chlamydomonas reinhardtii is increased by high CO2 availability. *Plant Journal*, **2015**, 81, 759-66 | 6.9 | 39 |
| 26 | 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 |
| 25 | 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 |
| 24 | Drought affects the heat-hardening capacity of alpine plants as indicated by changes in xanthophyll cycle pigments, singlet oxygen scavenging, Ɛ-tocopherol and plant hormones. *Environmental and Experimental Botany*, **2017**, 133, 159-175 | 5.9 | 24 |
| 23 | Chlamydomonas reinhardtii responding to high light: a role for 2-propenal (acrolein). *Physiologia Plantarum*, **2017**, 161, 75-87 | 4.6 | 22 |
| 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 |

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| 21 | The non-photochemical quenching protein LHCSR3 prevents oxygen-dependent photoinhibition in Chlamydomonas reinhardtii. *Journal of Experimental Botany*, **2020**, 71, 2650-2660 | 7 | 21 |
| 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 | 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 |
| 18 | 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 |
| 17 | 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 |
| 16 | Photosynthetic Regulatory Mechanisms for Efficiency and Prevention of Photo-Oxidative Stress **2019**, 273-306 | | 11 |
| 15 | Abscisic acid-determined seed vigour differences do not influence redox regulation during ageing. *Biochemical Journal*, **2019**, 476, 965-974 | 3.8 | 11 |
| 14 | 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 |
| 13 | Photoprotection in lichens: adaptations of photobionts to high light. *Lichenologist*, **2021**, 53, 21-33 | 1.1 | 11 |
| 12 | 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 |
| 11 | Shedding light on the dark side of xanthophyll cycles. *New Phytologist*, **2021**, 230, 1336-1344 | 9.8 | 7 |
| 10 | Hydrogen Peroxide Metabolism in Interkingdom Interaction Between Bacteria and Wheat Seeds and Seedlings. *Molecular Plant-Microbe Interactions*, **2020**, 33, 336-348 | 3.6 | 6 |
| 9 | 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 |
| 8 | Does oxygen affect ageing mechanisms of Pinus densiflora seeds? A matter of cytoplasmic physical state.. *Journal of Experimental Botany*, **2022**, | 7 | 3 |
| 7 | LHCSR3-Type NPQ Prevents Photoinhibition and Slowed Growth under Fluctuating Light in. *Plants*, **2020**, 9, | 4.5 | 3 |
| 6 | AtFAHD1a: A New Player Influencing Seed Longevity and Dormancy in Arabidopsis?. *International Journal of Molecular Sciences*, **2021**, 22, | 6.3 | 3 |
| 5 | 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 |
| 4 | 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 |

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| 3 | Acquisition of desiccation tolerance in Haematococcus pluvialis requires photosynthesis and coincides with lipid and astaxanthin accumulation. *Algal Research*, **2022**, 64, 102699 | 5 | 2 |
| 2 | Cytoplasmic physical state governs the influence of oxygen on Pinus densiflora seed ageing | | 1 |
| 1 | Redox feedback regulation of ANAC089 signaling alters seed germination and stress response. *Cell Reports*, **2021**, 35, 109263 | 10.6 | 1 |