# Anja Krieger-Liszkay

List of Publications by Year
in descending order



| 111 | 9,544 | 38742 50 | 39675 94 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 117 | 117 | 117 | 9192 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Singlet oxygen production in photosynthesis. Journal of Experimental Botany, 2004, 56, 337-346. | 4.8 | 629 |
| 2 | Singlet oxygen production in photosystem II and related protection mechanism. Photosynthesis Research, 2008, 98, 551-564. | 2.9 | 470 |
| 3 | In Vivo Cell Wall Loosening by Hydroxyl Radicals during Cress Seed Germination and Elongation Growth Â Â. Plant Physiology, 2009, 150, 1855-1865. | 4.8 | 346 |
| 4 | Redox- and Reactive Oxygen Species-Dependent Signaling into and out of the Photosynthesizing Chloroplast. Plant Physiology, 2016, 171, 1541-1550. | 4.8 | 343 |
| 5 | Energetic coupling between plastids and mitochondria drives CO2 assimilation in diatoms. Nature, 2015, 524, 366-369. | 27.8 | 311 |
| 6 | Export of Vacuolar Manganese by AtNRAMP3 and AtNRAMP4 Is Required for Optimal Photosynthesis and Growth under Manganese Deficiency. Plant Physiology, 2010, 152, 1986-1999. | 4.8 | 299 |
| 7 | Evidence for the involvement of cell wall peroxidase in the generation of hydroxyl radicals mediating extension growth. Planta, 2003, 217, 658-667. | 3.2 | 278 |
| 8 | Herbicide-induced oxidative stress in photosystem II. Trends in Biochemical Sciences, 2001, 26, 648-653. | 7.5 | 270 |
| 9 | Evidence that hydroxyl radicals mediate auxin-induced extension growth. Planta, 2002, 214, 821-828. | 3.2 | 267 |
| 10 | Mechanism of Cd2+ toxicity: Cd2+ inhibits photoactivation of Photosystem II by competitive binding to the essential Ca2+ site. Biochimica Et Biophysica Acta - Bioenergetics, 2005, 1706, 158-164. | 1.0 | 227 |
| 11 | Regulation of Photosynthetic Electron Transport and Photoinhibition. Current Protein and Peptide Science, 2014, 15, 351-362. | 1.4 | 226 |
| 12 | Origin of cadmiumâ€induced reactive oxygen species production: mitochondrial electron transfer versus plasma membrane NADPH oxidase. New Phytologist, 2008, 179, 687-699. | 7.3 | 215 |
| 13 | Production and diffusion of chloroplastic H2O2 and its implication to signalling. Journal of Experimental Botany, 2010, 61, 3577-3587. | 4.8 | 198 |
| 14 | A Dual Strategy to Cope with High Light in Chlamydomonas reinhardtii Â. Plant Cell, 2013, 25, 545-557. | 6.6 | 193 |
| 15 | The role of calcium in the pH-dependent control of Photosystem II. Photosynthesis Research, 1993, 37, 117-130. | 2.9 | 186 |
| 16 | Production, Detection, and Signaling of Singlet Oxygen in Photosynthetic Organisms. Antioxidants and Redox Signaling, 2013, 18, 2145-2162. | 5.4 | 186 |
| 17 | Tocopherol is the scavenger of singlet oxygen produced by the triplet states of chlorophyll in the PSII reaction centre. Journal of Experimental Botany, 2006, 57, 1677-1684. | 4.8 | 177 |
| 18 | Singlet oxygen production in herbicide-treated photosystem II. FEBS Letters, 2002, 532, 407-410. | 2.8 | 167 |

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|---|---|---|---|
| 19 | Polyphenolic Allelochemicals from the Aquatic Angiosperm Myriophyllum spicatumInhibit Photosystem II. Plant Physiology, 2002, 130, 2011-2018. | 4.8 | 165 |
| 20 | Influence of Herbicide Binding on the Redox Potential of the Quinone Acceptor in Photosystem II:â€‰Relevance to Photodamage and Phytotoxicity. Biochemistry, 1998, 37, 17339-17344. | 2.5 | 161 |
| 21 | Scission of polysaccharides by peroxidase-generated hydroxyl radicals. Phytochemistry, 2000, 53, 565-570. | 2.9 | 134 |
| 22 | Light-Induced Acclimation of the Arabidopsis chlorina1 Mutant to Singlet Oxygen Â. Plant Cell, 2013, 25, 1445-1462. | 6.6 | 133 |
| 23 | Carnosic Acid and Carnosol, Two Major Antioxidants of Rosemary, Act through Different Mechanisms. Plant Physiology, 2017, 175, 1381-1394. | 4.8 | 124 |
| 24 | Hydroxyl Radical Generation by Photosystem IIâ€. Biochemistry, 2004, 43, 6783-6792. | 2.5 | 117 |
| 25 | Role of singlet oxygen in chloroplast to nucleus retrograde signaling in Chlamydomonas reinhardtii. FEBS Letters, 2007, 581, 5555-5560. | 2.8 | 112 |
| 26 | Towards Structural Determination of the Water-splitting Enzyme. Journal of Biological Chemistry, 2000, 275, 20652-20659. | 3.4 | 111 |
| 27 | The Cyanobacterial Photoactive Orange Carotenoid Protein Is an Excellent Singlet Oxygen Quencher Â. Plant Cell, 2014, 26, 1781-1791. | 6.6 | 110 |
| 28 | Bicarbonate-induced redox tuning in Photosystem II for regulation and protection. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12144-12149. | 7.1 | 107 |
| 29 | Evidence for a Role of VIPP1 in the Structural Organization of the Photosynthetic Apparatus in Chlamydomonas. Plant Cell, 2012, 24, 637-659. | 6.6 | 104 |
| 30 | Structural insights into photosystem II assembly. Nature Plants, 2021, 7, 524-538. | 9.3 | 102 |
| 31 | Photosensitizers Neutral Red (Type I) and Rose Bengal (Type II) Cause Light-Dependent Toxicity inChlamydomonas reinhardtiiand Induce theGpxhGene via Increased Singlet Oxygen Formation. Environmental Science & Technology, 2004, 38, 6307-6313. | 10.0 | 96 |
| 32 | The chloroplast NADPH thioredoxin reductase C, NTRC, controls nonâ€photochemical quenching of light energy and photosynthetic electron transport in Arabidopsis. Plant, Cell and Environment, 2016, 39, 804-822. | 5.7 | 95 |
| 33 | Oxygen activation at the plasma membrane: relation between superoxide and hydroxyl radical production by isolated membranes. Planta, 2011, 234, 35-45. | 3.2 | 93 |
| 34 | Polysaccharide degradation by Fenton reaction- or peroxidase-generated hydroxyl radicals in isolated plant cell walls. Phytochemistry, 2002, 61, 31-35. | 2.9 | 82 |
| 35 | Plastid Alternative Oxidase (PTOX) Promotes Oxidative Stress When Overexpressed in Tobacco. Journal of Biological Chemistry, 2009, 284, 31174-31180. | 3.4 | 80 |
| 36 | Photoinhibition: molecular mechanisms and physiological significance. Physiologia Plantarum, 2011, 142, 1-5. | 5.2 | 80 |

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|---|---|---|---|
| 37 | Recombinant Water-Soluble Chlorophyll Protein from Brassica oleracea Var. Botrys Binds Various Chlorophyll Derivatives. Biochemistry, 2003, 42, 7427-7433. | 2.5 | 77 |
| 38 | Evidence That Cytochrome b559 Mediates the Oxidation of Reduced Plastoquinone in the Dark. Journal of Biological Chemistry, 2003, 278, 13554-13560. | 3.4 | 77 |
| 39 | Deletion of chloroplast NADPH-dependent thioredoxin reductase results in inability to regulate starch synthesis and causes stunted growth under short-day photoperiods. Journal of Experimental Botany, 2013, 64, 3843-3854. | 4.8 | 76 |
| 40 | Influence of the Redox Potential of the Primary Quinone Electron Acceptor on Photoinhibition in Photosystem II. Journal of Biological Chemistry, 2007, 282, 12492-12502. | 3.4 | 75 |
| 41 | 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, 2158-2165. | 1.0 | 75 |
| 42 | Sensitive detection and localization of hydroxyl radical production in cucumber roots and Arabidopsis seedlings by spin trapping electron paramagnetic resonance spectroscopy. Plant Journal, 2005, 44, 342-347. | 5.7 | 70 |
| 43 | Superoxide anion radicals generated by methylviologen in photosystem I damage photosystem II. Physiologia Plantarum, 2011, 142, 17-25. | 5.2 | 69 |
| 44 | A reporter system for the individual detection of hydrogen peroxide and singlet oxygen: its use for the assay of reactive oxygen species produced in vivo. Plant Journal, 2007, 50, 475-487. | 5.7 | 65 |
| 45 | Photosynthetic electron flow affects H2O2 signaling by inactivation of catalase in Chlamydomonas reinhardtii. Planta, 2008, 228, 1055-1066. | 3.2 | 65 |
| 46 | Acetate in mixotrophic growth medium affects photosystem II in Chlamydomonas reinhardtii and protects against photoinhibition. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 1183-1190. | 1.0 | 63 |
| 47 | The Dual Role of the Plastid Terminal Oxidase PTOX: Between a Protective and a Pro-oxidant Function. Frontiers in Plant Science, 2015, 6, 1147. | 3.6 | 63 |
| 48 | Lack of the Small Plastid-encoded PsbJ Polypeptide Results in a Defective Water-splitting Apparatus of Photosystem II, Reduced Photosystem I Levels, and Hypersensitivity to Light. Journal of Biological Chemistry, 2002, 277, 14031-14039. | 3.4 | 61 |
| 49 | The glutathione peroxidase homologous gene Gpxh in Chlamydomonas reinhardtii is upregulated by singlet oxygen produced in photosystem II. Planta, 2006, 223, 583-590. | 3.2 | 61 |
| 50 | The impact of photosynthesis on initiation of leaf senescence. Physiologia Plantarum, 2019, 166, 148-164. | 5.2 | 56 |
| 51 | Secondary Quinone in Photosystem II of Thermosynechococcus elongatus: Semiquinoneâ^'Iron EPR Signals and Temperature Dependence of Electron Transfer. Biochemistry, 2005, 44, 12780-12789. | 2.5 | 55 |
| 52 | Multi-omics Analysis Reveals Sequential Roles for ABA during Seed Maturation. Plant Physiology, 2019, 180, 1198-1218. | 4.8 | 52 |
| 53 | Interorganelle Communication: Peroxisomal MALATE DEHYDROGENASE2 Connects Lipid Catabolism to Photosynthesis through Redox Coupling in Chlamydomonas. Plant Cell, 2018, 30, 1824-1847. | 6.6 | 51 |
| 54 | The Lycopene Cyclase CrtY from Pantoea ananatis (Formerly Erwinia uredovora) Catalyzes an FADred-dependent Non-redox Reaction. Journal of Biological Chemistry, 2010, 285, 12109-12120. | 3.4 | 50 |

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| 55 | Mutants impaired in vacuolar metal mobilization identify chloroplasts as a target for cadmium hypersensitivity in Arabidopsis thaliana. Plant, Cell and Environment, 2013, 36, 804-817. | 5.7 | 50 |
| 56 | Downâ€regulation of catalase activity allows transient accumulation of a hydrogen peroxide signal in <scp>C</scp>hlamydomonas reinhardtii. Plant, Cell and Environment, 2013, 36, 1204-1213. | 5.7 | 50 |
| 57 | Putative role of the malate valve enzyme NADPâ€“malate dehydrogenase in H <sub>2</sub> O <sub>2</sub> signalling in Arabidopsis. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130228. | 4.0 | 50 |
| 58 | High lightâ€induced hydrogen peroxide production in <scp>C</scp>hlamydomonas reinhardtii is increased by high <scp>CO</scp><sub>2</sub> availability. Plant Journal, 2015, 81, 759-766. | 5.7 | 50 |
| 59 | Putative function of cytochrome b559 as a plastoquinol oxidase. Physiologia Plantarum, 2010, 138, 463-473. | 5.2 | 48 |
| 60 | Oxidative stress induced by the photosensitizers neutral red (type I) or rose bengal (type II) in the light causes different molecular responses in Chlamydomonas reinhardtii. Plant Science, 2005, 168, 747-759. | 3.6 | 47 |
| 61 | Reactive oxygen intermediates produced by photosynthetic electron transport are enhanced in short-day grown plants. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1306-1313. | 1.0 | 45 |
| 62 | Functional and molecular characterization of plastid terminal oxidase from rice (Oryza sativa). Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1284-1292. | 1.0 | 45 |
| 63 | An easily reversible structural change underlies mechanisms enabling desert crust cyanobacteria to survive desiccation. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 1267-1273. | 1.0 | 45 |
| 64 | Limitation in Electron Transfer in Photosystem I Donor Side Mutants of Chlamydomonas reinhardtii. Journal of Biological Chemistry, 2000, 275, 5852-5859. | 3.4 | 43 |
| 65 | Naphthoquinone-Dependent Generation of Superoxide Radicals by Quinone Reductase Isolated from the Plasma Membrane of Soybean. Plant Physiology, 2008, 147, 864-878. | 4.8 | 43 |
| 66 | Production of reactive oxygen species in chloride- and calcium-depleted photosystem II and their involvement in photoinhibition. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1608, 171-180. | 1.0 | 42 |
| 67 | Function of the 23 kDa extrinsic protein of Photosystem II as a manganese binding protein and its role in photoactivation. Biochimica Et Biophysica Acta - Bioenergetics, 2005, 1708, 63-70. | 1.0 | 42 |
| 68 | The non-photochemical quenching protein LHCSR3 prevents oxygen-dependent photoinhibition in Chlamydomonas reinhardtii. Journal of Experimental Botany, 2020, 71, 2650-2660. | 4.8 | 41 |
| 69 | Manganese binding to the 23ÂkDa extrinsic protein of Photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2007, 1767, 583-588. | 1.0 | 38 |
| 70 | Chlamydomonas reinhardtii responding to high light: a role for 2â€propenal (acrolein). Physiologia Plantarum, 2017, 161, 75-87. | 5.2 | 38 |
| 71 | Identification of the electron donor to flavodiiron proteins in Synechocystis sp. PCC 6803 by in vivo spectroscopy. Biochimica Et Biophysica Acta - Bioenergetics, 2020, 1861, 148256. | 1.0 | 38 |
| 72 | The ABA-Deficiency Suppressor Locus HAS2 Encodes the PPR Protein LOI1/MEF11 Involved in Mitochondrial RNA Editing. Molecular Plant, 2015, 8, 644-656. | 8.3 | 37 |

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|---|---|---|---|
| 73 | Pure forms of the singlet oxygen sensors TEMP and TEMPD do not inhibit Photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 1658-1661. | 1.0 | 36 |
| 74 | Non-Photochemical Quenching Capacity in Arabidopsis thaliana Affects Herbivore Behaviour. PLoS ONE, 2013, 8, e53232. | 2.5 | 33 |
| 75 | Chloroplast Activity and 3â€²phosphadenosine 5â€²phosphate Signaling Regulate Programmed Cell Death in Arabidopsis. Plant Physiology, 2016, 170, 1745-1756. | 4.8 | 30 |
| 76 | Effect of Chlamydomonas plastid terminal oxidase 1 expressed in tobacco on photosynthetic electron transfer. Plant Journal, 2016, 85, 219-228. | 5.7 | 29 |
| 77 | The plastid-nucleus located DNA/RNA binding protein WHIRLY1 regulates microRNA-levels during stress in barley (Hordeum vulgare L.). RNA Biology, 2018, 15, 886-891. | 3.1 | 25 |
| 78 | Inhibition of Photosystem II activity by saturating single turnover flashes in calcium-depleted and active Photosystem II. Photosynthesis Research, 2000, 63, 209-216. | 2.9 | 24 |
| 79 | High and low potential forms of the QA quinone electron acceptor in Photosystem II of Thermosynechococcus elongatus and spinach. Journal of Photochemistry and Photobiology B: Biology, 2011, 104, 154-157. | 3.8 | 24 |
| 80 | Inhibition of electron transport at the cytochromeb6fcomplex protects photosystem II from photoinhibition. FEBS Letters, 2000, 486, 191-194. | 2.8 | 23 |
| 81 | Generation of reactive oxygen species in thylakoids from senescing flag leaves of the barley varieties Lomerit and Carina. Planta, 2015, 241, 1497-1508. | 3.2 | 22 |
| 82 | Photoperiod Affects the Phenotype of Mitochondrial Complex I Mutants. Plant Physiology, 2017, 173, 434-455. | 4.8 | 22 |
| 83 | Glycolate Induces Redox Tuning Of Photosystem II in Vivo: Study of a Photorespiration Mutant. Plant Physiology, 2018, 177, 1277-1285. | 4.8 | 22 |
| 84 | Synthesis and Biological Characterization of New Aminophosphonates for Mitochondrial pH Determination by <sup>31</sup>P NMR Spectroscopy. Journal of Medicinal Chemistry, 2013, 56, 2487-2499. | 6.4 | 19 |
| 85 | Dynamic Changes in Protein-Membrane Association for Regulating Photosynthetic Electron Transport. Cells, 2021, 10, 1216. | 4.1 | 19 |
| 86 | Regulation of photosynthetic electron flow on dark to light transition by ferredoxin:NADP(H) oxidoreductase interactions. ELife, 2021, 10, . | 6.0 | 18 |
| 87 | Role of the NAD(P)H quinone oxidoreductase NQR and the cytochrome b AIR12 in controlling superoxide generation at the plasma membrane. Planta, 2017, 245, 807-817. | 3.2 | 17 |
| 88 | Importing Manganese into the Chloroplast: Many Membranes to Cross. Molecular Plant, 2018, 11, 1109-1111. | 8.3 | 17 |
| 89 | In vitro analysis of the plastid terminal oxidase in photosynthetic electron transport. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1684-1690. | 1.0 | 15 |
| 90 | Gallium ferredoxin as a tool to study the effects of ferredoxin binding to photosystem I without ferredoxin reduction. Photosynthesis Research, 2017, 134, 251-263. | 2.9 | 14 |

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| 91 | Dynamics of the localization of the plastid terminal oxidase inside the chloroplast. Journal of Experimental Botany, 2020, 71, 2661-2669. | 4.8 | 14 |
| 92 | Singlet fission in naturally-organized carotenoid molecules. Physical Chemistry Chemical Physics, 2021, 23, 4768-4776. | 2.8 | 13 |
| 93 | Near-infrared in vitro measurements of photosystem I cofactors and electron-transfer partners with a recently developed spectrophotometer. Photosynthesis Research, 2019, 142, 307-319. | 2.9 | 12 |
| 94 | Overexpression of plastid terminal oxidase in Synechocystis sp. PCC 6803 alters cellular redox state. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160379. | 4.0 | 11 |
| 95 | Role of the two PsaE isoforms on O2 reduction at photosystem I in Arabidopsis thaliana. Biochimica Et Biophysica Acta - Bioenergetics, 2020, 1861, 148089. | 1.0 | 11 |
| 96 | Cl-Channel Inhibitors of the Arylaminobenzoate Type Act as Photosystem II Herbicides:Â A Functional and Structural Studyâ€. Biochemistry, 2001, 40, 3273-3281. | 2.5 | 10 |
| 97 | AIR12, a b -type cytochrome of the plasma membrane of Arabidopsis thaliana is a negative regulator of resistance against Botrytis cinerea. Plant Science, 2015, 233, 32-43. | 3.6 | 10 |
| 98 | Moderate drought stress stabilizes the primary quinone acceptor <scp>Q<sub>A</sub></scp> and the secondary quinone acceptor <scp>Q<sub>B</sub></scp> in photosystem <scp>II</scp>. Physiologia Plantarum, 2021, 171, 260-267. | 5.2 | 9 |
| 99 | Regulation of the generation of reactive oxygen species during photosynthetic electron transport. Biochemical Society Transactions, 2022, 50, 1025-1034. | 3.4 | 9 |
| 100 | Electron transport pathways in isolated chromoplasts from Narcissus pseudonarcissus L.. Plant Journal, 2019, 99, 245-256. | 5.7 | 8 |
| 101 | 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. | 3.1 | 7 |
| 102 | Over Expression of the Cyanobacterial Pgr5-Homologue Leads to Pseudoreversion in a Gene Coding for a Putative Esterase in Synechocystis 6803. Life, 2020, 10, 174. | 2.4 | 7 |
| 103 | Effect of constitutive expression of bacterial phytoene desaturase CRTI on photosynthetic electron transport in Arabidopsis thaliana. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 345-353. | 1.0 | 6 |
| 104 | Singlet oxygen triggers chloroplast rupture and cell death in the zeaxanthin epoxidase defective mutant aba1 of Arabidopsis thaliana under high light stress. Journal of Plant Physiology, 2017, 216, 188-196. | 3.5 | 6 |
| 105 | Evolutive differentiation between alga- and plant-type plastid terminal oxidase: Study of plastid terminal oxidase PTOX isoforms in Marchantia polymorpha. Biochimica Et Biophysica Acta - Bioenergetics, 2021, 1862, 148309. | 1.0 | 6 |
| 106 | Adenylates regulate Arabidopsis plastidial thioredoxin activities through the binding of a CBS domain protein. Plant Physiology, 2022, 189, 2298-2314. | 4.8 | 6 |
| 107 | Near-infrared in vivo measurements of photosystem I and its lumenal electron donors with a recently developed spectrophotometer. Photosynthesis Research, 2020, 144, 63-72. | 2.9 | 4 |
| 108 | From light capture to metabolic needs, oxygenic photosynthesis is an everâ€expanding field of study in plants, algae and cyanobacteria. Physiologia Plantarum, 2017, 161, 2-5. | 5.2 | 2 |

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|---|---|---|---|
| 109 | A tribute to Ulrich Heber (1930â€“2016) for his contribution to photosynthesis research: understanding the interplay between photosynthetic primary reactions, metabolism and the environment. Photosynthesis Research, 2018, 137, 17-28. | 2.9 | 1 |
| 110 | Photosynthesisâ€”European Congress on Photosynthesis Research. Physiologia Plantarum, 2019, 166, 4-6. | 5.2 | 1 |
| 111 | A tribute to <scp>Jeanâ€Marc</scp> Ducruet for his contribution to thermoluminescence and photosynthesis research. Physiologia Plantarum, 2021, 171, 179-182. | 5.2 | 0 |