

# Ilse Kranner

## List of Publications by Year in descending order

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97  
papers

5,843  
citations

101543

36  
h-index

82547

72  
g-index

105  
all docs

105  
docs citations

105  
times ranked

5856  
citing authors

#	ARTICLE	IF	CITATIONS
1	Does oxygen affect ageing mechanisms of <i>Pinus densiflora</i> seeds? A matter of cytoplasmic physical state. <i>Journal of Experimental Botany</i> , 2022, 73, 2631-2649.	4.8	18
2	Acquisition of desiccation tolerance in <i>Haematococcus pluvialis</i> requires photosynthesis and coincides with lipid and astaxanthin accumulation. <i>Algal Research</i> , 2022, 64, 102699.	4.6	11
3	Metabolite Profiling in Green Microalgae with Varying Degrees of Desiccation Tolerance. <i>Microorganisms</i> , 2022, 10, 946.	3.6	3
4	The lichen market place. <i>New Phytologist</i> , 2022, 234, 1541-1543.	7.3	4
5	Comparative analysis of wild-type accessions reveals novel determinants of <i>Arabidopsis</i> seed longevity. <i>Plant, Cell and Environment</i> , 2022, 45, 2708-2728.	5.7	9
6	Advances in understanding Norway spruce natural resistance to needle bladder rust infection: transcriptional and secondary metabolites profiling. <i>BMC Genomics</i> , 2022, 23, .	2.8	2
7	How dry is dry? Molecular mobility in relation to thallus water content in a lichen. <i>Journal of Experimental Botany</i> , 2021, 72, 1576-1588.	4.8	24
8	AtFAHD1a: A New Player Influencing Seed Longevity and Dormancy in <i>Arabidopsis</i> ?. <i>International Journal of Molecular Sciences</i> , 2021, 22, 2997.	4.1	9
9	Apoplastic lipid barriers regulated by conserved homeobox transcription factors extend seed longevity in multiple plant species. <i>New Phytologist</i> , 2021, 231, 679-694.	7.3	16
10	Enhanced culturing techniques for the mycobiont isolated from the lichen <i>Xanthoria parietina</i> . <i>Mycological Progress</i> , 2021, 20, 797-808.	1.4	7
11	Redox feedback regulation of ANAC089 signaling alters seed germination and stress response. <i>Cell Reports</i> , 2021, 35, 109263.	6.4	20
12	Plant Parasites under Pressure: Effects of Abiotic Stress on the Interactions between Parasitic Plants and Their Hosts. <i>International Journal of Molecular Sciences</i> , 2021, 22, 7418.	4.1	21
13	Hydrogen Peroxide Metabolism in Interkingdom Interaction Between Bacteria and Wheat Seeds and Seedlings. <i>Molecular Plant-Microbe Interactions</i> , 2020, 33, 336-348.	2.6	15
14	Phytohormone release by three isolated lichen mycobionts and the effects of indole-3-acetic acid on their compatible photobionts. <i>Symbiosis</i> , 2020, 82, 95-108.	2.3	7
15	Adaptation to Aquatic and Terrestrial Environments in <i>Chlorella vulgaris</i> (Chlorophyta). <i>Frontiers in Microbiology</i> , 2020, 11, 585836.	3.5	13
16	RNA-Seq and secondary metabolite analyses reveal a putative defence-transcriptome in Norway spruce ( <i>Picea abies</i> ) against needle bladder rust ( <i>Chrysomyxa rhododendri</i> ) infection. <i>BMC Genomics</i> , 2020, 21, 336.	2.8	13
17	Abundance and Extracellular Release of Phytohormones in Aero-terrestrial Microalgae (Trebouxiophyceae, Chlorophyta) As a Potential Chemical Signaling Source 1. <i>Journal of Phycology</i> , 2020, 56, 1295-1307.	2.3	19
18	Pre-akinete formation in <i>Zygnema</i> sp. from polar habitats is associated with metabolite re-arrangement. <i>Journal of Experimental Botany</i> , 2020, 71, 3314-3322.	4.8	25

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19	Metatranscriptomic and metabolite profiling reveals vertical heterogeneity within a <i>Zygnema</i> green algal mat from Svalbard (High Arctic). <i>Environmental Microbiology</i> , 2019, 21, 4283-4299.	3.8	31
20	Wheat seed ageing viewed through the cellular redox environment and changes in pH. <i>Free Radical Research</i> , 2019, 53, 641-654.	3.3	23
21	Abscisic acid-determined seed vigour differences do not influence redox regulation during ageing. <i>Biochemical Journal</i> , 2019, 476, 965-974.	3.7	18
22	Non-invasive diagnosis of viability in seeds and lichens by infrared thermography under controlled environmental conditions. <i>Plant Methods</i> , 2019, 15, 147.	4.3	0
23	Novel loci and a role for nitric oxide for seed dormancy and preharvest sprouting in barley. <i>Plant, Cell and Environment</i> , 2019, 42, 1318-1327.	5.7	32
24	Solar irradiation levels during simulated long- and short-term heat waves significantly influence heat survival, pigment and ascorbate composition, and free radical scavenging activity in alpine <i>Vaccinium gaultherioides</i> . <i>Physiologia Plantarum</i> , 2018, 163, 211-230.	5.2	7
25	Distress and eustress of reactive electrophiles and relevance to light stress acclimation via stimulation of thiol/disulphide-based redox defences. <i>Free Radical Biology and Medicine</i> , 2018, 122, 65-73.	2.9	36
26	Redox poise and metabolite changes in bread wheat seeds are advanced by priming with hot steam. <i>Biochemical Journal</i> , 2018, 475, 3725-3743.	3.7	25
27	Changes in tocochromanols and glutathione reveal differences in the mechanisms of seed ageing under seedbank conditions and controlled deterioration in barley. <i>Environmental and Experimental Botany</i> , 2018, 156, 8-15.	4.2	39
28	Analyses of several seed viability markers in individual recalcitrant seeds of <i>Eugenia stipitata</i> McVaugh with totipotent germination. <i>Plant Biology</i> , 2017, 19, 6-13.	3.8	24
29	The freshwater red alga <i>Batrachospermum turfosum</i> (Florideophyceae) can acclimate to a wide range of light and temperature conditions. <i>European Journal of Phycology</i> , 2017, 52, 238-249.	2.0	14
30	Association genetics of phenolic needle compounds in Norway spruce with variable susceptibility to needle bladder rust. <i>Plant Molecular Biology</i> , 2017, 94, 229-251.	3.9	30
31	Exceptional flooding tolerance in the totipotent recalcitrant seeds of <i>Eugenia stipitata</i> . <i>Seed Science Research</i> , 2017, 27, 121-130.	1.7	9
32	Changes in low-molecular-weight thiol-disulphide redox couples are part of bread wheat seed germination and early seedling growth. <i>Free Radical Research</i> , 2017, 51, 568-581.	3.3	22
33	Drought affects the heat-hardening capacity of alpine plants as indicated by changes in xanthophyll cycle pigments, singlet oxygen scavenging, 1 $\pm$ -tocopherol and plant hormones. <i>Environmental and Experimental Botany</i> , 2017, 133, 159-175.	4.2	41
34	Foliar Phenolic Compounds in Norway Spruce with Varying Susceptibility to <i>Chrysomyxa rhododendri</i> : Analyses of Seasonal and Infection-Induced Accumulation Patterns. <i>Frontiers in Plant Science</i> , 2017, 8, 1173.	3.6	36
35	Seed Carotenoid and Tocochromanol Composition of Wild Fabaceae Species Is Shaped by Phylogeny and Ecological Factors. <i>Frontiers in Plant Science</i> , 2017, 8, 1428.	3.6	27
36	Formation of lipid bodies and changes in fatty acid composition upon pre-akinetes formation in Arctic and Antarctic <i>Zygnema</i> ( <i>Zygnematophyceae</i> , <i>Streptophyta</i> ) strains. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiw096.	2.7	57

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37	The crypsis hypothesis explained: a reply to Jayasuriya et al. (2015). <i>Seed Science Research</i> , 2015, 25, 402-408.	1.7	6
38	The distribution of glutathione and homogluthathione in leaf, root and seed tissue of 73 species across the three sub-families of the Leguminosae. <i>Phytochemistry</i> , 2015, 115, 175-183.	2.9	10
39	Formation of chloroplast protrusions and catalase activity in alpine <i>Ranunculus glacialis</i> under elevated temperature and different CO <sub>2</sub> /O <sub>2</sub> ratios. <i>Protoplasma</i> , 2015, 252, 1613-1619.	2.1	13
40	Diurnal changes in the xanthophyll cycle pigments of freshwater algae correlate with the environmental hydrogen peroxide concentration rather than non-photochemical quenching. <i>Annals of Botany</i> , 2015, 116, 519-527.	2.9	18
41	A proposed interplay between peroxidase, amine oxidase and lipoxygenase in the wounding-induced oxidative burst in <i>Pisum sativum</i> seedlings. <i>Phytochemistry</i> , 2015, 112, 130-138.	2.9	34
42	Application of heat stress <i>in situ</i> demonstrates a protective role of irradiation on photosynthetic performance in alpine plants. <i>Plant, Cell and Environment</i> , 2015, 38, 812-826.	5.7	51
43	Glutathione redox state, tocopherols, fatty acids, antioxidant enzymes and protein carbonylation in sunflower seed embryos associated with after-ripening and ageing. <i>Annals of Botany</i> , 2015, 116, 669-678.	2.9	58
44	Roles of apoplastic peroxidases in plant response to wounding. <i>Phytochemistry</i> , 2015, 112, 122-129.	2.9	75
45	Genome-wide association mapping and biochemical markers reveal that seed ageing and longevity are intricately affected by genetic background and developmental and environmental conditions in barley. <i>Plant, Cell and Environment</i> , 2015, 38, 1011-1022.	5.7	95
46	Speeding Up Social Waves. Propagation Mechanisms of Shimmering in Giant Honeybees. <i>PLoS ONE</i> , 2014, 9, e86315.	2.5	12
47	Side-effects of domestication: cultivated legume seeds contain similar tocopherols and fatty acids but less carotenoids than their wild counterparts. <i>BMC Plant Biology</i> , 2014, 14, 1599.	3.6	68
48	Salt stress, signalling and redox control in seeds. <i>Functional Plant Biology</i> , 2013, 40, 848.	2.1	33
49	Physical dormancy in seeds: a game of hide and seek?. <i>New Phytologist</i> , 2013, 198, 496-503.	7.3	98
50	A Central Role for Thiols in Plant Tolerance to Abiotic Stress. <i>International Journal of Molecular Sciences</i> , 2013, 14, 7405-7432.	4.1	357
51	Transcriptome-Wide Mapping of Pea Seed Ageing Reveals a Pivotal Role for Genes Related to Oxidative Stress and Programmed Cell Death. <i>PLoS ONE</i> , 2013, 8, e78471.	2.5	74
52	Evidence for the absence of enzymatic reactions in the glassy state. A case study of xanthophyll cycle pigments in the desiccation-tolerant moss <i>Syntrichia ruralis</i> . <i>Journal of Experimental Botany</i> , 2013, 64, 3033-3043.	4.8	86
53	Volatile fingerprints of seeds of four species indicate the involvement of alcoholic fermentation, lipid peroxidation, and Maillard reactions in seed deterioration during ageing and desiccation stress. <i>Journal of Experimental Botany</i> , 2012, 63, 6519-6530.	4.8	63
54	Thermal energy dissipation and xanthophyll cycles beyond the Arabidopsis model. <i>Photosynthesis Research</i> , 2012, 113, 89-103.	2.9	97

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55	Redox state of low-molecular-weight thiols and disulphides during somatic embryogenesis of salt-treated suspension cultures of <i>Dactylis glomerata</i> L. <i>Free Radical Research</i> , 2012, 46, 656-664.	3.3	24
56	Post desiccation germination of mature seeds of tea ( <i>Camellia sinensis</i> L.) can be enhanced by pro-oxidant treatment, but partial desiccation tolerance does not ensure survival at 20°C. <i>Plant Science</i> , 2012, 184, 36-44.	3.6	11
57	How to Join a Wave: Decision-Making Processes in Shimmering Behavior of Giant Honeybees ( <i>Apis</i> ) <i>Tj ETQq1 1 0.784314 rgBT /Overlo</i>	2.5	16
58	Analyses of Reactive Oxygen Species and Antioxidants in Relation to Seed Longevity and Germination. <i>Methods in Molecular Biology</i> , 2011, 773, 343-367.	0.9	66
59	Mathematically combined half-cell reduction potentials of low-molecular-weight thiols as markers of seed ageing. <i>Free Radical Research</i> , 2011, 45, 1093-1102.	3.3	37
60	Extracellular superoxide production associated with secondary root growth following desiccation of <i>Pisum sativum</i> seedlings. <i>Journal of Plant Physiology</i> , 2011, 168, 1870-1873.	3.5	12
61	Crosstalk between reactive oxygen species and hormonal signalling pathways regulates grain dormancy in barley. <i>Plant, Cell and Environment</i> , 2011, 34, 980-993.	5.7	163
62	Metals and seeds: Biochemical and molecular implications and their significance for seed germination. <i>Environmental and Experimental Botany</i> , 2011, 72, 93-105.	4.2	262
63	Inter-nucleosomal DNA fragmentation and loss of RNA integrity during seed ageing. <i>Plant Growth Regulation</i> , 2011, 63, 63-72.	3.4	72
64	Wet-dry cycling extends seed persistence by re-instating antioxidant capacity. <i>Plant and Soil</i> , 2011, 338, 511-519.	3.7	31
65	Stereoscopic motion analysis in densely packed clusters: 3D analysis of the shimmering behaviour in Giant honey bees. <i>Frontiers in Zoology</i> , 2011, 8, 3.	2.0	14
66	Desiccation tolerant plants as model systems to study redox regulation of protein thiols. <i>Plant Growth Regulation</i> , 2010, 62, 241-255.	3.4	88
67	Production of reactive oxygen species in excised, desiccated and cryopreserved explants of <i>Trichilia dregeana</i> Sond. <i>South African Journal of Botany</i> , 2010, 76, 112-118.	2.5	43
68	Alleviation of dormancy by reactive oxygen species in <i>Bidens pilosa</i> L. seeds. <i>South African Journal of Botany</i> , 2010, 76, 601-605.	2.5	22
69	Glutathione half-cell reduction potential as a seed viability marker of the potential oilseed crop <i>Vernonia galamensis</i> . <i>Industrial Crops and Products</i> , 2010, 32, 687-691.	5.2	16
70	What is stress? Concepts, definitions and applications in seed science. <i>New Phytologist</i> , 2010, 188, 655-673.	7.3	358
71	Noninvasive diagnosis of seed viability using infrared thermography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 3912-3917.	7.1	65
72	Glutathione half-cell reduction potential and $\alpha$ -tocopherol as viability markers during the prolonged storage of <i>Suaeda maritima</i> seeds. <i>Seed Science Research</i> , 2010, 20, 47-53.	1.7	38

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73	Trade-Off between Foraging Activity and Infestation by Nest Parasites in the Primitively Eusocial Bee <i>Halictus scabiosae</i> . <i>Psyche: Journal of Entomology</i> , 2010, 2010, 1-13.	0.9	6
74	Homoglutathione synthetase and glutathione synthetase in drought-stressed cowpea leaves: Expression patterns and accumulation of low-molecular-weight thiols. <i>Journal of Plant Physiology</i> , 2010, 167, 480-487.	3.5	18
75	Extracellular production of reactive oxygen species during seed germination and early seedling growth in <i>Pisum sativum</i> . <i>Journal of Plant Physiology</i> , 2010, 167, 805-811.	3.5	130
76	Extracellular superoxide production, viability and redox poise in response to desiccation in recalcitrant <i>Castanea sativa</i> seeds. <i>Plant, Cell and Environment</i> , 2009, 33, 59-75.	5.7	87
77	The Mechanisms Involved in Seed Dormancy Alleviation by Hydrogen Cyanide Unravel the Role of Reactive Oxygen Species as Key Factors of Cellular Signaling during Germination. <i>Plant Physiology</i> , 2009, 150, 494-505.	4.8	256
78	Quantification of seed oil from species with varying oil content using supercritical fluid extraction. <i>Phytochemical Analysis</i> , 2008, 19, 493-498.	2.4	22
79	Desiccation-Tolerance in Lichens: A Review. <i>Bryologist</i> , 2008, 111, 576-593.	0.6	284
80	An oxidative burst of superoxide in embryonic axes of recalcitrant sweet chestnut seeds as induced by excision and desiccation. <i>Physiologia Plantarum</i> , 2008, 133, 131-139.	5.2	73
81	Stress physiology and the symbiosis. , 2008, , 134-151.		42
82	Social Waves in Giant Honeybees Repel Hornets. <i>PLoS ONE</i> , 2008, 3, e3141.	2.5	98
83	Extreme thermo-tolerance in seeds of desert succulents is related to maximum annual temperature. <i>South African Journal of Botany</i> , 2007, 73, 262-265.	2.5	21
84	Isolation of high-quality RNA from polyphenol-, polysaccharide- and lipid-rich seeds. <i>Phytochemical Analysis</i> , 2006, 17, 144-148.	2.4	54
85	Glutathione half-cell reduction potential: A universal stress marker and modulator of programmed cell death?. <i>Free Radical Biology and Medicine</i> , 2006, 40, 2155-2165.	2.9	281
86	A Modulating Role for Antioxidants in Desiccation Tolerance. <i>Integrative and Comparative Biology</i> , 2005, 45, 734-740.	2.0	230
87	Antioxidants and photoprotection in a lichen as compared with its isolated symbiotic partners. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 3141-3146.	7.1	218
88	Biochemical traits of lichens differing in relative desiccation tolerance. <i>New Phytologist</i> , 2003, 160, 167-176.	7.3	97
89	Analysis of Chlorophylls, Carotenoids, and Tocopherols in Lichens. , 2002, , 363-378.		18
90	Glutathione status correlates with different degrees of desiccation tolerance in three lichens. <i>New Phytologist</i> , 2002, 154, 451-460.	7.3	83

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91	Revival of a resurrection plant correlates with its antioxidant status. <i>Plant Journal</i> , 2002, 31, 13-24.	5.7	228
92	Increased stress parameter synthesis in the yeast <i>Saccharomyces cerevisiae</i> after treatment with 4-hydroxy-2-nonenal 1. <i>FEBS Letters</i> , 1997, 405, 11-15.	2.8	26
93	Significance of Thiolâ€Disulfide Exchange in Resting Stages of Plant Development. <i>Botanica Acta</i> , 1996, 109, 8-14.	1.6	72
94	Determination of Glutathione and Glutathione Disulphide in Lichens: a Comparison of Frequently Used Methods. , 1996, 7, 24-28.		78
95	Simultaneous Determination of Ascorbic Acid and Dehydroascorbic Acid in Plant Materials by High Performance Liquid Chromatography. , 1996, 7, 69-72.		41
96	Content of low-molecular-weight thiols during the imbibition of Pea seeds. <i>Physiologia Plantarum</i> , 1993, 88, 557-562.	5.2	73
97	Content of low-molecular-weight thiols during the imbibition of pea seeds. <i>Physiologia Plantarum</i> , 1993, 88, 557-562.	5.2	4