StanisÅ‚aw KarpiÅ„ski

List of Publications by Year
in descending order

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99 papers	9,409 citations	57758 44 h-index	39675 94 g-index
106 all docs	106 docs citations	106 times ranked	8120 citing authors

#	Article	IF	Citations
1	Systemic Signaling and Acclimation in Response to Excess Excitation Energy in Arabidopsis. Science, 1999, 284, 654-657.	12.6	849
2	Photosynthetic electron transport regulates the expression of cytosolic ascorbate peroxidase genes in Arabidopsis during excess light stress.. Plant Cell, 1997, 9, 627-640.	6.6	579
3	ROS, Calcium, and Electric Signals: Key Mediators of Rapid Systemic Signaling in Plants. Plant Physiology, 2016, 171, 1606-1615.	4.8	455
4	Friend or foe? Reactive oxygen species production, scavenging and signaling in plant response to environmental stresses. Free Radical Biology and Medicine, 2018, 122, 4-20.	2.9	415
5	Evidence for a Direct Link between Glutathione Biosynthesis and Stress Defense Gene Expression in Arabidopsis[W]. Plant Cell, 2004, 16, 2448-2462.	6.6	383
6	The role of hydrogen peroxide in regulation of plant metabolism and cellular signalling in response to environmental stresses.. Acta Biochimica Polonica, 2007, 54, 39-50.	0.5	363
7	LESION SIMULATING DISEASE 1 Is Required for Acclimation to Conditions That Promote Excess Excitation Energy Â Â. Plant Physiology, 2004, 136, 2818-2830.	4.8	328
8	Chloroplast Signaling and<i>LESION SIMULATING DISEASE1</i>Regulate Crosstalk between Light Acclimation and Immunity in<i>Arabidopsis</i>Â. Plant Cell, 2008, 20, 2339-2356.	6.6	326
9	Controlled levels of salicylic acid are required for optimal photosynthesis and redox homeostasis. Journal of Experimental Botany, 2006, 57, 1795-1807.	4.8	317
10	Control of Ascorbate Peroxidase 2 expression by hydrogen peroxide and leaf water status during excess light stress reveals a functional organisation of Arabidopsis leaves. Plant Journal, 2003, 33, 691-705.	5.7	306
11	Signal transduction in response to excess light: getting out of the chloroplast. Current Opinion in Plant Biology, 2002, 5, 43-48.	7.1	280
12	Poplar Carbohydrate-Active Enzymes. Gene Identification and Expression Analyses. Plant Physiology, 2006, 140, 946-962.	4.8	271
13	Transcriptional regulation of the CRK/DUF26 group of Receptor-like protein kinases by ozone and plant hormones in Arabidopsis. BMC Plant Biology, 2010, 10, 95.	3.6	261
14	Light perception in plant disease defence signalling. Current Opinion in Plant Biology, 2003, 6, 390-396.	7.1	232
15	Evidence for Light Wavelength-Specific Photoelectrophysiological Signaling and Memory of Excess Light Episodes in <i>Arabidopsis</i> Â Â. Plant Cell, 2010, 22, 2201-2218.	6.6	187
16	Spatial Dependence for Hydrogen Peroxide-Directed Signaling in Light-Stressed Plants. Plant Physiology, 2006, 141, 346-350.	4.8	179
17	Arabidopsis Chloroplastic Glutathione Peroxidases Play a Role in Cross Talk between Photooxidative Stress and Immune Responses Â Â. Plant Physiology, 2009, 150, 670-683.	4.8	171
18	Large-Scale Phenomics Identifies Primary and Fine-Tuning Roles for CRKs in Responses Related to Oxidative Stress. PLoS Genetics, 2015, 11, e1005373.	3.5	167

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19	Light acclimation, retrograde signalling, cell death and immune defences in plants. Plant, Cell and Environment, 2013, 36, 736-744.	5.7	162
20	Lysigenous Aerenchyma Formation in <i>Arabidopsis</i> Is Controlled by <i>LESION SIMULATING DISEASE1</i>. Plant Cell, 2007, 19, 3819-3830.	6.6	159
21	Are diverse signalling pathways integrated in the regulation of Arabidopsis antioxidant defence gene expression in response to excess excitation energy?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2000, 355, 1531-1540.	4.0	132
22	Impact of chloroplastic- and extracellular-sourced ROS on high light-responsive gene expression in Arabidopsis. Journal of Experimental Botany, 2008, 59, 121-133.	4.8	128
23	Induction ofASCORBATE PEROXIDASE 2expression in woundedArabidopsisleaves does not involve known wound-signalling pathways but is associated with changes in photosynthesis. Plant Journal, 2004, 38, 499-511.	5.7	127
24	The Genome Sequence of the North-European Cucumber (Cucumis sativus L.) Unravels Evolutionary Adaptation Mechanisms in Plants. PLoS ONE, 2011, 6, e22728.	2.5	112
25	LESION SIMULATING DISEASE1, ENHANCED DISEASE SUSCEPTIBILITY1, and PHYTOALEXIN DEFICIENT4 Conditionally Regulate Cellular Signaling Homeostasis, Photosynthesis, Water Use Efficiency, and Seed Yield in Arabidopsis Â. Plant Physiology, 2013, 161, 1795-1805.	4.8	110
26	Identification of cDNAS encoding plastid-targeted glutathione peroxidase. Plant Journal, 1998, 13, 375-379.	5.7	107
27	Phytohormones Signaling Pathways and ROS Involvement in Seed Germination. Frontiers in Plant Science, 2016, 7, 864.	3.6	106
28	The influence of the light environment and photosynthesis on oxidative signalling responses in plant-biotrophic pathogen interactions. Plant, Cell and Environment, 2005, 28, 1046-1055.	5.7	103
29	The role of hydrogen peroxide in regulation of plant metabolism and cellular signalling in response to environmental stresses. Acta Biochimica Polonica, 2007, 54, 39-50.	0.5	87
30	Differential redox regulation by glutathione of glutathione reductase and CuZn-superoxide dismutase gene expression in Pinus sylvestris L. needles. Planta, 1996, 198, 151-7.	3.2	85
31	An HPLC-based method of estimation of the total redox state of plastoquinone in chloroplasts, the size of the photochemically active plastoquinone-pool and its redox state in thylakoids of Arabidopsis. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 1669-1675.	1.0	85
32	Mitogen-Activated Protein Kinase 4 Is a Salicylic Acid-Independent Regulator of Growth But Not of Photosynthesis in Arabidopsis. Molecular Plant, 2014, 7, 1151-1166.	8.3	83
33	Electrical Signaling, Photosynthesis and Systemic Acquired Acclimation. Frontiers in Physiology, 2017, 8, 684.	2.8	80
34	Redox Changes in the Chloroplast and Hydrogen Peroxide are Essential for Regulation of C3â€"CAM Transition and Photooxidative Stress Responses in the Facultative CAM Plant Mesembryanthemum crystallinum L.. Plant and Cell Physiology, 2003, 44, 573-581.	3.1	77
35	<scp>LESION SIMULATING DISEASE</scp> 1 and <scp>ENHANCED DISEASE SUSCEPTIBILITY</scp> 1 differentially regulate <scp>UV</scp>â€<scp>C</scp>â€induced photooxidative stress signalling and programmed cell death in <scp><i>A</i></scp><i>rabidopsis thaliana</i>. Plant, Cell and Environment, 2015, 38, 315-330.	5.7	73
36	Cysteine-rich receptor-like kinase CRK5 as a regulator of growth, development, and ultraviolet radiation responses in Arabidopsis thaliana. Journal of Experimental Botany, 2015, 66, 3325-3337.	4.8	73

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37	Light intensity-dependent retrograde signalling in higher plants. Journal of Plant Physiology, 2013, 170, 1501-1516.	3.5	70
38	Antagonistic Effects of Hydrogen Peroxide and Glutathione on Acclimation to Excess Excitation Energy in Arabidopsis. IUBMB Life, 2000, 50, 21-26.	3.4	68
39	A universal algorithm for genome-widein silicioidentification of biologically significant gene promoter putativecis-regulatory-elements; identification of new elements for reactive oxygen species and sucrose signaling in Arabidopsis. Plant Journal, 2006, 45, 384-398.	5.7	68
40	Redox control of oxidative stress responses in the C3â€“CAM intermediate plant Mesembryanthemum crystallinum. Plant Physiology and Biochemistry, 2002, 40, 669-677.	5.8	60
41	Secret life of plants. Plant Signaling and Behavior, 2010, 5, 1391-1394.	2.4	55
42	Role of phytochromes A and B in the regulation of cell death and acclimatory responses to UV stress in<i>Arabidopsis thaliana</i>. Journal of Experimental Botany, 2015, 66, 6679-6695.	4.8	52
43	Evidence for the Involvement of Electrical, Calcium and ROS Signaling in the Systemic Regulation of Non-Photochemical Quenching and Photosynthesis. Plant and Cell Physiology, 2017, 58, 207-215.	3.1	52
44	Differential tissue/organ-dependent expression of two sucrose- and cold-responsive genes for UDP-glucose pyrophosphorylase in Populus. Gene, 2007, 389, 186-195.	2.2	50
45	PAD4, LSD1 and EDS1 regulate drought tolerance, plant biomass production, and cell wall properties. Plant Cell Reports, 2016, 35, 527-539.	5.6	48
46	Isolation, Purification, and Subcellular Localization of Isozymes of Superoxide Dismutase from Scots Pine (<i>Pinus sylvestris</i> L.) Needles. Plant Physiology, 1991, 95, 21-28.	4.8	47
47	Characterization of cDNAs encoding CuZn-superoxide dismutases in Scots pine. Plant Molecular Biology, 1992, 18, 545-555.	3.9	44
48	Abscisic acid signalling determines susceptibility of bundle sheath cells to photoinhibition in high light-exposed <i>Arabidopsis</i> leaves. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130234.	4.0	43
49	A Salinity-Induced C3-CAM Transition Increases Energy Conservation in the Halophyte Mesembryanthemum crystallinum L.. Plant and Cell Physiology, 2004, 45, 789-794.	3.1	40
50	Retrograde Signaling: Understanding the Communication between Organelles. International Journal of Molecular Sciences, 2020, 21, 6173.	4.1	40
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55	Isochorismate synthase 1 is required for thylakoid organization, optimal plastoquinone redox status, and state transitions in Arabidopsis thaliana. Journal of Experimental Botany, 2013, 64, 3669-3679.	4.8	35
56	Pausing of Chloroplast Ribosomes Is Induced by Multiple Features and Is Linked to the Assembly of Photosynthetic Complexes. Plant Physiology, 2018, 176, 2557-2569.	4.8	33
57	Effect of coldâ€induced changes in physical and chemical leaf properties on the resistance of winter triticale (Ã—<i><scp>T</scp>riticosecale</i>) to the fungal pathogen <i><scp>M</scp>icrodochium nivale</i>. Plant Pathology, 2013, 62, 867-878.	2.4	29
58	The chlB gene encoding a subunit of light-independent protochlorophyllide reductase is edited in chloroplasts of conifers. Current Genetics, 1997, 31, 343-347.	1.7	28
59	Î²-carbonic anhydrases and carbonic ions uptake positively influence Arabidopsis photosynthesis, oxidative stress tolerance and growth in light dependent manner. Journal of Plant Physiology, 2016, 203, 44-54.	3.5	28
60	Involvement of the Chloroplast Signal Recognition Particle cpSRP43 in Acclimation to Conditions Promoting Photooxidative Stress in Arabidopsis. Plant and Cell Physiology, 2005, 46, 118-129.	3.1	23
61	Photosystem II 22kDa protein level â€•a prerequisite for excess lightâ€inducible memory, crossâ€tolerance to UVâ€C and regulation of electrical signalling. Plant, Cell and Environment, 2020, 43, 649-661.	5.7	23
62	Differential expression of CuZn-superoxide dismutases in Pinus sylvestris needles exposed to SO2 and NO2. Physiologia Plantarum, 1992, 85, 689-696.	5.2	21
63	Programmed Cell Death as a Response to High Light, UV and Drought Stress in Plants. , 0, , .		21
64	CIA2 and CIA2â€LIKE are required for optimal photosynthesis and stress responses in <i>Arabidopsis thaliana</i>. Plant Journal, 2021, 105, 619-638.	5.7	20
65	LSD1â€, EDS1â€•and PAD4â€dependent conditional correlation among salicylic acid, hydrogen peroxide, water use efficiency and seed yield in <i>Arabidopsis thaliana</i>. Physiologia Plantarum, 2019, 165, 369-382.	5.2	19
66	FMO1 Is Involved in Excess Light Stress-Induced Signal Transduction and Cell Death Signaling. Cells, 2020, 9, 2163.	4.1	19
67	Molecular responses to photooxidative stress in Pinus sylvestris. I. Differential expression of nuclear and plastid genes in relation to recovery from winter stress. Physiologia Plantarum, 1994, 90, 358-366.	5.2	17
68	Mitogen activated protein kinase 4 (MPK4) influences growth in Populus tremula L.Ã—tremuloides. Environmental and Experimental Botany, 2016, 130, 189-205.	4.2	17
69	<scp><i>PHYTOALEXIN DEFICIENT</i></scp>â€…<i>4</i> affects reactive oxygen species metabolism, cell wall and wood properties in hybrid aspen (<scp><i>P</i></scp><i>opulus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 177 Td (trem	5.7	16
70	Determination of Water Use Efficiency for Arabidopsis thaliana. Bio-protocol, 2014, 4, .	0.4	15
71	The genes encoding subunit 3 of NADH dehydrogenase and ribosomal protein S12 are co-transcribed and edited in Pinus sylvestris (L.) mitochondria. Current Genetics, 1995, 28, 423-428.	1.7	14
72	PsbS is required for systemic acquired acclimation and post-excess-light-stress optimization of chlorophyll fluorescence decay times inArabidopsis. Plant Signaling and Behavior, 2015, 10, e982018.	2.4	14

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73	The Role of Programmed Cell Death Regulator LSD1 in Nematode-Induced Syncytium Formation. Frontiers in Plant Science, 2018, 9, 314.	3.6	14
74	ENHANCED DISEASE SUSCEPTIBILITY 1 (EDS1) affects development, photosynthesis, and hormonal homeostasis in hybrid aspen (Populus tremula L.â€ Ã—â€ P. tremuloides). Journal of Plant Physiology, 2018, 226, 91-102.	3.5	13
75	Contribution of PsbS Function and Stomatal Conductance to Foliar Temperature in Higher Plants. Plant and Cell Physiology, 2016, 57, pcw083.	3.1	12
76	Salicylic Acid Accumulation Controlled by LSD1 Is Essential in Triggering Cell Death in Response to Abiotic Stress. Cells, 2021, 10, 962.	4.1	12
77	Redox Sensing of Photooxidative Stress and Acclimatory Mechanisms in Plants. Advances in Photosynthesis and Respiration, 2001, , 469-486.	1.0	11
78	Biotechnological Potential of LSD1, EDS1, and PAD4 in the Improvement of Crops and Industrial Plants. Plants, 2019, 8, 290.	3.5	10
79	MITOGEN-ACTIVATED PROTEIN KINASE 4 impacts leaf development, temperature, and stomatal movement in hybrid aspen. Plant Physiology, 2021, 186, 2190-2204.	4.8	10
80	Light-Dependent Translation Change of Arabidopsis psbA Correlates with RNA Structure Alterations at the Translation Initiation Region. Cells, 2021, 10, 322.	4.1	9
81	Integration of Signaling in Antioxidant Defenses. Advances in Photosynthesis and Respiration, 2008, , 223-239.	1.0	8
82	Phototropin 1 and 2 Influence Photosynthesis, UV-C Induced Photooxidative Stress Responses, and Cell Death. Cells, 2021, 10, 200.	4.1	8
83	Four cytosolic-type CuZn-superoxide dismutases in germinating seeds of Pinus sylvestris. Physiologia Plantarum, 1994, 92, 443-450.	5.2	8
84	Four cytosolic-type CuZn-superoxide dismutases in germinating seeds of Pinus sylvestris. Physiologia Plantarum, 1994, 92, 443-450.	5.2	7
85	Novel Role of JAC1 in Influencing Photosynthesis, Stomatal Conductance, and Photooxidative Stress Signalling Pathway in Arabidopsis thaliana. Frontiers in Plant Science, 2020, 11, 1124.	3.6	5
86	The concentration of selected heavy metals in poplar wood biomass and liquid fraction obtained after high temperature pretreatment. Wood Research, 2021, 66, 39-48.	0.6	5
87	Cellular light memory, photo-electrochemical and redox retrograde signaling in plants. Biotechnologia, 2012, 1, 27-39.	0.9	5
88	The chloroplast genome of Pinussylvestris; physical map and localization of chloroplast genes. Canadian Journal of Forest Research, 1993, 23, 234-238.	1.7	4
89	EDS1-Dependent Cell Death and the Antioxidant System in Arabidopsis Leaves is Deregulated by the Mammalian Bax. Cells, 2020, 9, 2454.	4.1	3
90	Differential expression of CuZn-superoxide dismutases in Pinus sylvestris needles exposed to SO2 and NO2. Physiologia Plantarum, 1992, 85, 689-696.	5.2	3

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91	Signalling and Antioxidant Defence Mechanisms in Higher Plants. Tree Physiology, 2001, , 93-114.	2.5	2
92	Molecular responses to photooxidative stress in Pinus sylvestris. I. Differential expression of nuclear and plastid genes in relation to recovery from winter stress. Physiologia Plantarum, 1994, 90, 358-366.	5.2	2
93	Estimation of microbiological contamination of maize seeds using isothermal calorimetry. Journal of Thermal Analysis and Calorimetry, 2020, 142, 749-754.	3.6	1
94	Plant Physiomics: Photoelectrochemical and Molecular Retrograde Signalling in Plant Acclimatory and Defence Responses. , 2015, , 439-457.		1
95	Incorporation of inorganic nanostructures into the internal structures of Arabidopsis thaliana. New Biotechnology, 2016, 33, S86.	4.4	0
96	12x coverage 454/Sanger Hybrid Assembly of Cucumber (Cucumis sativus L. cv.Borszczagovski) genome - the most efficient way to begin post genomic era. Nature Precedings, 0, , .	0.1	0
97	Glutathione Regulates Differentially Expression of Genes Encoding Glutathione Reductase and CuZn-Superoxide Dismutase in Scots Pine Needles. , 1995, , 2507-2510.		0
98	Developmental Regulation of Light-Independent Transcription of Nuclear- and Plastid-Encoded Chloroplast Proteins in Scots Pine. , 1995, , 2511-2514.		0
99	Systemic Sensing of Light in Plants; A Key Regulatory Role of Photosynthetic Electron Transport. , 1998, , 2809-2812.		0