

# Stanisław Karpiński

## List of Publications by Year in descending order

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99  
papers

9,409  
citations

57631

44  
h-index

39575

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. <i>Science</i> , 1999, 284, 654-657.	6.0	849
2	Photosynthetic electron transport regulates the expression of cytosolic ascorbate peroxidase genes in Arabidopsis during excess light stress.. <i>Plant Cell</i> , 1997, 9, 627-640.	3.1	579
3	ROS, Calcium, and Electric Signals: Key Mediators of Rapid Systemic Signaling in Plants. <i>Plant Physiology</i> , 2016, 171, 1606-1615.	2.3	455
4	Friend or foe? Reactive oxygen species production, scavenging and signaling in plant response to environmental stresses. <i>Free Radical Biology and Medicine</i> , 2018, 122, 4-20.	1.3	415
5	Evidence for a Direct Link between Glutathione Biosynthesis and Stress Defense Gene Expression in Arabidopsis[W]. <i>Plant Cell</i> , 2004, 16, 2448-2462.	3.1	383
6	The role of hydrogen peroxide in regulation of plant metabolism and cellular signalling in response to environmental stresses.. <i>Acta Biochimica Polonica</i> , 2007, 54, 39-50.	0.3	363
7	LESION SIMULATING DISEASE 1 Is Required for Acclimation to Conditions That Promote Excess Excitation Energy. <i>Plant Physiology</i> , 2004, 136, 2818-2830.	2.3	328
8	Chloroplast Signaling and <i>LESION SIMULATING DISEASE1</i> Regulate Crosstalk between Light Acclimation and Immunity in Arabidopsis. <i>Plant Cell</i> , 2008, 20, 2339-2356.	3.1	326
9	Controlled levels of salicylic acid are required for optimal photosynthesis and redox homeostasis. <i>Journal of Experimental Botany</i> , 2006, 57, 1795-1807.	2.4	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. <i>Plant Journal</i> , 2003, 33, 691-705.	2.8	306
11	Signal transduction in response to excess light: getting out of the chloroplast. <i>Current Opinion in Plant Biology</i> , 2002, 5, 43-48.	3.5	280
12	Poplar Carbohydrate-Active Enzymes. Gene Identification and Expression Analyses. <i>Plant Physiology</i> , 2006, 140, 946-962.	2.3	271
13	Transcriptional regulation of the CRK/DUF26 group of Receptor-like protein kinases by ozone and plant hormones in Arabidopsis. <i>BMC Plant Biology</i> , 2010, 10, 95.	1.6	261
14	Light perception in plant disease defence signalling. <i>Current Opinion in Plant Biology</i> , 2003, 6, 390-396.	3.5	232
15	Evidence for Light Wavelength-Specific Photoelectrophysiological Signaling and Memory of Excess Light Episodes in Arabidopsis. <i>Plant Cell</i> , 2010, 22, 2201-2218.	3.1	187
16	Spatial Dependence for Hydrogen Peroxide-Directed Signaling in Light-Stressed Plants. <i>Plant Physiology</i> , 2006, 141, 346-350.	2.3	179
17	Arabidopsis Chloroplastic Glutathione Peroxidases Play a Role in Cross Talk between Photooxidative Stress and Immune Responses. <i>Plant Physiology</i> , 2009, 150, 670-683.	2.3	171
18	Large-Scale Phenomics Identifies Primary and Fine-Tuning Roles for CRKs in Responses Related to Oxidative Stress. <i>PLoS Genetics</i> , 2015, 11, e1005373.	1.5	167

#	ARTICLE	IF	CITATIONS
19	Light acclimation, retrograde signalling, cell death and immune defences in plants. <i>Plant, Cell and Environment</i> , 2013, 36, 736-744.	2.8	162
20	Lysigenous Aerenchyma Formation in <i>Arabidopsis</i> Is Controlled by <i>LESION SIMULATING DISEASE1</i> . <i>Plant Cell</i> , 2007, 19, 3819-3830.	3.1	159
21	Are diverse signalling pathways integrated in the regulation of <i>Arabidopsis</i> antioxidant defence gene expression in response to excess excitation energy?. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2000, 355, 1531-1540.	1.8	132
22	Impact of chloroplastic- and extracellular-sourced ROS on high light-responsive gene expression in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2008, 59, 121-133.	2.4	128
23	Induction of <i>ASCORBATE PEROXIDASE 2</i> expression in wounded <i>Arabidopsis</i> leaves does not involve known wound-signalling pathways but is associated with changes in photosynthesis. <i>Plant Journal</i> , 2004, 38, 499-511.	2.8	127
24	The Genome Sequence of the North-European Cucumber ( <i>Cucumis sativus</i> L.) Unravels Evolutionary Adaptation Mechanisms in Plants. <i>PLoS ONE</i> , 2011, 6, e22728.	1.1	112
25	<i>LESION SIMULATING DISEASE1</i> , <i>ENHANCED DISEASE SUSCEPTIBILITY1</i> , and <i>PHYTOALEXIN DEFICIENT4</i> Conditionally Regulate Cellular Signaling Homeostasis, Photosynthesis, Water Use Efficiency, and Seed Yield in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2013, 161, 1795-1805.	2.3	110
26	Identification of cDNAs encoding plastid-targeted glutathione peroxidase. <i>Plant Journal</i> , 1998, 13, 375-379.	2.8	107
27	Phytohormones Signaling Pathways and ROS Involvement in Seed Germination. <i>Frontiers in Plant Science</i> , 2016, 7, 864.	1.7	106
28	The influence of the light environment and photosynthesis on oxidative signalling responses in plant-birotrophic pathogen interactions. <i>Plant, Cell and Environment</i> , 2005, 28, 1046-1055.	2.8	103
29	The role of hydrogen peroxide in regulation of plant metabolism and cellular signalling in response to environmental stresses. <i>Acta Biochimica Polonica</i> , 2007, 54, 39-50.	0.3	87
30	Differential redox regulation by glutathione of glutathione reductase and CuZn-superoxide dismutase gene expression in <i>Pinus sylvestris</i> L. needles. <i>Planta</i> , 1996, 198, 151-7.	1.6	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 <i>Arabidopsis</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2006, 1757, 1669-1675.	0.5	85
32	Mitogen-Activated Protein Kinase 4 Is a Salicylic Acid-Independent Regulator of Growth But Not of Photosynthesis in <i>Arabidopsis</i> . <i>Molecular Plant</i> , 2014, 7, 1151-1166.	3.9	83
33	Electrical Signaling, Photosynthesis and Systemic Acquired Acclimation. <i>Frontiers in Physiology</i> , 2017, 8, 684.	1.3	80
34	Redox Changes in the Chloroplast and Hydrogen Peroxide are Essential for Regulation of C <sub>3</sub> →C <sub>4</sub> Transition and Photooxidative Stress Responses in the Facultative CAM Plant <i>Mesembryanthemum crystallinum</i> L.. <i>Plant and Cell Physiology</i> , 2003, 44, 573-581.	1.5	77
35	<i>LESION SIMULATING DISEASE 1</i> and <i>ENHANCED DISEASE SUSCEPTIBILITY 1</i> differentially regulate UV-C-induced photooxidative stress signalling and programmed cell death in <i>Arabidopsis thaliana</i> . <i>Plant, Cell and Environment</i> , 2015, 38, 315-330.	2.8	73
36	Cysteine-rich receptor-like kinase CRK5 as a regulator of growth, development, and ultraviolet radiation responses in <i>Arabidopsis thaliana</i> . <i>Journal of Experimental Botany</i> , 2015, 66, 3325-3337.	2.4	73

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37	Light intensity-dependent retrograde signalling in higher plants. <i>Journal of Plant Physiology</i> , 2013, 170, 1501-1516.	1.6	70
38	Antagonistic Effects of Hydrogen Peroxide and Glutathione on Acclimation to Excess Excitation Energy in <i>Arabidopsis</i> . <i>IUBMB Life</i> , 2000, 50, 21-26.	1.5	68
39	A universal algorithm for genome-wide identification of biologically significant gene promoter putative cis-regulatory elements; identification of new elements for reactive oxygen species and sucrose signaling in <i>Arabidopsis</i> . <i>Plant Journal</i> , 2006, 45, 384-398.	2.8	68
40	Redox control of oxidative stress responses in the C <sub>3</sub> -CAM intermediate plant <i>Mesembryanthemum crystallinum</i> . <i>Plant Physiology and Biochemistry</i> , 2002, 40, 669-677.	2.8	60
41	Secret life of plants. <i>Plant Signaling and Behavior</i> , 2010, 5, 1391-1394.	1.2	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> . <i>Journal of Experimental Botany</i> , 2015, 66, 6679-6695.	2.4	52
43	Evidence for the Involvement of Electrical, Calcium and ROS Signaling in the Systemic Regulation of Non-Photochemical Quenching and Photosynthesis. <i>Plant and Cell Physiology</i> , 2017, 58, 207-215.	1.5	52
44	Differential tissue/organ-dependent expression of two sucrose- and cold-responsive genes for UDP-glucose pyrophosphorylase in <i>Populus</i> . <i>Gene</i> , 2007, 389, 186-195.	1.0	50
45	PAD4, LSD1 and EDS1 regulate drought tolerance, plant biomass production, and cell wall properties. <i>Plant Cell Reports</i> , 2016, 35, 527-539.	2.8	48
46	Isolation, Purification, and Subcellular Localization of Isozymes of Superoxide Dismutase from Scots Pine ( <i>Pinus sylvestris</i> L.) Needles. <i>Plant Physiology</i> , 1991, 95, 21-28.	2.3	47
47	Characterization of cDNAs encoding CuZn-superoxide dismutases in Scots pine. <i>Plant Molecular Biology</i> , 1992, 18, 545-555.	2.0	44
48	Abscisic acid signalling determines susceptibility of bundle sheath cells to photoinhibition in high light-exposed <i>Arabidopsis</i> leaves. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014, 369, 20130234.	1.8	43
49	A Salinity-Induced C <sub>3</sub> -CAM Transition Increases Energy Conservation in the Halophyte <i>Mesembryanthemum crystallinum</i> L.. <i>Plant and Cell Physiology</i> , 2004, 45, 789-794.	1.5	40
50	Retrograde Signaling: Understanding the Communication between Organelles. <i>International Journal of Molecular Sciences</i> , 2020, 21, 6173.	1.8	40
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55	Isochorismate synthase 1 is required for thylakoid organization, optimal plastoquinone redox status, and state transitions in <i>Arabidopsis thaliana</i> . <i>Journal of Experimental Botany</i> , 2013, 64, 3669-3679.	2.4	35
56	Pausing of Chloroplast Ribosomes Is Induced by Multiple Features and Is Linked to the Assembly of Photosynthetic Complexes. <i>Plant Physiology</i> , 2018, 176, 2557-2569.	2.3	33
57	Effect of cold-induced changes in physical and chemical leaf properties on the resistance of winter triticale ( <i>Triticosecale</i> ) to the fungal pathogen <i>Microdochium nivale</i> . <i>Plant Pathology</i> , 2013, 62, 867-878.	1.2	29
58	The chlB gene encoding a subunit of light-independent protochlorophyllide reductase is edited in chloroplasts of conifers. <i>Current Genetics</i> , 1997, 31, 343-347.	0.8	28
59	$\Gamma^2$ -carbonic anhydrases and carbonic ions uptake positively influence <i>Arabidopsis</i> photosynthesis, oxidative stress tolerance and growth in light dependent manner. <i>Journal of Plant Physiology</i> , 2016, 203, 44-54.	1.6	28
60	Involvement of the Chloroplast Signal Recognition Particle cpSRP43 in Acclimation to Conditions Promoting Photooxidative Stress in <i>Arabidopsis</i> . <i>Plant and Cell Physiology</i> , 2005, 46, 118-129.	1.5	23
61	Photosystem II 22kDa protein level is a prerequisite for excess light-inducible memory, cross-tolerance to UV-C and regulation of electrical signalling. <i>Plant, Cell and Environment</i> , 2020, 43, 649-661.	2.8	23
62	Differential expression of CuZn-superoxide dismutases in <i>Pinus sylvestris</i> needles exposed to SO <sub>2</sub> and NO <sub>2</sub> . <i>Physiologia Plantarum</i> , 1992, 85, 689-696.	2.6	21
63	Programmed Cell Death as a Response to High Light, UV and Drought Stress in Plants. , 0, , .		21
64	CIA2 and CIA2-LIKE are required for optimal photosynthesis and stress responses in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2021, 105, 619-638.	2.8	20
65	LSD1, EDS1 and PAD4-dependent conditional correlation among salicylic acid, hydrogen peroxide, water use efficiency and seed yield in <i>Arabidopsis thaliana</i> . <i>Physiologia Plantarum</i> , 2019, 165, 369-382.	2.6	19
66	FMO1 Is Involved in Excess Light Stress-Induced Signal Transduction and Cell Death Signaling. <i>Cells</i> , 2020, 9, 2163.	1.8	19
67	Molecular responses to photooxidative stress in <i>Pinus sylvestris</i> . I. Differential expression of nuclear and plastid genes in relation to recovery from winter stress. <i>Physiologia Plantarum</i> , 1994, 90, 358-366.	2.6	17
68	Mitogen activated protein kinase 4 (MPK4) influences growth in <i>Populus tremula</i> L. tremuloides. <i>Environmental and Experimental Botany</i> , 2016, 130, 189-205.	2.0	17
69	PHYTOALEXIN DEFICIENT 4 affects reactive oxygen species metabolism, cell wall and wood properties in hybrid aspen ( <i>Populus</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock 10218 50 17716d (tremu		
70	Determination of Water Use Efficiency for <i>Arabidopsis thaliana</i> . <i>Bio-protocol</i> , 2014, 4, .	0.2	15
71	The genes encoding subunit 3 of NADH dehydrogenase and ribosomal protein S12 are co-transcribed and edited in <i>Pinus sylvestris</i> (L.) mitochondria. <i>Current Genetics</i> , 1995, 28, 423-428.	0.8	14
72	PsbS is required for systemic acquired acclimation and post-excess-light-stress optimization of chlorophyll fluorescence decay times in <i>Arabidopsis</i> . <i>Plant Signaling and Behavior</i> , 2015, 10, e982018.	1.2	14

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73	The Role of Programmed Cell Death Regulator LSD1 in Nematode-Induced Syncytium Formation. <i>Frontiers in Plant Science</i> , 2018, 9, 314.	1.7	14
74	ENHANCED DISEASE SUSCEPTIBILITY 1 (EDS1) affects development, photosynthesis, and hormonal homeostasis in hybrid aspen ( <i>Populus tremula</i> L. × <i>P. tremuloides</i> ). <i>Journal of Plant Physiology</i> , 2018, 226, 91-102.	1.6	13
75	Contribution of PsbS Function and Stomatal Conductance to Foliar Temperature in Higher Plants. <i>Plant and Cell Physiology</i> , 2016, 57, pcw083.	1.5	12
76	Salicylic Acid Accumulation Controlled by LSD1 Is Essential in Triggering Cell Death in Response to Abiotic Stress. <i>Cells</i> , 2021, 10, 962.	1.8	12
77	Redox Sensing of Photooxidative Stress and Acclimatory Mechanisms in Plants. <i>Advances in Photosynthesis and Respiration</i> , 2001, , 469-486.	1.0	11
78	Biotechnological Potential of LSD1, EDS1, and PAD4 in the Improvement of Crops and Industrial Plants. <i>Plants</i> , 2019, 8, 290.	1.6	10
79	MITOGEN-ACTIVATED PROTEIN KINASE 4 impacts leaf development, temperature, and stomatal movement in hybrid aspen. <i>Plant Physiology</i> , 2021, 186, 2190-2204.	2.3	10
80	Light-Dependent Translation Change of Arabidopsis psbA Correlates with RNA Structure Alterations at the Translation Initiation Region. <i>Cells</i> , 2021, 10, 322.	1.8	9
81	Integration of Signaling in Antioxidant Defenses. <i>Advances in Photosynthesis and Respiration</i> , 2008, , 223-239.	1.0	8
82	Phototropin 1 and 2 Influence Photosynthesis, UV-C Induced Photooxidative Stress Responses, and Cell Death. <i>Cells</i> , 2021, 10, 200.	1.8	8
83	Four cytosolic-type CuZn-superoxide dismutases in germinating seeds of <i>Pinus sylvestris</i> . <i>Physiologia Plantarum</i> , 1994, 92, 443-450.	2.6	8
84	Four cytosolic-type CuZn-superoxide dismutases in germinating seeds of <i>Pinus sylvestris</i> . <i>Physiologia Plantarum</i> , 1994, 92, 443-450.	2.6	7
85	Novel Role of JAC1 in Influencing Photosynthesis, Stomatal Conductance, and Photooxidative Stress Signalling Pathway in <i>Arabidopsis thaliana</i> . <i>Frontiers in Plant Science</i> , 2020, 11, 1124.	1.7	5
86	The concentration of selected heavy metals in poplar wood biomass and liquid fraction obtained after high temperature pretreatment. <i>Wood Research</i> , 2021, 66, 39-48.	0.2	5
87	Cellular light memory, photo-electrochemical and redox retrograde signaling in plants. <i>Biotechnologia</i> , 2012, 1, 27-39.	0.3	5
88	The chloroplast genome of <i>Pinus sylvestris</i> ; physical map and localization of chloroplast genes. <i>Canadian Journal of Forest Research</i> , 1993, 23, 234-238.	0.8	4
89	EDS1-Dependent Cell Death and the Antioxidant System in <i>Arabidopsis</i> Leaves is Deregulated by the Mammalian Bax. <i>Cells</i> , 2020, 9, 2454.	1.8	3
90	Differential expression of CuZn-superoxide dismutases in <i>Pinus sylvestris</i> needles exposed to SO <sub>2</sub> and NO <sub>2</sub> . <i>Physiologia Plantarum</i> , 1992, 85, 689-696.	2.6	3

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91	Signalling and Antioxidant Defence Mechanisms in Higher Plants. <i>Tree Physiology</i> , 2001, , 93-114.	0.9	2
92	Molecular responses to photooxidative stress in <i>Pinus sylvestris</i> . I. Differential expression of nuclear and plastid genes in relation to recovery from winter stress. <i>Physiologia Plantarum</i> , 1994, 90, 358-366.	2.6	2
93	Estimation of microbiological contamination of maize seeds using isothermal calorimetry. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 142, 749-754.	2.0	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 <i>Arabidopsis thaliana</i> . <i>New Biotechnology</i> , 2016, 33, S86.	2.4	0
96	12x coverage 454/Sanger Hybrid Assembly of Cucumber ( <i>Cucumis sativus</i> L. cv.Borszczagowski) genome - the most efficient way to begin post genomic era. <i>Nature Precedings</i> , 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