Jerzy Kruk

List of Publications by Year in descending order

66 papers	2,209 citations	218677 26 h-index	243625 44 g-index
68 all docs	68 docs citations	68 times ranked	2374 citing authors

#	Article	IF	Citations
1	Tocopherol as singlet oxygen scavenger in photosystem II. Journal of Plant Physiology, 2005, 162, 749-757.	3.5	145
2	Improving photosynthesis, plant productivity and abiotic stress tolerance â€“ current trends and future perspectives. Journal of Plant Physiology, 2018, 231, 415-433.	3.5	110
3	Plastoquinol as a singlet oxygen scavenger in photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 154-162.	1.0	108
4	Plastoquinol is the Main Prenyllipid Synthesized During Acclimation to High Light Conditions in Arabidopsis and is Converted to Plastochromanol by Tocopherol Cyclase. Plant and Cell Physiology, 2010, 51, 537-545.	3.1	100
5	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
6	Phytohormones as targets for improving plant productivity and stress tolerance. Journal of Plant Physiology, 2018, 229, 32-40.	3.5	82
7	Plastochromanol-8: Fifty years of research. Phytochemistry, 2014, 108, 9-16.	2.9	81
8	RP-LC for Determination of Plastochromanol, Tocotrienols and Tocopherols in Plant Oils. Chromatographia, 2007, 66, 909-913.	1.3	78
9	Title is missing!. Photosynthesis Research, 1999, 62, 273-279.	2.9	73
10	Physiological characterization of Chlamydomonas reinhardtii acclimated to chronic stress induced by Ag, Cd, Cr, Cu and Hg ions. Ecotoxicology and Environmental Safety, 2016, 130, 133-145.	6.0	64
11	Scavenging of Superoxide Generated in Photosystem I by Plastoquinol and Other Prenyllipids in Thylakoid Membranesâ€. Biochemistry, 2003, 42, 8501-8505.	2.5	59
12	Riboflavin as a Source of Autofluorescence in Eisenia fetida Coelomocytes. Photochemistry and Photobiology, 2006, 82, 570.	2.5	56
13	Powered by light: Phototrophy and photosynthesis in prokaryotes and its evolution. Microbiological Research, 2016, 186-187, 99-118.	5.3	54
14	Antioxidant Properties of Plastoquinol and Other Biological Prenylquinols in Liposomes and Solution. Free Radical Research, 1994, 21, 409-416.	3.3	50
15	Plastoquinol is more active than Î±-tocopherol in singlet oxygen scavenging during high light stress of Chlamydomonas reinhardtii. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 389-394.	1.0	50
16	Inhibition of oxygen evolution in Photosystem II by Cu(II) ions is associated with oxidation of cytochrome b559. Biochemical Journal, 2003, 371, 597-601.	3.7	48
17	Function of isoprenoid quinones and chromanols during oxidative stress in plants. New Biotechnology, 2016, 33, 636-643.	4.4	48
18	The 33 kDa Protein of Photosystem II Is a Low-Affinity Calcium- and Lanthanide-Binding Protein. Biochemistry, 2003, 42, 14862-14867.	2.5	38

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19	Function of plastochromanol and other biological prenyllipids in the inhibition of lipid peroxidationâ€"A comparative study in model systems. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 233-240.	2.6	37
20	Photoactive Protochlorophyllide-Enzyme Complexes Reconstituted with PORA, PORB and PORC Proteins of A. thaliana: Fluorescence and Catalytic Properties. PLoS ONE, 2015, 10, e0116990.	2.5	37
21	Vitamin E - Occurrence, Biosynthesis by Plants and Functions in Human Nutrition. Mini-Reviews in Medicinal Chemistry, 2017, 17, 1039-1052.	2.4	37
22	Coregulated Genes Link Sulfide:Quinone Oxidoreductase and Arsenic Metabolism in Synechocystis sp. Strain PCC6803. Journal of Bacteriology, 2014, 196, 3430-3440.	2.2	36
23	Photocatalytic LPOR forms helical lattices that shape membranes for chlorophyll synthesis. Nature Plants, 2021, 7, 437-444.	9.3	35
24	Novel vitamin E forms in leaves of Kalanchoe daigremontiana and Phaseolus coccineus. Journal of Plant Physiology, 2011, 168, 2021-2027.	3.5	33
25	Prenyllipid antioxidants participate in response to acute stress induced by heavy metals in green microalga Chlamydomonas reinhardtii. Environmental and Experimental Botany, 2016, 123, 98-107.	4.2	30
26	Effect of Chlamydomonas plastid terminal oxidase 1 expressed in tobacco on photosynthetic electron transfer. Plant Journal, 2016, 85, 219-228.	5.7	29
27	MGDG, PG and SQDG regulate the activity of light-dependent protochlorophyllide oxidoreductase. Biochemical Journal, 2017, 474, 1307-1320.	3.7	29
28	Plant-Derived Antioxidants in Disease Prevention. Oxidative Medicine and Cellular Longevity, 2016, 2016, 1-2.	4.0	28
29	Hydroxyâ€plastochromanol and plastoquinoneâ€<scp>C</scp> as singlet oxygen products during photoâ€oxidative stress in <scp>A</scp>rabidopsis. Plant, Cell and Environment, 2014, 37, 1464-1473.	5.7	27
30	Singlet oxygen oxidation products of carotenoids, fatty acids and phenolic prenyllipids. Journal of Photochemistry and Photobiology B: Biology, 2021, 216, 112148.	3.8	27
31	Coelomocyte-derived fluorescence and DNA markers of composting earthworm species. Journal of Experimental Zoology, 2014, 321, 28-40.	1.2	26
32	Dermal exposure of Eisenia andrei earthworms: Effects of heavy metals on metallothionein and phytochelatin synthase gene expressions in coelomocytes. Environmental Toxicology and Chemistry, 2015, 34, 1397-1404.	4.3	26
33	Evidence for the Involvement of Loosely Bound Plastosemiquinones in Superoxide Anion Radical Production in Photosystem II. PLoS ONE, 2014, 9, e115466.	2.5	25
34	Singlet oxygen and non-photochemical quenching contribute to oxidation of the plastoquinone-pool under high light stress in Arabidopsis. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 705-710.	1.0	24
35	Stimulation of Oxygen Evolution in Photosystem II by Copper(II) Ions. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2002, 57, 853-857.	1.4	23
36	Occurrence of chlorophyll precursors in leaves of cabbage heads â€" the case of natural etiolation. Journal of Photochemistry and Photobiology B: Biology, 2005, 80, 187-194.	3.8	23

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37	Tocopherol quinone content of green algae and higher plants revised by a new high-sensitive fluorescence detection method using HPLC â€“ Effects of high light stress and senescence. Journal of Plant Physiology, 2008, 165, 1238-1247.	3.5	23
38	Chemical quenching of singlet oxygen by plastoquinols and their oxidation products in Arabidopsis. Plant Journal, 2018, 95, 848-861.	5.7	22
39	Plant-Derived Antioxidants in Disease Prevention 2018. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-2.	4.0	20
40	Title is missing!. Photosynthesis Research, 1998, 58, 203-209.	2.9	19
41	Fluorescence Lifetimes and Spectral Properties of Protochlorophyllide in Organic Solvents in Relation to the Respective Parameters In VivoÂ¶. Photochemistry and Photobiology, 2004, 79, 62-67.	2.5	19
42	The inhibitor-evoked shortage of tocopherol and plastoquinol is compensated by other antioxidant mechanisms in Chlamydomonas reinhardtii exposed to toxic concentrations of cadmium and chromium ions. Ecotoxicology and Environmental Safety, 2020, 191, 110241.	6.0	19
43	Fluorescence Lifetimes Study of Î±-Tocopherol and Biological Prenylquinols in Organic Solvents and Model Membranes. Photochemistry and Photobiology, 2006, 82, 1309.	2.5	18
44	Ferredoxin:NADP⁺ oxidoreductase bound to cytochrome b₆f complex is active in plastoquinone reduction: Implications for cyclic electron transport. Physiologia Plantarum, 2011, 141, 289-298.	5.2	17
45	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
46	RubisCO Early Oxygenase Activity: A Kinetic and Evolutionary Perspective. BioEssays, 2017, 39, 1700071.	2.5	17
47	Cytochrome c is reduced mainly by plastoquinol and not by superoxide in thylakoid membranes at low and medium light intensities: its specific interaction with thylakoid membrane lipids. Biochemical Journal, 2003, 375, 215-220.	3.7	16
48	Novel and rare prenyllipids â€“ Occurrence and biological activity. Plant Physiology and Biochemistry, 2018, 122, 1-9.	5.8	16
49	Tocopherol Cyclasesâ€”Substrate Specificity and Phylogenetic Relations. PLoS ONE, 2016, 11, e0159629.	2.5	16
50	Cyanobacteria use both p-hydroxybenozate and homogentisate as a precursor of plastoquinone head group. Acta Physiologiae Plantarum, 2016, 38, 1.	2.1	14
51	The oxidative stress in allelopathy: Participation of prenyllipid antioxidants in the response to juglone in Chlamydomonas reinhardtii. Phytochemistry, 2017, 144, 171-179.	2.9	13
52	Immune system participates in brain regeneration and restoration of reproduction in the earthworm Dendrobaena veneta. Developmental and Comparative Immunology, 2015, 52, 269-279.	2.3	12
53	Insight into the oligomeric structure of PORA from A. thaliana. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 1757-1764.	2.3	12
54	New prenyllipid metabolites identified in <scp>A</scp>rabidopsis during photoâ€oxidative stress. Plant, Cell and Environment, 2015, 38, 2698-2706.	5.7	11

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55	Physiological and antioxidant responses of two accessions of Arabidopsis thaliana in different light and temperature conditions. Physiologia Plantarum, 2015, 154, 194-209.	5.2	9
56	Natural variation in tocochromanols content in Arabidopsis thaliana accessions â€“ the effect of temperature and light intensity. Physiologia Plantarum, 2016, 157, 147-160.	5.2	8
57	Lack of tocopherols influences the PSII antenna and the functioning of photosystems under low light. Journal of Plant Physiology, 2018, 223, 57-64.	3.5	6
58	Oxidative stress limits growth ofChlamydomonas reinhardtii(Chlorophyta,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (Chlamy 60, 303-313.	1.4	6
59	Chemical proprieties of the iron-quinone complex in mutated reaction centers of Rb. sphaeroides. Hyperfine Interactions, 2012, 206, 109-114.	0.5	3
60	Activity of tocopherol oxidase in Phaseolus coccineus seedlings. Acta Physiologiae Plantarum, 2013, 35, 2539-2545.	2.1	3
61	Identification of new fluorophores in coelomic fluid of Eisenia andrei earthworms. PLoS ONE, 2019, 14, e0214757.	2.5	3
62	Polystichum setiferum at the Northeastern Limit of Its Distribution Range. Acta Societatis Botanicorum Poloniae, 0, 90, .	0.8	3
63	Origin of Chlorophyll Fluorescence in Plants at 55-75Â°CÂ¶. Photochemistry and Photobiology, 2007, 77, 68-76.	2.5	2
64	Acylserotonins â€“ a new class of plant lipids with antioxidant activity and potential pharmacological applications. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2021, 1866, 159044.	2.4	1
65	Protochlorophylls in Cucurbitaceae â€“ Distribution, biosynthesis and phylogeny. Phytochemistry, 2022, 197, 113110.	2.9	0
66	Occurrence of neoxanthin and lutein epoxide cycle in parasitic Cuscuta species. Acta Biochimica Polonica, 2008, 55, 183-90.	0.5	0