Maria Filek

List of Publications by Year
in descending order

91 papers	2,195 citations	279798 23 h-index	254184 43 g-index
92 all docs	92 docs citations	92 times ranked	2264 citing authors

#	Article	IF	Citations
1	The protective role of selenium in rape seedlings subjected to cadmium stress. Journal of Plant Physiology, 2008, 165, 833-844.	3.5	249
2	Impact of osmotic stress on physiological and biochemical characteristics in drought-susceptible and drought-resistant wheat genotypes. Acta Physiologiae Plantarum, 2013, 35, 451-461.	2.1	140
3	Effect of selenium on macro- and microelement distribution and physiological parameters of rape and wheat seedlings exposed to cadmium stress. Plant and Soil, 2010, 329, 457-468.	3.7	135
4	Effect of selenium on characteristics of rape chloroplasts modified by cadmium. Journal of Plant Physiology, 2010, 167, 28-33.	3.5	92
5	Membrane permeability and micro- and macroelement accumulation in spring wheat cultivars during the short-term effect of salinity- and PEG-induced water stress. Acta Physiologiae Plantarum, 2012, 34, 985-995.	2.1	91
6	Physiological and biochemical characterisation of watered and drought-stressed barley mutants in the HvDWARF gene encoding C6-oxidase involved in brassinosteroid biosynthesis. Plant Physiology and Biochemistry, 2016, 99, 126-141.	5.8	76
7	Relationships between polyamines, ethylene, osmoprotectants and antioxidant enzymes activities in wheat seedlings after short-term PEG- and NaCl-induced stresses. Plant Growth Regulation, 2013, 69, 177-189.	3.4	73
8	Alleviation of Osmotic Stress Effects by Exogenous Application of Salicylic or Abscisic Acid on Wheat Seedlings. International Journal of Molecular Sciences, 2013, 14, 13171-13193.	4.1	72
9	Changes in wheat plastid membrane properties induced by cadmium and selenium in presence/absence of 2,4-dichlorophenoxyacetic acid. Plant Cell, Tissue and Organ Culture, 2009, 96, 19-28.	2.3	65
10	The effects of short-term selenium stress on Polish and Finnish wheat seedlingsâ€"EPR, enzymatic and fluorescence studies. Journal of Plant Physiology, 2012, 169, 275-284.	3.5	65
11	Variation and action potentials evoked by thermal stimuli accompany enhancement of ethylene emission in distant non-stimulated leaves ofVicia faba minorseedlings. Journal of Plant Physiology, 2003, 160, 1203-1210.	3.5	59
12	Involvement of Selenium in Protective Mechanisms of Plants under Environmental Stress Conditions â€" Review. Acta Biologica Cracoviensia Series Botanica, 2015, 57, 9-20.	0.5	45
13	Selenium-induced protection of photosynthesis activity in rape (Brassica napus) seedlings subjected to cadmium stress. Fluorescence and EPR measurements. Photosynthesis Research, 2010, 105, 27-37.	2.9	44
14	Cytokinins in shoot apices of Brassica napus plants during vernalization. Plant Science, 2012, 187, 105-112.	3.6	41
15	The uptake and translocation of macro- and microelements in rape and wheat seedlings as affected by selenium supply level. Plant and Soil, 2010, 336, 303-312.	3.7	37
16	Structural and biochemical response of chloroplasts in tolerant and sensitive barley genotypes to drought stress. Journal of Plant Physiology, 2016, 207, 61-72.	3.5	35
17	Ethylene Synthesis and Auxin Augmentation in Pistil Tissues are Important for Egg Cell Differentiation after Pollination in Maize. Plant and Cell Physiology, 2004, 45, 1396-1405.	3.1	32
18	Prioritization of Candidate Genes in QTL Regions for Physiological and Biochemical Traits Underlying Drought Response in Barley (Hordeum vulgare L.). Frontiers in Plant Science, 2018, 9, 769.	3.6	31

#	Article	IF	Citations
19	Mixed DPPC/DPTAP Monolayers at the Air/Water Interface: Influence of Indolilo-3-acetic Acid and Selenate Ions on the Monolayer Morphology. Langmuir, 2011, 27, 10886-10893.	3.5	29
20	Vernalization and photoperiod-related changes in the DNA methylation state in winter and spring rapeseed. Acta Physiologiae Plantarum, 2013, 35, 817-827.	2.1	29
21	Regulation of the membrane structure by brassinosteroids and progesterone in winter wheat seedlings exposed to low temperature. Steroids, 2017, 128, 37-45.	1.8	29
22	The Effects of the Structure and Composition of the Hydrophobic Parts of Phosphatidylcholine-Containing Systems on Phosphatidylcholine Oxidation by Ozone. Journal of Membrane Biology, 2017, 250, 493-505.	2.1	25
23	EPR spectroscopy as a tool for investigation of differences in radical status in wheat plants of various tolerances to osmotic stress induced by NaCl and PEG-treatment. Journal of Plant Physiology, 2013, 170, 136-145.	3.5	24
24	Effect of para-substituted phenols on the surface potential and on the surface tension at the water/air interface. Journal of Colloid and Interface Science, 1980, 73, 282-286.	9.4	23
25	The Influence of Phytohormones on Zeta Potential and Electrokinetic Charges of Winter Wheat Cells. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2002, 57, 696-704.	1.4	23
26	The influence of the starch component on thermal radical generation in flours. Carbohydrate Polymers, 2014, 101, 846-856.	10.2	22
27	Changes of paramagnetic species in cereal grains upon short-term ozone action as a marker of oxidative stress tolerance. Journal of Plant Physiology, 2016, 190, 54-66.	3.5	21
28	Changes in content of steroid regulators during cold hardening of winter wheat - Steroid physiological/biochemical activity and impact on frost tolerance. Plant Physiology and Biochemistry, 2019, 139, 215-228.	5.8	21
29	Trace elementsâ€™ uptake and antioxidant response to excess of manganese in in vitro cells of sensitive and tolerant wheat. Acta Physiologiae Plantarum, 2016, 38, 1.	2.1	20
30	Electron Paramagnetic Resonance (EPR) Spectroscopy in Studies of the Protective Effects of 24-Epibrasinoide and Selenium against Zearalenone-Stimulation of the Oxidative Stress in Germinating Grains of Wheat. Toxins, 2017, 9, 178.	3.4	19
31	The role of chloroplasts in the oxidative stress that is induced by zearalenone in wheat plants â€“ The functions of 24-epibrassinolide and selenium in the protective mechanisms. Plant Physiology and Biochemistry, 2019, 137, 84-92.	5.8	19
32	Influence of phytohormones on polar and hydrophobic parts of mixed phospholipid monolayers at water/air interface. Journal of Colloid and Interface Science, 2004, 269, 153-157.	9.4	17
33	Influence of Cadmium and Selenate on the Interactions between Hormones and Phospholipids. Langmuir, 2009, 25, 13071-13076.	3.5	17
34	Changes of electric potential in pistils of Petunia hybrida Hort. and Brassica napus L. during pollination. Acta Physiologiae Plantarum, 1998, 20, 291-297.	2.1	16
35	Effect of tocopherol on surface properties of plastid lipids originating from wheat calli cultivated in cadmium presence. Chemistry and Physics of Lipids, 2010, 163, 74-81.	3.2	16
36	Electron paramagnetic resonance (EPR) spectroscopy characterization of wheat grains from plants of different water stress tolerance. Journal of Plant Physiology, 2012, 169, 1234-1242.	3.5	16

#	Article	IF	Citations
37	Effect of indole-3-acetic acid on surface properties of the wheat plastid lipids. Journal of Plant Physiology, 2005, 162, 245-252.	3.5	15
38	Stable radicals and biochemical compounds in embryos and endosperm of wheat grains differentiating sensitive and tolerant genotypes â€" EPR and Raman studies. Journal of Plant Physiology, 2015, 183, 95-107.	3.5	15
39	The impact of biochemical composition and nature of paramagnetic species in grains on stress tolerance of oat cultivars. Journal of Plant Physiology, 2016, 199, 52-66.	3.5	15
40	Electrical properties of the monolayers of p-phenol derivatives. Journal of Colloid and Interface Science, 1982, 89, 166-169.	9.4	14
41	Differences in surface behaviour of galactolipoids originating from different kind of wheat tissue cultivated in vitro. Chemistry and Physics of Lipids, 2008, 155, 24-30.	3.2	14
42	Cadmium and selenium modulate slow vacuolar channels in rape (Brassica napus) vacuoles. Journal of Plant Physiology, 2010, 167, 1566-1570.	3.5	13
43	Mechanical and Electrokinetic Effects of Polyamines/Phospholipid Interactions in Model Membranes. Journal of Membrane Biology, 2014, 247, 81-92.	2.1	13
44	Studies of Lipid Monolayers Prepared from Native and Model Plant Membranes in Their Interaction with Zearalenone and Its Mixture with Selenium Ions. Journal of Membrane Biology, 2017, 250, 273-284.	2.1	13
45	Foliar application of selenium for protection against the first stages of mycotoxin infection of crop plant leaves. Journal of the Science of Food and Agriculture, 2019, 99, 482-485.	3.5	13
46	Protective effect of ascorbic acid after single and repetitive administration of cadmium in Swiss mice. Toxicology Mechanisms and Methods, 2012, 22, 597-604.	2.7	12
47	Resonance Raman and EPR spectroscopy studies of untreated spring wheat leaves. Vibrational Spectroscopy, 2012, 60, 113-117.	2.2	12
48	Occurrence and Physiology of Zearalenone as a New Plant Hormone. Sustainable Agriculture Reviews, 2010, , 419-435.	1.1	12
49	Does micro- and macroelement content differentiate grains of sensitive and tolerant wheat varieties?. Acta Physiologiae Plantarum, 2014, 36, 3095-3100.	2.1	11
50	24-Epibrassinolide as a Modifier of Antioxidant Activities and Membrane Properties of Wheat Cells in Zearalenone Stress Conditions. Journal of Plant Growth Regulation, 2018, 37, 1085-1098.	5.1	11
51	The impact of shortâ€term UV irradiation on grains of sensitive and tolerant cereal genotypes studied by EPR. Journal of the Science of Food and Agriculture, 2018, 98, 2607-2616.	3.5	11
52	Adaxial and abaxial pattern of Urtica dioica leaves analyzed by 2DCOS ATR-FTIR as a function of their growth time and impact of environmental pollution. Vibrational Spectroscopy, 2019, 104, 102948.	2.2	11
53	Direct electric current partly replaces the chilling effect in vernalisation of winter wheat. Journal of Plant Physiology, 2002, 159, 795-797.	3.5	10
54	X-ray structure investigations of winter wheat membrane systems. II. Effect of phytohormones on structural properties of mixed phospholipidâ€"sterols membranes. Plant Science, 2003, 165, 271-275.	3.6	10

#	Article	IF	Citations
55	Biochemical and Physicochemical Background of Mammalian Androgen Activity in Winter Wheat Exposed to Low Temperature. Journal of Plant Growth Regulation, 2018, 37, 199-219.	5.1	10
56	Langmuir monolayers of chloroplast membrane lipids. Thin Solid Films, 2008, 516, 8844-8847.	1.8	9
57	Physicochemical Aspects of Reaction of Ozone with Galactolipid and Galactolipidâ€"Tocopherol Layers. Journal of Membrane Biology, 2014, 247, 639-649.	2.1	9
58	2D FTIR correlation spectroscopy and EPR analysis of Urtica dioica leaves from areas of different environmental pollution. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 189, 405-414.	3.9	9
59	Improvement of regeneration ability in Phleum pratense L. in vitro culture by dicamba. Acta Physiologiae Plantarum, 1999, 21, 397-403.	2.1	8
60	The effect of cold on the response of Brassica napus callus tissue to the secondary metabolites of Leptosphaeria maculans. Acta Physiologiae Plantarum, 2015, 37, 1.	2.1	8
61	Î±-Tocopherol/Gallic Acid Cooperation in the Protection of Galactolipids Against Ozone-Induced Oxidation. Journal of Membrane Biology, 2016, 249, 87-95.	2.1	8
62	Response of chloroplasts of tolerant and sensitive wheat genotypes to manganese excess: structural and biochemical properties. Acta Physiologiae Plantarum, 2017, 39, 1.	2.1	8
63	Translocation of elements and sugars in wheat genotypes at vegetative and generative stages under continuous selenium exposure. Journal of the Science of Food and Agriculture, 2019, 99, 6364-6371.	3.5	8
64	Manganese protects wheat from the mycotoxin zearalenone and its derivatives. Scientific Reports, 2019, 9, 14214.	3.3	8
65	X-ray structure investigations of winter wheat membrane systems. I. Influence of phytohormones on phospholipid orientation in non- and embryogenic cells. Plant Science, 2003, 165, 265-270.	3.6	7
66	Rapid production of wheat cell suspension cultures directly from immature embryos. Plant Cell, Tissue and Organ Culture, 2008, 94, 139-147.	2.3	7
67	The Impact of Mutations in the HvCPD and HvBRI1 Genes on the Physicochemical Properties of the Membranes from Barley Acclimated to Low/High Temperatures. Cells, 2020, 9, 1125.	4.1	7
68	Surface activity of p derivatives of phenol mixtures at the water/air interface. Journal of Colloid and Interface Science, 1983, 95, 247-253.	9.4	6
69	Fatty acid composition and the hydrophilic properties of phospholipids in seedlings of spring and winter wheat growing at 20Â°C and 2Â°C. Physiologia Plantarum, 1992, 85, 129-132.	5.2	6
70	The Influence of Growth Regulators on Membrane Permeability in Cultures of Winter Wheat Cells. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2004, 59, 673-678.	1.4	6
71	Does DNA Methylation Pattern Mark Generative Development in Winter Rape?. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2006, 61, 387-396.	1.4	6
72	Electric and structural studies of hormone interaction with chloroplast envelope membranes isolated from vegetative and generative rape. Journal of Plant Physiology, 2007, 164, 861-867.	3.5	6

#	Article	IF	Citations
73	The Influence of Plant Hormones on Phospholipid Monolayer Stability. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2007, 62, 55-60.	1.4	6
74	Antioxidative action of polyamines in protection of phospholipid membranes exposed to ozone stress. Acta Biochimica Polonica, 2020, 67, 259-262.	0.5	6
75	Slow vacuolar channels of non-embryogenic and embryogenic cultures of winter wheat. Acta Physiologiae Plantarum, 2003, 25, 179-184.	2.1	5
76	Evaluation of Spring Wheat (20 Varieties) Adaptation to Soil Drought during Seedlings Growth Stage. Agriculture (Switzerland), 2014, 4, 96-112.	3.1	5
77	Impact of polyphenol-rich green tea extracts on the protection of DOPC monolayer against damage caused by ozone induced lipid oxidation. Acta Biochimica Polonica, 2018, 65, 193-197.	0.5	5
78	Influence of Temperature on Phytohormone Interactions with Monolayers Obtained from Phospholipids of Wheat Calli. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2004, 59, 60-64.	1.4	4
79	The Effect of Electric Field on Callus Induction with Rape Hypocotyls. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2005, 60, 876-882.	1.4	4
80	The direct action of hyaluronic acid on human U-937 and HL-60 cells â€" modification of native and model membranes. Biologia (Poland), 2016, 71, 1304-1314.	1.5	4
81	The Dynamics of Cytokinin Changes after Grafting of Vegetative Apices on Flowering Rapeseed Plants. Plants, 2019, 8, 78.	3.5	4
82	Exposure of human lymphoma cells (U-937) to the action of a single mycotoxin as well as in mixtures with the potential protectors 24-epibrassinolide and selenium ions. Mycotoxin Research, 2019, 35, 89-98.	2.3	4
83	The effects of freezing on membrane electric potential in winter oilseed rape leaves. Acta Physiologiae Plantarum, 2000, 22, 69-75.	2.1	3
84	Slow vacuolar channels in vacuoles from winter and spring varieties of rape (Brassica napus). Journal of Plant Physiology, 2008, 165, 1511-1518.	3.5	3
85	The Role of SV Ion Channels Under the Stress of Mycotoxins Induced in Wheat Cellsâ€"Protective Action of Selenium Ions. Journal of Plant Growth Regulation, 2019, 38, 1255-1259.	5.1	3
86	Changes of Redox Activity during the Development of Rape. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2006, 61, 548-552.	1.4	2
87	Significance of selenium supplementation in root- shoot reactions under manganese stress in wheat seedlings â€" biochemical and cytological studies. Plant and Soil, 2021, 468, 389-410.	3.7	2
88	Applicability of Polish Winter Wheat (Triticum aestivum L.) Cultivars to Long-Term in vitro Culture. Cereal Research Communications, 2001, 29, 127-134.	1.6	2
89	Brassinosteroid-lipid membrane interaction under low and high temperature stress in model systems. BMC Plant Biology, 2022, 22, 246.	3.6	2
90	Influence of aniline on surface activity of p-halogenphenols. Journal of Colloid and Interface Science, 1982, 90, 280-283.	9.4	1

#	Article	IF	Citations
91	Changes of pH in Petunia hybrida (Hort.) styles induced by pollination and influence of proton pump and ion channels on its regulation. Acta Physiologiae Plantarum, 2003, 25, 97-104.	2.1	1