

# Ismail Turkan

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1936928/publications.pdf>

Version: 2024-02-01

87  
papers

7,289  
citations

87843

38  
h-index

56687

83  
g-index

89  
all docs

89  
docs citations

89  
times ranked

7199  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparative lipid peroxidation, antioxidant defense systems and proline content in roots of two rice cultivars differing in salt tolerance. <i>Environmental and Experimental Botany</i> , 2005, 53, 247-257.	2.0	582
2	The effect of salt stress on lipid peroxidation and antioxidants in leaves of sugar beet <i>Beta vulgaris</i> L. and wild beet <i>Beta maritima</i> L.. <i>Plant Science</i> , 2003, 164, 77-84.	1.7	472
3	Recent developments in understanding salinity tolerance. <i>Environmental and Experimental Botany</i> , 2009, 67, 2-9.	2.0	465
4	Differential responses of lipid peroxidation and antioxidants in the leaves of drought-tolerant <i>P. acutifolius</i> Gray and drought-sensitive <i>P. vulgaris</i> L. subjected to polyethylene glycol mediated water stress. <i>Plant Science</i> , 2005, 168, 223-231.	1.7	416
5	The effect of salt stress on lipid peroxidation, antioxidative enzymes and proline content of sesame cultivars. <i>Environmental and Experimental Botany</i> , 2007, 60, 344-351.	2.0	391
6	Redox- and Reactive Oxygen Species-Dependent Signaling into and out of the Photosynthesizing Chloroplast. <i>Plant Physiology</i> , 2016, 171, 1541-1550.	2.3	343
7	Differential responses of antioxidative enzymes and lipid peroxidation to salt stress in salt-tolerant <i>Plantago maritima</i> and salt-sensitive <i>Plantago media</i> . <i>Physiologia Plantarum</i> , 2007, 131, 399-411.	2.6	263
8	Reactive oxygen species regulation and antioxidant defence in halophytes. <i>Functional Plant Biology</i> , 2013, 40, 832.	1.1	247
9	Effects of 24-epibrassinolide on seed germination, seedling growth, lipid peroxidation, proline content and antioxidative system of rice ( <i>Oryza sativa</i> L.) under salinity stress. <i>Plant Growth Regulation</i> , 2004, 42, 203-211.	1.8	228
10	<i>NAC</i> transcription factor <i>JUNGBRUNNEN1</i> enhances drought tolerance in tomato. <i>Plant Biotechnology Journal</i> , 2018, 16, 354-366.	4.1	222
11	Salinity tolerance of purslane ( <i>Portulaca oleracea</i> L.) is achieved by enhanced antioxidative system, lower level of lipid peroxidation and proline accumulation. <i>Environmental and Experimental Botany</i> , 2007, 61, 49-57.	2.0	204
12	Does exogenous glycinebetaine affect antioxidative system of rice seedlings under NaCl treatment?. <i>Journal of Plant Physiology</i> , 2004, 161, 1089-1100.	1.6	165
13	Physiochemical and antioxidant responses of the perennial xerophyte <i>Capparis ovata</i> Desf. to drought. <i>Environmental and Experimental Botany</i> , 2009, 66, 487-492.	2.0	163
14	Exogenous glycinebetaine affects growth and proline accumulation and retards senescence in two rice cultivars under NaCl stress. <i>Environmental and Experimental Botany</i> , 2006, 56, 72-79.	2.0	155
15	An Enhancing Effect of Exogenous Mannitol on the Antioxidant Enzyme Activities in Roots of Wheat Under Salt Stress. <i>Journal of Plant Growth Regulation</i> , 2009, 28, 12-20.	2.8	148
16	Endoplasmic reticulum stress triggers ROS signalling, changes the redox state, and regulates the antioxidant defence of <i>Arabidopsis thaliana</i> . <i>Journal of Experimental Botany</i> , 2014, 65, 1377-1390.	2.4	148
17	Comparison of ROS formation and antioxidant enzymes in <i>Cleome gynandra</i> (C4) and <i>Cleome spinosa</i> (C3) under drought stress. <i>Plant Science</i> , 2012, 182, 59-70.	1.7	142
18	Reactive oxygen species scavenging capacities of cotton ( <i>Gossypium hirsutum</i> ) cultivars under combined drought and heat induced oxidative stress. <i>Environmental and Experimental Botany</i> , 2014, 99, 141-149.	2.0	135

#	ARTICLE	IF	CITATIONS
19	Contribution of Gamma amino butyric acid (GABA) to salt stress responses of <i>Nicotiana sylvestris</i> CMSII mutant and wild type plants. <i>Journal of Plant Physiology</i> , 2012, 169, 452-458.	1.6	111
20	The role of antioxidant defense systems at differential salt tolerance of <i>Hordeum marinum</i> Huds. (sea) <i>Tj ETQq0 0 0 rgBT /Overlock 10 T</i> 69, 76-85.	2.0	108
21	Different antioxidant defense responses to salt stress during germination and vegetative stages of endemic halophyte <i>Gypsophila ob lanceolata</i> Bark.. <i>Environmental and Experimental Botany</i> , 2012, 77, 63-76.	2.0	108
22	ROS and RNS: key signalling molecules in plants. <i>Journal of Experimental Botany</i> , 2018, 69, 3313-3315.	2.4	105
23	Superoxide dismutase and peroxidase activities in drought sensitive and resistant barley ( <i>Hordeum</i> ) <i>Tj ETQq1 1 0.784314 rgBT /Overlock 10 T</i>	1.0	102
24	Lipid peroxidation-derived reactive carbonyl species (RCS): Their interaction with ROS and cellular redox during environmental stresses. <i>Environmental and Experimental Botany</i> , 2019, 165, 139-149.	2.0	92
25	Effect of salt stress on lipid peroxidation and superoxide dismutase and peroxidase activities of <i>Lycopersicon esculentum</i> and <i>L. pennellii</i> . <i>Biologia Plantarum</i> , 2006, 50, 745-748.	1.9	90
26	The effects of induced production of reactive oxygen species in organelles on endoplasmic reticulum stress and on the unfolded protein response in arabidopsis. <i>Annals of Botany</i> , 2015, 116, 541-553.	1.4	90
27	Comparative effects of drought, salt, heavy metal and heat stresses on gamma-aminobutyric acid levels of sesame ( <i>Sesamum indicum</i> L.). <i>Acta Physiologiae Plantarum</i> , 2009, 31, 655-659.	1.0	84
28	Antioxidant responses of chickpea plants subjected to boron toxicity. <i>Plant Biology</i> , 2009, 11, 328-338.	1.8	73
29	Elucidation of physiological and biochemical mechanisms of an endemic halophyte <i>Centaurea tuzgolensis</i> under salt stress. <i>Plant Physiology and Biochemistry</i> , 2011, 49, 816-824.	2.8	65
30	Glycine betaine protects tomato ( <i>Solanum lycopersicum</i> ) plants at low temperature by inducing fatty acid desaturase7 and lipoxygenase gene expression. <i>Molecular Biology Reports</i> , 2014, 41, 1401-1410.	1.0	65
31	Interplay between the unfolded protein response and reactive oxygen species: a dynamic duo. <i>Journal of Experimental Botany</i> , 2018, 69, 3333-3345.	2.4	62
32	Comparison of moss and bark samples as biomonitors of heavy metals in a highly industrialised area in Izmir, Turkey. <i>Science of the Total Environment</i> , 1995, 166, 61-67.	3.9	60
33	Response of the cherry rootstock to water stress induced in vitro. <i>Biologia Plantarum</i> , 2008, 52, 573-576.	1.9	58
34	Changes in the alternative electron sinks and antioxidant defence in chloroplasts of the extreme halophyte <i>Eutrema parvulum</i> ( <i>Thellungiella parvula</i> ) under salinity. <i>Annals of Botany</i> , 2015, 115, 449-463.	1.4	56
35	Hydrogen sulfide (H <sub>2</sub> S) and nitric oxide (NO) alleviate cobalt toxicity in wheat ( <i>Triticum aestivum</i> L.) by modulating photosynthesis, chloroplastic redox and antioxidant capacity. <i>Journal of Hazardous Materials</i> , 2020, 388, 122061.	6.5	54
36	Abscisic acidâ€regulated responses of <i>aba2â€1</i> under osmotic stress: the abscisic acidâ€inducible antioxidant defence system and reactive oxygen species production. <i>Plant Biology</i> , 2012, 14, 337-346.	1.8	53

#	ARTICLE	IF	CITATIONS
37	Plant response to salinity: an analysis of ROS formation, signaling, and antioxidant defense. Turkish Journal of Botany, 2020, 44, 1-13.	0.5	49
38	Strategies of ROS regulation and antioxidant defense during transition from C3 to C4 photosynthesis in the genus Flaveria under PEG-induced osmotic stress. Journal of Plant Physiology, 2014, 171, 65-75.	1.6	46
39	Responses of the cherry rootstock to salinity in vitro. Biologia Plantarum, 2007, 51, 597-600.	1.9	44
40	Understanding the Role of the Antioxidant System and the Tetrapyrrole Cycle in Iron Deficiency Chlorosis. Plants, 2019, 8, 348.	1.6	40
41	Flavonoid Naringenin Alleviates Short-Term Osmotic and Salinity Stresses Through Regulating Photosynthetic Machinery and Chloroplastic Antioxidant Metabolism in Phaseolus vulgaris. Frontiers in Plant Science, 2020, 11, 682.	1.7	40
42	A novel mechanism of aluminium-induced cell death involving vacuolar processing enzyme and vacuolar collapse in tobacco cell line BY-2. Journal of Inorganic Biochemistry, 2013, 128, 196-201.	1.5	38
43	Opportunities and Limitations of Crop Phenotyping in Southern European Countries. Frontiers in Plant Science, 2019, 10, 1125.	1.7	37
44	The effects of boron toxicity on root antioxidant systems of two chickpea (Cicer arietinum L.) cultivars. Plant and Soil, 2009, 314, 99-108.	1.8	36
45	Emerging roles for ROS and RNS “ versatile molecules in plants. Journal of Experimental Botany, 2017, 68, 4413-4416.	2.4	33
46	Reactive oxygen species and redox regulation in mesophyll and bundle sheath cells of C4 plants. Journal of Experimental Botany, 2018, 69, 3321-3331.	2.4	33
47	Induced anti-oxidant activity in soybean alleviates oxidative stress under moderate boron toxicity. Plant Growth Regulation, 2013, 70, 217-226.	1.8	32
48	Effect of Coronatine on Antioxidant Enzyme Response of Chickpea Roots to Combination of PEG-Induced Osmotic Stress and Heat Stress. Journal of Plant Growth Regulation, 2013, 32, 72-82.	2.8	32
49	Naringenin induces tolerance to salt/osmotic stress through the regulation of nitrogen metabolism, cellular redox and ROS scavenging capacity in bean plants. Plant Physiology and Biochemistry, 2020, 157, 264-275.	2.8	32
50	Time course analysis of ABA and non-ionic osmotic stress-induced changes in water status, chlorophyll fluorescence and osmotic adjustment in Arabidopsis thaliana wild-type (Columbia) and ABA-deficient mutant (aba2). Environmental and Experimental Botany, 2013, 86, 44-51.	2.0	30
51	Melatonin mitigates UV-B stress via regulating oxidative stress response, cellular redox and alternative electron sinks in Arabidopsis thaliana. Phytochemistry, 2021, 182, 112592.	1.4	28
52	Effects of Paclobutrazol on Response of Two Barley Cultivars to Salt Stress. Biologia Plantarum, 2003, 46, 263-268.	1.9	27
53	The roles of reactive carbonyl species in induction of antioxidant defence and ROS signalling in extreme halophytic model Eutrema parvulum and glycophytic model Arabidopsis thaliana. Environmental and Experimental Botany, 2019, 160, 81-91.	2.0	26
54	Is there a room for GABA in ROS and RNS signalling?. Environmental and Experimental Botany, 2019, 161, 67-73.	2.0	25

#	ARTICLE	IF	CITATIONS
55	The regulation of antioxidant enzymes in two <i>Plantago</i> species differing in salinity tolerance under combination of waterlogging and salinity. <i>Functional Plant Biology</i> , 2013, 40, 484.	1.1	24
56	Ferulic acid confers tolerance against excess boron by regulating ROS levels and inducing antioxidant system in wheat leaves ( <i>Triticum aestivum</i> ). <i>Environmental and Experimental Botany</i> , 2019, 161, 193-202.	2.0	23
57	Halophytes as a source of salt tolerance genes and mechanisms: a case study for the Salt Lake area, Turkey. <i>Functional Plant Biology</i> , 2016, 43, 575.	1.1	21
58	Endoplasmic reticulum stress regulates glutathione metabolism and activities of glutathione related enzymes in <i>Arabidopsis</i> . <i>Functional Plant Biology</i> , 2018, 45, 284.	1.1	20
59	Combined effects of salt stress and cucurbit downy mildew ( <i>Pseudoperospora cubensis</i> Berk. and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 (Cucumis sativus L.) seedlings. <i>Physiological and Molecular Plant Pathology</i> , 2013, 83, 84-92.	1.3	18
60	Indoleacetic acid, gibberellic acid, zeatin, and abscisic acid levels in NaCl-treated tomato species differing in salt tolerance. <i>Israel Journal of Plant Sciences</i> , 2001, 49, 269-278.	0.3	16
61	The impact of GABA in harpin-elicited biotic stress responses in <i>Nicotiana tabaccum</i> . <i>Journal of Plant Physiology</i> , 2015, 188, 51-57.	1.6	15
62	Signalling Strategies During Drought and Salinity, Recent News. <i>Advances in Botanical Research</i> , 2011, 57, 293-317.	0.5	14
63	Mg deficiency changes the isoenzyme pattern of reactive oxygen species-relatedenzymes and regulates NADPH-oxidase-mediated ROS signaling in cotton. <i>Turkish Journal of Biology</i> , 2017, 41, 868-880.	2.1	14
64	NaCl pre-treatments mediate salt adaptation in melon plants through antioxidative system. <i>Seed Science and Technology</i> , 2008, 36, 360-370.	0.6	13
65	The Effects of Melatonin on Transcriptional Profile of Unfolded Protein Response Genes Under Endoplasmic Reticulum Stress in <i>Arabidopsis thaliana</i> . <i>Plant Molecular Biology Reporter</i> , 2017, 35, 188-202.	1.0	13
66	Identification and Characterization of the Glucosinolateâ€œMyrosinase System in Caper ( <i>Capparis ovata</i> ) Tj ETQq0 0.0 rgBT /Overlock 10	1.0	11
67	Effects of salinity, light, and temperature on seed germination in a Turkish endangered halophyte, <i>Kalidiopsis wagenitzii</i> (Chenopodiaceae). <i>Israel Journal of Plant Sciences</i> , 2004, 52, 21-30.	0.3	11
68	Redox Regulation and Antioxidant Defence During Abiotic Stress: What Have We Learned from <i>Arabidopsis</i> and Its Relatives?. , 2015, , 83-113.		10
69	Nanomaterial sulfonated graphene oxide advances the tolerance against nitrate and ammonium toxicity by regulating chloroplastic redox balance, photochemistry of photosystems and antioxidant capacity in <i>Triticum aestivum</i> . <i>Journal of Hazardous Materials</i> , 2022, 424, 127310.	6.5	10
70	Can Plants Normally Produce Seeds under Microgravity in Space?. <i>Japanese Journal of Crop Science</i> , 1991, 60, 427-433.	0.1	9
71	Changes in redox regulation during transition from C 3 to single cell C 4 photosynthesis in <i>Bienertia sinuspersici</i> . <i>Journal of Plant Physiology</i> , 2018, 220, 1-10.	1.6	9
72	Deploying root microbiome of halophytes to improve salinity tolerance of crops. <i>Plant Biotechnology Reports</i> , 2020, 14, 143-150.	0.9	9

#	ARTICLE	IF	CITATIONS
73	Differential responses of the scavenging systems for reactive oxygen species (ROS) and reactive carbonyl species (RCS) to UV-B irradiation in <i>Arabidopsis thaliana</i> and its high altitude perennial relative <i>Arabis alpina</i> . <i>Photochemical and Photobiological Sciences</i> , 2021, 20, 889-901.	1.6	9
74	Growth performance and antioxidative response in bread and durum wheat plants grown with varied potassium treatments under ambient and elevated carbon dioxide. <i>Environmental and Experimental Botany</i> , 2017, 137, 26-35.	2.0	8
75	THE EFFECT OF HARPINEA AS PLANT ACTIVATOR IN CONTROL OF BACTERIAL AND FUNGAL DISEASES OF TOMATO. <i>Acta Horticulturae</i> , 2003, , 251-254.	0.1	7
76	Pretreatment of seeds with hydrogen peroxide improves deep-sowing tolerance of wheat seedlings. <i>Plant Physiology and Biochemistry</i> , 2021, 167, 321-336.	2.8	7
77	Transgenic bialaphos-resistant snapdragon ( <i>Antirrhinum majus</i> L.) produced by <i>Agrobacterium rhizogenes</i> transformation. <i>Scientia Horticulturae</i> , 1998, 76, 37-57.	1.7	6
78	Survey of endogenous gibberellins in a barley mutant showing abnormal response to gravity.. <i>Japanese Journal of Genetics</i> , 1991, 66, 41-48.	1.0	5
79	Three (Turkish) olive cultivars display contrasting salt stress-coping mechanisms under high salinity. <i>Trees - Structure and Function</i> , 2021, 35, 1283-1298.	0.9	5
80	Redox regulation in $C_3$ and $C_4$ plants during climate change and its implications on food security. <i>Food and Energy Security</i> , 2023, 12, .	2.0	5
81	Activation of Photorespiration Facilitates Drought Stress Tolerance in <i>Lotus corniculatus</i> . <i>Journal of Plant Growth Regulation</i> , 2023, 42, 2088-2101.	2.8	5
82	The involvement of gamma-aminobutyric acid shunt in the endoplasmic reticulum stress response of <i>Arabidopsis thaliana</i> . <i>Journal of Plant Physiology</i> , 2020, 253, 153250.	1.6	4
83	Day and Night Fluctuations in GABA Biosynthesis Contribute to Drought Responses in <i>Nicotiana tabacum</i> L.. <i>Plant Signaling and Behavior</i> , 2021, 16, 1899672.	1.2	4
84	Influences of sulfonated graphene oxide on gas exchange performance, antioxidant systems and redox states of ascorbate and glutathione in nitrate and/or ammonium stressed-wheat ( <i>Triticum aestivum</i> ) <i>Tj ETQq0 0 0 r2T /Overlock 10 Tf 5</i>		
85	Endogenous gibberellin relationships in internode elongation of floating rice: A genetic study.. <i>Japanese Journal of Genetics</i> , 1990, 65, 183-191.	1.0	2
86	Induced accumulation of chloroplastic and mitochondrial reactive oxygen species (ROS) differentially regulates the enzymatic antioxidant system of <i>C3 Flaveria robusta</i> and <i>C4 F. bidentis</i> . <i>Environmental and Experimental Botany</i> , 2022, 198, 104863.	2.0	1
87	Localization of High Concentration of Gibberellins in Elongating Internodes of Floating Rice.. <i>Breeding Science</i> , 1991, 41, 553-559.	0.2	0