Iwona Szarejko

List of Publications by Year in descending order

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Version: 2024-02-01

72 papers	3,263 citations	172457 29 h-index	168389 53 g-index
79 all docs	79 docs citations	79 times ranked	4222 citing authors

#	Article	IF	Citations
1	Open or Close the Gate â€“ Stomata Action Under the Control of Phytohormones in Drought Stress Conditions. Frontiers in Plant Science, 2013, 4, 138.	3.6	417
2	The Role and Regulation of ABI5 (ABA-Insensitive 5) in Plant Development, Abiotic Stress Responses and Phytohormone Crosstalk. Frontiers in Plant Science, 2016, 7, 1884.	3.6	362
3	TILLING - a shortcut in functional genomics. Journal of Applied Genetics, 2011, 52, 371-390.	1.9	184
4	Gene expression regulation in roots under drought. Journal of Experimental Botany, 2016, 67, 1003-1014.	4.8	146
5	Enhanced waterlogging tolerance in barley by manipulation of expression of the Nâ€end rule pathway E3 ligase <scp>PROTEOLYSIS</scp>6. Plant Biotechnology Journal, 2016, 14, 40-50.	8.3	122
6	Molecular Cloning and Characterization of Î²-Expansin Gene Related to Root Hair Formation in Barley. Plant Physiology, 2006, 141, 1149-1158.	4.8	121
7	Root Hair Mutations Displace the Barley Rhizosphere Microbiota. Frontiers in Plant Science, 2017, 8, 1094.	3.6	85
8	Transcriptome analysis reveals the role of the root hairs as environmental sensors to maintain plant functions under water-deficiency conditions. Journal of Experimental Botany, 2016, 67, 1079-1094.	4.8	80
9	Water-deficiency conditions differently modulate the methylome of roots and leaves in barley (Hordeum vulgareL.). Journal of Experimental Botany, 2016, 67, 1109-1121.	4.8	72
10	HorTILLUSâ€"A Rich and Renewable Source of Induced Mutations for Forward/Reverse Genetics and Pre-breeding Programs in Barley (Hordeum vulgare L.). Frontiers in Plant Science, 2018, 9, 216.	3.6	71
11	No Time to Waste: Transcriptome Study Reveals that Drought Tolerance in Barley May Be Attributed to Stressed-Like Expression Patterns that Exist before the Occurrence of Stress. Frontiers in Plant Science, 2017, 8, 2212.	3.6	66
12	Quantitative Trait Loci for Yield and Yield-Related Traits in Spring Barley Populations Derived from Crosses between European and Syrian Cultivars. PLoS ONE, 2016, 11, e0155938.	2.5	63
13	Molecular analysis of point mutations in a barley genome exposed to MNU and gamma rays. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2012, 738-739, 52-70.	1.0	55
14	Barley Brassinosteroid Mutants Provide an Insight into Phytohormonal Homeostasis in Plant Reaction to Drought Stress. Frontiers in Plant Science, 2016, 7, 1824.	3.6	55
15	Identification and functional analysis of the <scp>HvD14</scp> gene involved in strigolactone signaling in Hordeum vulgare. Physiologia Plantarum, 2016, 158, 341-355.	5.2	54
16	Barley ABI5 (Abscisic Acid INSENSITIVE 5) Is Involved in Abscisic Acid-Dependent Drought Response. Frontiers in Plant Science, 2020, 11, 1138.	3.6	51
17	Quantitative trait loci for plant height in Maresiâ€‰Ã—â€‰CamB barley population and their associations with yield-related traits under different water regimes. Journal of Applied Genetics, 2017, 58, 23-35.	1.9	49
18	Updates on the Role of ABSCISIC ACID INSENSITIVE 5 (ABI5) and ABSCISIC ACID-RESPONSIVE ELEMENT BINDING FACTORs (ABFs) in ABA Signaling in Different Developmental Stages in Plants. Cells, 2021, 10, 1996.	4.1	49

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19	Asymmetric growth of root epidermal cells is related to the differentiation of root hair cells in Hordeum vulgare (L.). Journal of Experimental Botany, 2013, 64, 5145-5155.	4.8	48
20	Mutation in HvCBP20 (Cap Binding Protein 20) Adapts Barley to Drought Stress at Phenotypic and Transcriptomic Levels. Frontiers in Plant Science, 2017, 8, 942.	3.6	48
21	QTLs for earliness and yield-forming traits in the Lubuskiâ€‰Ã—â€‰CamB barley RIL population under various water regimes. Journal of Applied Genetics, 2017, 58, 49-65.	1.9	46
22	Accumulation of peroxidase-related reactive oxygen species in trichoblasts correlates with root hair initiation in barley. Journal of Plant Physiology, 2013, 170, 185-195.	3.5	45
23	Analysis of aluminum toxicity in Hordeum vulgare roots with an emphasis on DNA integrity and cell cycle. PLoS ONE, 2018, 13, e0193156.	2.5	45
24	Root Hair Development in the Grasses: What We Already Know and What We Still Need to Know. Plant Physiology, 2015, 168, 407-414.	4.8	41
25	Identification of barley DWARF gene involved in brassinosteroid synthesis. Plant Growth Regulation, 2011, 65, 343-358.	3.4	38
26	Arabinogalactan proteins are involved in root hair development in barley. Journal of Experimental Botany, 2015, 66, 1245-1257.	4.8	34
27	Aluminum Alters the Histology and Pectin Cell Wall Composition of Barley Roots. International Journal of Molecular Sciences, 2019, 20, 3039.	4.1	34
28	Drought stress and re-watering affect the abundance of TIP aquaporin transcripts in barley. PLoS ONE, 2019, 14, e0226423.	2.5	34
29	The evolutionary context of root epidermis cell patterning in grasses (Poaceae). Plant Signaling and Behavior, 2014, 9, e27972.	2.4	33
30	Arabidopsis suppressor mutant of abh1 shows a new face of the already known players: ABH1 (CBP80) and ABI4â€”in response to ABA and abiotic stresses during seed germination. Plant Molecular Biology, 2013, 81, 189-209.	3.9	32
31	Methylation Sensitive Amplification Polymorphism Sequencing (MSAP-Seq)â€”A Method for High-Throughput Analysis of Differentially Methylated CCGG Sites in Plants with Large Genomes. Frontiers in Plant Science, 2017, 8, 2056.	3.6	32
32	Mutation Detection by Analysis of DNA Heteroduplexes in TILLING Populations of Diploid Species. , 2017, , 281-303.		31
33	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
34	Global analysis of the root hair morphogenesis transcriptome reveals new candidate genes involved in root hair formation in barley. Journal of Plant Physiology, 2010, 167, 1076-1083.	3.5	30
35	New allele of HvBRI1 gene encoding brassinosteroid receptor in barley. Journal of Applied Genetics, 2011, 52, 257-268.	1.9	30
36	iRootHair: A Comprehensive Root Hair Genomics Database Â. Plant Physiology, 2012, 161, 28-35.	4.8	30

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37	Insights into Barley Root Transcriptome under Mild Drought Stress with an Emphasis on Gene Expression Regulatory Mechanisms. International Journal of Molecular Sciences, 2019, 20, 6139.	4.1	30
38	Genetic and Physiological Dissection of Photosynthesis in Barley Exposed to Drought Stress. International Journal of Molecular Sciences, 2019, 20, 6341.	4.1	30
39	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
40	A Reverse-Genetics Mutational Analysis of the Barley HvDWARF Gene Results in Identification of a Series of Alleles and Mutants with Short Stature of Various Degree and Disturbance in BR Biosynthesis Allowing a New Insight into the Process. International Journal of Molecular Sciences, 2016, 17, 600.	4.1	29
41	Morphological, genetic and molecular characteristics of barley root hair mutants. Journal of Applied Genetics, 2014, 55, 433-447.	1.9	27
42	Barley strigolactone signalling mutant hvd14.d reveals the role of strigolactones in abscisic acidâ€dependent response to drought. Plant, Cell and Environment, 2020, 43, 2239-2253.	5.7	25
43	Aluminum or Low pH â€“ Which Is the Bigger Enemy of Barley? Transcriptome Analysis of Barley Root Meristem Under Al and Low pH Stress. Frontiers in Genetics, 2021, 12, 675260.	2.3	21
44	Unexpected genetic diversity of Fallopia japonica from Central Europe revealed after AFLP analysis. Flora: Morphology, Distribution, Functional Ecology of Plants, 2012, 207, 636-645.	1.2	20
45	Methyl Jasmonate Affects Photosynthesis Efficiency, Expression of HvTIP Genes and Nitrogen Homeostasis in Barley. International Journal of Molecular Sciences, 2020, 21, 4335.	4.1	20
46	Different recombination frequencies in wheat doubled haploid populations obtained through maize pollination and anther culture. Euphytica, 2007, 156, 173-183.	1.2	17
47	A comparative analysis of proteins that accumulate during the initial stage of root hair development in barley root hair mutants and their parent varieties. Journal of Applied Genetics, 2012, 53, 363-376.	1.9	17
48	Mutation in barley ERA1 (Enhanced Response to ABA1) gene confers better photosynthesis efficiency in response to drought as revealed by transcriptomic and physiological analysis. Environmental and Experimental Botany, 2018, 148, 12-26.	4.2	17
49	The dmc1 Mutant Allows an Insight Into the DNA Double-Strand Break Repair During Meiosis in Barley (Hordeum vulgare L.). Frontiers in Plant Science, 2019, 10, 761.	3.6	17
50	An automated, cost-effective and scalable, flood-and-drain based root phenotyping system for cereals. Plant Methods, 2016, 12, 34.	4.3	16
51	Plastid differentiation during microgametogenesis determines green plant regeneration in barley microspore culture. Plant Science, 2020, 291, 110321.	3.6	15
52	The barley EST DNA Replication and Repair Database (bEST-DRRD) as a tool for the identification of the genes involved in DNA replication and repair. BMC Plant Biology, 2012, 12, 88.	3.6	14
53	TILLING in Barley. Methods in Molecular Biology, 2019, 1900, 73-94.	0.9	14
54	ATR, a DNA Damage Signaling Kinase, Is Involved in Aluminum Response in Barley. Frontiers in Plant Science, 2019, 10, 1299.	3.6	11

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55	Changes in plastid biogenesis leading to the formation of albino regenerants in barley microspore culture. BMC Plant Biology, 2021, 21, 22.	3.6	11
56	Forward Genetics Approach Reveals a Mutation in bHLH Transcription Factor-Encoding Gene as the Best Candidate for the Root Hairless Phenotype in Barley. Frontiers in Plant Science, 2018, 9, 1229.	3.6	10
57	High-throughput sequencing data revealed genotype-specific changes evoked by heat stress in crown tissue of barley sdw1 near-isogenic lines. BMC Genomics, 2022, 23, 177.	2.8	9
58	Genetic diversity of the expansive grass Brachypodium pinnatum in a changing landscape: Effect of habitat age. Flora: Morphology, Distribution, Functional Ecology of Plants, 2012, 207, 346-353.	1.2	8
59	Molecular mapping of genes involved in root hair formation in barley. Euphytica, 2007, 157, 95-111.	1.2	7
60	Cuticular waxesâ€"A shield of barley mutant in CBP20 (Cap-Binding Protein 20) gene when struggling with drought stress. Plant Science, 2020, 300, 110593.	3.6	7
61	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
62	Identification of root morphology mutants in barley. Plant Genetic Resources: Characterisation and Utilisation, 2011, 9, 357-360.	0.8	6
63	Towards the Identification of New Genes Involved in ABA-Dependent Abiotic Stresses Using Arabidopsis Suppressor Mutants of abh1 Hypersensitivity to ABA during Seed Germination. International Journal of Molecular Sciences, 2013, 14, 13403-13432.	4.1	6
64	Fragmentation of Pooled PCR Products for Highly Multiplexed TILLING. G3: Genes, Genomes, Genetics, 2019, 9, 2657-2666.	1.8	6
65	Bioinformatics-Based Assessment of the Relevance of Candidate Genes for Mutation Discovery. , 2017, , 263-280.		5
66	Al-Tolerant Barley Mutant hvatr.g Shows the ATR-Regulated DNA Damage Response to Maleic Acid Hydrazide. International Journal of Molecular Sciences, 2020, 21, 8500.	4.1	5
67	Albino Plant Formation in Androgenic Cultures: An Old Problem and New Facts. Methods in Molecular Biology, 2021, 2288, 3-23.	0.9	5
68	A study of the genetic variation of the aquatic fern Marsilea quadrifolia L. preserved in botanical collections in Poland and originated from natural populations in Europe. Flora: Morphology, Distribution, Functional Ecology of Plants, 2014, 209, 655-665.	1.2	4
69	EST-Based Approach for Dissecting Root Architecture in Barley Using Mutant Traits of Other Species. , 2011, , 11-72.		3
70	Methods for the Simple and Reliable Assessment of Barley Sensitivity to Abiotic Stresses During Early Development. Methods in Molecular Biology, 2019, 1900, 127-151.	0.9	3
71	Barley primary microRNA expression pattern is affected by soil water availability. Acta Biochimica Polonica, 2017, 63, 817-824.	0.5	3
72	Whole Exome Sequencing-Based Identification of a Novel Gene Involved in Root Hair Development in Barley (Hordeum vulgare L.). International Journal of Molecular Sciences, 2021, 22, 13411.	4.1	3