Arie Altman

List of Publications by Year
in descending order

72 papers	11,039 citations	100601 38 h-index	97045 71 g-index
73 all docs	73 docs citations	73 times ranked	12674 citing authors

#	Article	IF	Citations
1	Plant responses to drought, salinity and extreme temperatures: towards genetic engineering for stress tolerance. Planta, 2003, 218, 1-14.	1.6	2,937
2	Role of plant heat-shock proteins and molecular chaperones in the abiotic stress response. Trends in Plant Science, 2004, 9, 244-252.	4.3	2,358
3	Recent advances in engineering plant tolerance to abiotic stress: achievements and limitations. Current Opinion in Biotechnology, 2005, 16, 123-132.	3.3	1,299
4	Antioxidant Activities and Anthocyanin Content of Fresh Fruits of Common Fig (Ficus caricaL.). Journal of Agricultural and Food Chemistry, 2006, 54, 7717-7723.	2.4	441
5	Gradual Soil Water Depletion Results in Reversible Changes of Gene Expression, Protein Profiles, Ecophysiology, and Growth Performance in Populus euphratica, a Poplar Growing in Arid Regions. Plant Physiology, 2007, 143, 876-892.	2.3	338
6	Gene expression and metabolite profiling of Populus euphratica growing in the Negev desert. Genome Biology, 2005, 6, R101.	13.9	208
7	Stabilization of Oat Leaf Protoplasts through Polyamine-mediated Inhibition of Senescence. Plant Physiology, 1977, 60, 570-574.	2.3	173
8	Salt, nutrient uptake and transport, and ABA of Populus euphratica; a hybrid in response to increasing soil NaCl. Trees - Structure and Function, 2001, 15, 186-194.	0.9	164
9	Tree genetic engineering and applications to sustainable forestry and biomass production. Trends in Biotechnology, 2011, 29, 9-17.	4.9	145
10	Molecular and physiological responses to abiotic stress in forest trees and their relevance to tree improvement. Tree Physiology, 2014, 34, 1181-1198.	1.4	144
11	Accelerating Climate Resilient Plant Breeding by Applying Next-Generation Artificial Intelligence. Trends in Biotechnology, 2019, 37, 1217-1235.	4.9	134
12	Effects of NaCl on shoot growth, transpiration, ion compartmentation, and transport in regenerated plants of Populus euphratica and Populus tomentosa. Canadian Journal of Forest Research, 2003, 33, 967-975.	0.8	120
13	Linking the Salt Transcriptome with Physiological Responses of a Salt-Resistant <i>Populus</i> Species as a Strategy to Identify Genes Important for Stress Acclimation. Plant Physiology, 2010, 154, 1697-1709.	2.3	120
14	Differential accumulation of water stress-related proteins, sucrose synthase and soluble sugars in Populus species that differ in their water stress response. Physiologia Plantarum, 1997, 99, 153-159.	2.6	115
15	Genotypic difference in salinity and water stress tolerance of fresh market tomato cultivars. Plant Science, 2000, 152, 59-65.	1.7	112
16	Presence and Identification of Polyamines in Xylem and Phloem Exudates of Plants. Plant Physiology, 1986, 82, 1154-1157.	2.3	110
17	Forest-tree biotechnology: genetic transformation and its application to future forests. Trends in Biotechnology, 1998, 16, 439-446.	4.9	95
18	Photosynthetic response of Populus euphratica to salt stress. Forest Ecology and Management, 1997, 93, 55-61.	1.4	93

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19	Polyamines and Root Formation in Mung Bean Hypocotyl Cuttings. Plant Physiology, 1982, 70, 844-848.	2.3	90
20	Current challenges and future perspectives of plant and agricultural biotechnology. Trends in Biotechnology, 2015, 33, 337-342.	4.9	90
21	Polyamines, ribonuclease and the improvement of oat leaf protoplasts. Plant Science Letters, 1978, 11, 69-79.	1.9	87
22	Characterization of SP1, a Stress-Responsive, Boiling-Soluble, Homo-Oligomeric Protein from Aspen. Plant Physiology, 2002, 130, 865-875.	2.3	85
23	Retardation of radish leaf senescence by polyamines. Physiologia Plantarum, 1982, 54, 189-193.	2.6	80
24	Dual Mechanisms in Polyamine-mediated Control of Ribonuclease Activity in Oat Leaf Protoplasts. Plant Physiology, 1978, 62, 158-160.	2.3	76
25	Transgenic Populus tremula: a step-by-step protocol for its Agrobacterium-mediated transformation. Plant Molecular Biology Reporter, 1997, 15, 219-235.	1.0	75
26	The Structural Basis of the Thermostability of SP1, a Novel Plant (Populus tremula) Boiling Stable Protein. Journal of Biological Chemistry, 2004, 279, 51516-51523.	1.6	73
27	SP1 Protein-Based Nanostructures and Arrays. Nano Letters, 2008, 8, 473-477.	4.5	70
28	The effect of salt stress on polyamine biosynthesis and content in mung bean plants and in halophytes. Physiologia Plantarum, 1989, 76, 295-302.	2.6	69
29	Regulation of somatic embryogenesis in celery cell suspensions. Plant Cell, Tissue and Organ Culture, 1989, 18, 181-189.	1.2	62
30	Agrobacterium rhizogenes-mediated DNA transfer inPinus halepensis Mill.. Plant Cell Reports, 1996, 16, 26-31.	2.8	62
31	Growth and Dormancy Cycles in Citrus Bud Cultures and Their Hormonal Control. Physiologia Plantarum, 1974, 30, 240-245.	2.6	61
32	Interactions of polyamines and nitrogen nutrition in plants. Physiologia Plantarum, 1993, 89, 653-658.	2.6	56
33	Arginine and Ornithine Decarboxylases, the Polyamine Biosynthetic Enzymes of Mung Bean Seedlings. Plant Physiology, 1982, 69, 876-879.	2.3	54
34	Polyamines and wounded storage tissues - Inhibition of RNase activity and solute leakage. Physiologia Plantarum, 1982, 54, 194-198.	2.6	49
35	Polyamines and Root Formation in Mung Bean Hypocotyl Cuttings. Plant Physiology, 1985, 79, 80-83.	2.3	46
36	Interactions of polyamines and nitrogen nutrition in plants. Physiologia Plantarum, 1993, 89, 653-658.	2.6	44

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37	From plant tissue culture to biotechnology: Scientific revolutions, abiotic stress tolerance, and forestry. In Vitro Cellular and Developmental Biology - Plant, 2003, 39, 75-84.	0.9	43
38	Role of Ethylene in Abscisic Acid-induced Callus Formation in Citrus Bud Cultures. Plant Physiology, 1979, 63, 280-282.	2.3	40
39	Understanding Agriculture within the Frameworks of Cumulative Cultural Evolution, Gene-Culture Co-Evolution, and Cultural Niche Construction. Human Ecology, 2019, 47, 483-497.	0.7	40
40	Promotion of Callus Formation by Abscisic Acid in Citrus Bud Cultures. Plant Physiology, 1971, 47, 844-846.	2.3	38
41	Multiple display of catalytic modules on a protein scaffold: Nano-fabrication of enzyme particles. Journal of Biotechnology, 2007, 131, 433-439.	1.9	37
42	SP1 as a Novel Scaffold Building Block for Self-Assembly Nanofabrication of Submicron Enzymatic Structures. Nano Letters, 2007, 7, 1575-1579.	4.5	37
43	Aspen SP1, an exceptional thermal, protease and detergent-resistant self-assembled nano-particle. Biotechnology and Bioengineering, 2006, 95, 161-168.	1.7	36
44	Transformation and regeneration of transgenic aspen plants via shoot formation from stem explants. Physiologia Plantarum, 1997, 99, 554-561.	2.6	32
45	Protection of Fibroblasts (NIH-3T3) against Oxidative Damage by Cyanidin-3-rhamnoglucoside Isolated from Fig Fruits (<i>Ficus carica</i>L.). Journal of Agricultural and Food Chemistry, 2010, 58, 6660-6665.	2.4	30
46	Growth and Metabolic Activity of Lemon Juice Vesicle Explants in Vitro. Plant Physiology, 1982, 69, 1-6.	2.3	28
47	Promoting Ethically Responsible Use of Agricultural Biotechnology. Trends in Plant Science, 2021, 26, 546-559.	4.3	25
48	Characteristics of Root-to-Shoot Transport of Cytokinin 6-Benzylaminopurine in Intact Seedlings of Citrus aurantium. Physiologia Plantarum, 1977, 39, 225-232.	2.6	23
49	Xylem abscisic acid accelerates leaf abscission by modulating polyamine and ethylene synthesis in water-stressed intact poplar. Trees - Structure and Function, 2002, 16, 16-22.	0.9	23
50	Transcriptional activity of isolated maize chloroplasts. Archives of Biochemistry and Biophysics, 1984, 235, 26-33.	1.4	22
51	Involvement of Divalent Cations in Maintaining Cell Membrane Integrity in Stressed Apple Fruit Tissues. Journal of Plant Physiology, 1986, 125, 47-60.	1.6	22
52	Arabidopsis thaliana endo-1,4-$-ÃŸ-glucanase (cell) Promoter Mediates uidA Expression in Elongating Tissues of Aspen (Populus tremula). Journal of Plant Physiology, 2000, 156, 118-120.	1.6	19
53	In vitro Development of Mature Fagus Sylvatica L. Buds. I. The Effect of Medium and Plant Growth Regulators on Bud Growth and Protein Profiles. Journal of Plant Physiology, 1991, 138, 596-601.	1.6	17
54	EPR Studies of O₂^{â€¢âˆ’}, OH, and ¹O₂ Scavenging and Prevention of Glutathione Depletion in Fibroblast Cells by Cyanidin-3-rhamnoglucoside Isolated from Fig (Ficus carica L.) Fruits. Journal of Agricultural and Food Chemistry, 2010, 58, 7158-7165.	2.4	17

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55	Differential Effects of Sucrose, Abscisic Acid, and Benzyladenine on Shoot Growth and Callus Formation in the Abscission Zone of Excised Citrus Buds. Plant Physiology, 1977, 59, 1161-1164.	2.3	16
56	Growth and development of Citrus pistils and fruit explants in vitro. Physiologia Plantarum, 1981, 53, 295-300.	2.6	16
57	In vitro Development of Mature Fagus sylvatica L. buds II. Seasonal Changes in The Response to Plant Growth Regulators. Journal of Plant Physiology, 1991, 138, 136-141.	1.6	16
58	Interrelationship of Abscisic Acid and Gibberellic Acid in the Promotion of Callus Formation in the Abscission Zone of Citrus Bud Cultures. Physiologia Plantarum, 1974, 32, 55-61.	2.6	15
59	Liposome-mediated introduction of the chloramphenicol acetyl transferase (CAT) gene and its expression in tobacco protoplasts. Plant Molecular Biology, 1988, 10, 185-191.	2.0	14
60	rol. Trees - Structure and Function, 1999, 14, 49.	0.9	14
61	Crystallization and preliminary X-ray crystallographic analysis of SP1, a novel chaperone-like protein. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 512-514.	2.5	13
62	Fusion of germinating watermelon pollen tubes with liposomes. Plant Science, 1988, 55, 69-75.	1.7	12
63	Ornamental plant domestication by aesthetics-driven human cultural niche construction. Trends in Plant Science, 2022, 27, 124-138.	4.3	12
64	In vitro propagation and germplasm cold-storage of fertile and male-sterile Allium trifoliatum subsp. hirsutum. Genetic Resources and Crop Evolution, 1994, 41, 87-98.	0.8	7
65	Tomato yellow leaf curl virus DNA in callus cultures derived from infected tomato leaves. Plant Cell, Tissue and Organ Culture, 1994, 39, 37-42.	1.2	6
66	Plant tissue culture and biotechnology: perspectives in the history and prospects of the International Association of Plant Biotechnology (IAPB). In Vitro Cellular and Developmental Biology - Plant, 2019, 55, 590-594.	0.9	6
67	Interactions between myo-inositol and cytokinins: Their basipetal transport and effect on peach roots. Physiologia Plantarum, 1987, 69, 633-638.	2.6	4
68	INHIBITION OF POLYAMINE BIOSYNTHESIS BY L-CANAVANINE AND ITS EFFECT ON MERISTEMATIC ACTIVITY, GROWTH, AND DEVELOPMENT OF ZEA MAYS ROOTS. Israel Journal of Plant Sciences, 1997, 45, 23-30.	0.3	4
69	Highly efficient transformation and regeneration of aspen plants through shoot-bud formation in root culture. Plant Cell Reports, 1996, 15, 566-571.	2.8	4
70	Comparative Basipetal Transport of 6-Benzylaminopurine-8-14C, Gibberellin A3-3H, IAA-2-14C, and Sucrose-14C in the Root of Intact Citrus aurantium Seedlings. Physiologia Plantarum, 1977, 39, 233-235.	2.6	3
71	Cloning and characterization of the tomato karyopherin alpha1 gene promoter. Development Growth and Differentiation, 2004, 46, 515-522.	0.6	3
72	Changes in the integrity of large unilamellar vesicles due to their interaction with tobacco cell suspensions. Plant Cell Reports, 1988, 7, 341-343.	2.8	0