Ian C Dodd

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8486196/publications.pdf

Version: 2024-02-01

31976 42399 9,254 129 53 92 citations h-index g-index papers 132 132 132 8425 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Microbial amelioration of crop salinity stress. Journal of Experimental Botany, 2012, 63, 3415-3428.	4.8	388
2	Rhizosphere bacteria containing 1â€aminocyclopropaneâ€1â€carboxylate deaminase increase yield of plants grown in drying soil via both local and systemic hormone signalling. New Phytologist, 2009, 181, 413-423.	7.3	385
3	Hormonal changes in relation to biomass partitioning and shoot growth impairment in salinized tomato (Solanum lycopersicum L.) plants. Journal of Experimental Botany, 2008, 59, 4119-4131.	4.8	376
4	Rhizobacterial mediation of plant hormone status. Annals of Applied Biology, 2010, 157, 361-379.	2.5	369
5	AtMYB61, an R2R3-MYB Transcription Factor Controlling Stomatal Aperture in Arabidopsis thaliana. Current Biology, 2005, 15, 1201-1206.	3.9	259
6	Hormonal changes during salinity-induced leaf senescence in tomato (Solanum lycopersicum L.). Journal of Experimental Botany, 2008, 59, 3039-3050.	4.8	244
7	Unravelling rootstockxscion interactions to improve food security. Journal of Experimental Botany, 2015, 66, 2211-2226.	4.8	238
8	Root-To-Shoot Signalling: Assessing The Roles of â€~Up' In the Up and Down World of Long-Distance Signalling In Planta. Plant and Soil, 2005, 274, 251-270.	3.7	229
9	Long-distance signals regulating stomatal conductance and leaf growth in tomato (Lycopersicon) Tj ETQq1 1 0.78 2353-2363.	34314 rgB 4.8	T /Overlock : 222
10	Rootstockâ€mediated changes in xylem ionic and hormonal status are correlated with delayed leaf senescence, and increased leaf area and crop productivity in salinized tomato. Plant, Cell and Environment, 2009, 32, 928-938.	5.7	201
11	Root-synthesized cytokinins improve shoot growth and fruit yield in salinized tomato (Solanum) Tj ETQq $1\ 1\ 0.784$	1314 rgBT 4.8	/Oygrlock 10
12	Hormonal Interactions and Stomatal Responses. Journal of Plant Growth Regulation, 2003, 22, 32-46.	5.1	188
13	Vertical farming increases lettuce yield per unit area compared to conventional horizontal hydroponics. Food and Energy Security, 2016, 5, 184-191.	4.3	167
14	Phytohormone Mediation of Interactions Between Plants and Non-Symbiotic Growth Promoting Bacteria Under Edaphic Stresses. Frontiers in Plant Science, 2019, 10, 1368.	3.6	167
15	Rhizosphere bacteria containing 1-aminocyclopropane-1- carboxylate deaminase increase growth and photosynthesis of pea plants under salt stress by limiting Na+ accumulation. Functional Plant Biology, 2016, 43, 161.	2.1	155
16	Physiological impacts of ABA–JA interactions under water-limitation. Plant Molecular Biology, 2016, 91, 641-650.	3.9	152
17	Rhizosphere manipulations to maximize 'crop per drop' during deficit irrigation. Journal of Experimental Botany, 2009, 60, 2454-2459.	4.8	146

Auxin production by rhizobacteria was associated with improved yield of wheat (<i>Triticum) Tj ETQq0 0 0 rgBT /Overlock $10 \stackrel{Tf}{133} 50 62 \stackrel{To}{133} 60 \stackrel{Tf}{133} 10 \stackrel{Tf}{133} 10$

18

#	Article	IF	Citations
19	How do roots elongate in a structured soil?. Journal of Experimental Botany, 2013, 64, 4761-4777.	4.8	126
20	Abscisic acid metabolizing rhizobacteria decrease ABA concentrations in planta and alter plant growth. Plant Physiology and Biochemistry, 2014, 74, 84-91.	5.8	124
21	Impact of alternate wetting and drying on rice physiology, grain production, and grain quality. Field Crops Research, 2017, 205, 1-13.	5.1	123
22	Biomass allocation in tomato (Lycopersicon esculentum) plants grown under partial rootzone drying: enhancement of root growth. Functional Plant Biology, 2004, 31, 971.	2.1	122
23	Effect of partial rootzone drying on the concentration of zeatin-type cytokinins in tomato (Solanum) Tj ETQq1 1	0.784314	rgBT/Overlo
24	Cytokinin producing bacteria stimulate amino acid deposition by wheat roots. Plant Physiology and Biochemistry, 2014, 83, 285-291.	5.8	120
25	Hormonal regulation of source - sink relations to maintain crop productivity under salinity: a case study of root-to-shoot signalling in tomato. Functional Plant Biology, 2010, 37, 592.	2.1	115
26	Abscisic acid signalling when soil moisture is heterogeneous: decreased photoperiod sap flow from drying roots limits abscisic acid export to the shoots. Plant, Cell and Environment, 2008, 31, 1263-1274.	5.7	109
27	Microbial enhancement of crop resource use efficiency. Current Opinion in Biotechnology, 2012, 23, 236-242.	6.6	108
28	Exploring the use of recombinant inbred lines in combination with beneficial microbial inoculants (AM fungus and PGPR) to improve drought stress tolerance in tomato. Environmental and Experimental Botany, 2016, 131, 47-57.	4.2	104
29	The importance of soil drying and re-wetting in crop phytohormonal and nutritional responses to deficit irrigation. Journal of Experimental Botany, 2015, 66, 2239-2252.	4.8	103
30	The rhizobacterium Variovorax paradoxus 5C-2, containing ACC deaminase, promotes growth and development of Arabidopsis thaliana via an ethylene-dependent pathway. Journal of Experimental Botany, 2013, 64, 1565-1573.	4.8	102
31	Rapid increases in cytokinin concentration in lateral buds of chickpea (Cicer arietinum L.) during release of apical dominance. Planta, 1997, 202, 271-276.	3.2	101
32	Root-targeted biotechnology to mediate hormonal signalling and improve crop stress tolerance. Plant Cell Reports, 2011, 30, 807-823.	5.6	96
33	High solid anaerobic digestion: Operational challenges and possibilities. Environmental Technology and Innovation, 2015, 4, 268-284.	6.1	94
34	The Xerobranching Response Represses Lateral Root Formation When Roots Are Not in Contact with Water. Current Biology, 2018, 28, 3165-3173.e5.	3.9	94
35	Common and specific responses to availability of mineral nutrients and water. Journal of Experimental Botany, 2015, 66, 2133-2144.	4.8	93
36	Alternation of wet and dry sides during partial rootzone drying irrigation alters root-to-shoot signalling of abscisic acid. Functional Plant Biology, 2006, 33, 1081.	2.1	84

#	Article	IF	CITATIONS
37	Partial phenotypic reversion of ABA-deficient flacca tomato (Solanum lycopersicum) scions by a wild-type rootstock: normalizing shoot ethylene relations promotes leaf area but does not diminish whole plant transpiration rate. Journal of Experimental Botany, 2009, 60, 4029-4039.	4.8	84
38	Rootâ€toâ€shoot signalling when soil moisture is heterogeneous: increasing the proportion of root biomass in drying soil inhibits leaf growth and increases leaf abscisic acid concentration. Plant, Cell and Environment, 2011, 34, 1164-1175.	5.7	81
39	Long-distance ABA transport can mediate distal tissue responses by affecting local ABA concentrations. Journal of Integrative Plant Biology, 2018, 60, 16-33.	8.5	81
40	Soil moisture heterogeneity during deficit irrigation alters root-to-shoot signalling of abscisic acid. Functional Plant Biology, 2007, 34, 439.	2.1	80
41	Abscisic acid and stomatal closure: a hydraulic conductance conundrum?. New Phytologist, 2013, 197, 6-8.	7.3	80
42	Ethylene limits abscisic acid―or soil drying―nduced stomatal closure in aged wheat leaves. Plant, Cell and Environment, 2013, 36, 1850-1859.	5.7	79
43	Multiple impacts of the plant growth-promoting rhizobacterium Variovorax paradoxus 5C-2 on nutrient and ABA relations of Pisum sativum. Journal of Experimental Botany, 2012, 63, 6421-6430.	4.8	78
44	Do increases in xylem sap pH and/or ABA concentration mediate stomatal closure following nitrate deprivation?. Journal of Experimental Botany, 2003, 54, 1281-1288.	4.8	77
45	Contrasting physiological effects of partial root zone drying in field-grown grapevine (Vitis vinifera) Tj ETQq1 1 (4071-4083.	0.784314 i 4.8	rgBT /Overloc 76
46	Addressing Research Bottlenecks to Crop Productivity. Trends in Plant Science, 2021, 26, 607-630.	8.8	76
47	Alternate wetting and drying irrigation for rice in Bangladesh: Is it sustainable and has plant breeding something to offer?. Food and Energy Security, 2013, 2, 120-129.	4.3	74
48	Accounting for sap flow from different parts of the root system improves the prediction of xylem ABA concentration in plants grown with heterogeneous soil moisture. Journal of Experimental Botany, 2008, 59, 4083-4093.	4.8	73
49	Local root abscisic acid (ABA) accumulation depends on the spatial distribution of soil moisture in potato: implications for ABA signalling under heterogeneous soil drying. Journal of Experimental Botany, 2015, 66, 2325-2334.	4.8	71
50	Gravimetric phenotyping of whole plant transpiration responses to atmospheric vapour pressure deficit identifies genotypic variation in water use efficiency. Plant Science, 2016, 251, 101-109.	3.6	63
51	Root water potential integrates discrete soil physical properties to influence ABA signalling during partial rootzone drying. Journal of Experimental Botany, 2010, 61, 3543-3551.	4.8	62
52	Foliar Abscisic Acid-To-Ethylene Accumulation and Response Regulate Shoot Growth Sensitivity to Mild Drought in Wheat. Frontiers in Plant Science, 2016, 7, 461.	3.6	60
53	Isoprene emission protects photosynthesis but reduces plant productivity during drought in transgenic tobacco (<i>Nicotiana tabacum</i>) plants. New Phytologist, 2014, 201, 205-216.	7.3	58
54	Exogenous application of abscisic acid (ABA) increases root and cell hydraulic conductivity and abundance of some aquaporin isoforms in the ABA-deficient barley mutant Az34. Annals of Botany, 2016, 118, 777-785.	2.9	58

#	Article	IF	Citations
55	Attenuated accumulation of jasmonates modifies stomatal responses to water deficit. Journal of Experimental Botany, 2018, 69, 2103-2116.	4.8	55
56	Harmonising conflicts between science, regulation, perception and environmental impact: The case of soil conditioners from bioenergy. Environment International, 2015, 75, 52-67.	10.0	53
57	Alternate wetting and drying irrigation maintained rice yields despite half the irrigation volume, but is currently unlikely to be adopted by smallholder lowland rice farmers in Nepal. Food and Energy Security, 2015, 4, 144-157.	4.3	52
58	$$ $$ $$ $$ $$ $$ $$ $$ $$	2.0	50
59	Longâ€distance abscisic acid signalling under different vertical soil moisture gradients depends on bulk root water potential and average soil water content in the root zone. Plant, Cell and Environment, 2013, 36, 1465-1475.	5.7	50
60	Using X-ray Computed Tomography to explore the role of abscisic acid in moderating the impact of soil compaction on root system architecture. Environmental and Experimental Botany, 2015, 110, 11-18.	4.2	50
61	Climate Change and Consequences for Potato Production: a Review of Tolerance to Emerging Abiotic Stress. Potato Research, 2017, 60, 239-268.	2.7	50
62	Effects of nitrogen supply on xylem cytokinin delivery, transpiration and leaf expansion of pea genotypes differing in xylem-cytokinin concentration. Functional Plant Biology, 2004, 31, 903.	2.1	49
63	Genetic and management approaches to boost UK wheat yields by ameliorating water deficits. Journal of Experimental Botany, 2011, 62, 5241-5248.	4.8	49
64	ABA mediation of shoot cytokinin oxidase activity: assessing its impacts on cytokinin status and biomass allocation of nutrient-deprived durum wheat. Functional Plant Biology, 2009, 36, 66.	2.1	48
65	Root hairs are the most important root trait for rhizosheath formation of barley (<i>Hordeum) Tj ETQq1 1 0.7843 45-57.</i>	14 rgBT /0 2.9	
66	Applying â€~drought' to potted plants by maintaining suboptimal soil moisture improves plant water relations. Journal of Experimental Botany, 2017, 68, 2413-2424.	4.8	44
67	Wheat root growth responses to horizontal stratification of fertiliser in a water-limited environment. Plant and Soil, 2015, 386, 77-88.	3.7	41
68	Genetic analysis of physiological components of salt tolerance conferred by Solanum rootstocks. What is the rootstock doing for the scion?. Theoretical and Applied Genetics, 2010, 121, 105-115.	3.6	39
69	The cadmium-tolerant pea (Pisum sativum L.) mutant SGECdt is more sensitive to mercury: assessing plant water relations. Journal of Experimental Botany, 2015, 66, 2359-2369.	4.8	39
70	Partial rootzone drying improves almond tree leaf-level water use efficiency and afternoon water status compared with regulated deficit irrigation. Functional Plant Biology, 2011, 38, 372.	2.1	35
71	Modelling the impact of heterogeneous rootzone water distribution on the regulation of transpiration by hormone transport and/or hydraulic pressures. Plant and Soil, 2014, 384, 93-112.	3.7	34
72	Enhanced root growth of the brb (bald root barley) mutant in drying soil allows similar shoot physiological responses to soil water deficit as wild-type plants. Functional Plant Biology, 2016, 43, 199.	2.1	34

#	Article	IF	CITATIONS
73	Ethylene inhibits rice root elongation in compacted soil via ABA- and auxin-mediated mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	34
74	The effect of impedance to root growth on plant architecture in wheat. Plant and Soil, 2015, 392, 323-332.	3.7	33
7 5	Stomatal closure of <i>Pelargonium</i> \tilde{A} — <i>hortorum</i> in response to soil water deficit is associated with decreased leaf water potential only under rapid soil drying. Physiologia Plantarum, 2016, 156, 84-96.	5.2	33
76	<scp>ABA</scp> regulation of root growth during soil drying and recovery can involve auxin response. Plant, Cell and Environment, 2022, 45, 871-883.	5.7	32
77	Xylem sap collection and extraction methodologies to determine in vivo concentrations of ABA and its bound forms by gas chromatography-mass spectrometry (GC-MS). Plant Methods, 2012, 8, 11.	4.3	31
78	Two potato (Solanum tuberosum) varieties differ in drought tolerance due to differences in root growth at depth. Functional Plant Biology, 2014, 41, 1107.	2.1	31
79	Partial root zone drying exerts different physiological responses on field-grown grapevine (Vitis) Tj ETQq1 1 0.784 41, 1087.	·314 rgBT 2.1	/Overlock 1 30
80	Rapid changes in root HvPIP2;2 aquaporins abundance and ABA concentration are required to enhance root hydraulic conductivity and maintain leaf water potential in response to increased evaporative demand. Functional Plant Biology, 2018, 45, 143.	2.1	30
81	Overproduction of <scp>ABA</scp> in rootstocks alleviates salinity stress in tomato shoots. Plant, Cell and Environment, 2021, 44, 2966-2986.	5.7	30
82	Stem girdling uncouples soybean stomatal conductance from leaf water potential by enhancing leaf xylem ABA concentration. Environmental and Experimental Botany, 2019, 159, 149-156.	4.2	29
83	Impact of overexpression of 9-cis-epoxycarotenoid dioxygenase on growth and gene expression under salinity stress. Plant Science, 2020, 295, 110268.	3.6	29
84	Principal component analysis of hormone profiling data suggests an important role for cytokinins in regulating leaf growth and senescence of salinized tomato. Plant Signaling and Behavior, 2010, 5, 45-48.	2.4	28
85	Longâ€ŧerm impact of deficit irrigation on the physical quality of berries in â€~Crimson Seedless' table grapes. Journal of the Science of Food and Agriculture, 2015, 95, 2510-2520.	3.5	28
86	Structuralâ€"functional dissection and characterization of yield-contributing traits originating from a group 7 chromosome of the wheatgrass species <i>Thinopyrum ponticum</i> after transfer into durum wheat. Journal of Experimental Botany, 2014, 65, 509-525.	4.8	26
87	Hormonal and Nutritional Features in Contrasting Rootstock-mediated Tomato Growth under Low-phosphorus Nutrition. Frontiers in Plant Science, 2017, 08, 533.	3.6	24
88	Regulation of algal and cyanobacterial auxin production, physiology, and application in agriculture: an overview. Journal of Applied Phycology, 2021, 33, 2995-3023.	2.8	23
89	Root-to-shoot signalling: Assessing the roles of  up' in the up and down world of long-distance signalling in planta. Plant Ecophysiology, 2005, , 251-270.	1.5	22
90	Inhibition of tomato shoot growth by overâ€irrigation is linked to nitrogen deficiency and ethylene. Physiologia Plantarum, 2016, 156, 70-83.	5.2	22

#	Article	IF	Citations
91	Xylem-borne cytokinins: still in search of a role?. Journal of Experimental Botany, 2006, 57, 1-4.	4.8	21
92	Daily irrigation attenuates xylem abscisic acid concentration and increases leaf water potential of <i>Pelargonium $\langle i \rangle$ \tilde{A}— $\langle i \rangle$ hortorum $\langle i \rangle$ compared with infrequent irrigation. Physiologia Plantarum, 2016, 158, 23-33.</i>	5.2	21
93	Whole plant chamber to examine sensitivity of cereal gas exchange to changes in evaporative demand. Plant Methods, 2018, 14, 97.	4.3	21
94	Leaf phytohormone levels and stomatal control in an evergreen woody species under semiarid environment in a Brazilian seasonally dry tropical forest. Plant Growth Regulation, 2018, 85, 437-445.	3.4	21
95	Aluminum-induced stomatal closure is related to low root hydraulic conductance and high ABA accumulation. Environmental and Experimental Botany, 2020, 179, 104233.	4.2	21
96	Nitrogen Form Alters Hormonal Balance in Salt-treated Tomato (Solanum lycopersicum L.). Journal of Plant Growth Regulation, 2011, 30, 144-157.	5.1	20
97	Microbial inoculum development for ameliorating crop drought stress: A case study of Variovorax paradoxus 5C-2. New Biotechnology, 2020, 56, 103-113.	4.4	20
98	Abscisic acid mediates barley rhizosheath formation under mild soil drying by promoting root hair growth and auxin response. Plant, Cell and Environment, 2021, 44, 1935-1945.	5.7	20
99	Sap fluxes from different parts of the rootzone modulate xylem ABA concentration during partial rootzone drying and re-wetting. Journal of Experimental Botany, 2015, 66, 2315-2324.	4.8	18
100	The rhizosphere bacterium <i>Variovorax paradoxus</i> 5C-2 containing ACC deaminase does not increase systemic ABA signaling in maize (<i>Zea mays</i> L.). Plant Signaling and Behavior, 2009, 4, 519-521.	2.4	17
101	Alternate wetting and drying irrigation increases water and phosphorus use efficiency independent of substrate phosphorus status of vegetative rice plants. Plant Physiology and Biochemistry, 2020, 155, 914-926.	5.8	17
102	Liming can decrease legume crop yield and leaf gas exchange by enhancing root to shoot ABA signalling. Journal of Experimental Botany, 2015, 66, 2335-2345.	4.8	15
103	Adaptation to chronic drought modifies soil microbial community responses to phytohormones. Communications Biology, 2021, 4, 516.	4.4	14
104	Effects of Phosphate Shortage on Root Growth and Hormone Content of Barley Depend on Capacity of the Roots to Accumulate ABA. Plants, 2020, 9, 1722.	3.5	13
105	Abscisic Acid Mediates Drought-Enhanced Rhizosheath Formation in Tomato. Frontiers in Plant Science, 2021, 12, 658787.	3.6	13
106	Plant responses to heterogeneous salinity: agronomic relevance and research priorities. Annals of Botany, 2022, 129, 499-518.	2.9	13
107	Hormones and the Regulation of Water Balance. , 2010, , 519-548.		12
108	Physiological and gene expression responses of sunflower (Helianthus annuus L.) plants differ according to irrigation placement. Plant Science, 2014, 227, 37-44.	3.6	12

#	Article	IF	CITATIONS
109	Leaf area development of ABA-deficient and wild-type peas at two levels of nitrogen supply. Functional Plant Biology, 2003, 30, 777.	2.1	11
110	Apical Wilting and Petiole Xylem Vessel Diameter of the rms2 Branching Mutant of Pea are Shoot Controlled and Independent of a Long-Distance Signal Regulating Branching. Plant and Cell Physiology, 2008, 49, 791-800.	3.1	11
111	Irrigation frequency transiently alters whole plant gas exchange, water and hormone status, but irrigation volume determines cumulative growth in two herbaceous crops. Environmental and Experimental Botany, 2020, 176, 104101.	4.2	11
112	Drought and re-watering modify ethylene production and sensitivity, and are associated with coffee anthesis. Environmental and Experimental Botany, 2021, 181, 104289.	4.2	11
113	Genetic Analysis of Root-to-Shoot Signaling and Rootstock-Mediated Tolerance to Water Deficit in Tomato. Genes, 2021, 12, 10.	2.4	10
114	Xylem sap calcium concentrations do not explain liming-induced inhibition of legume gas exchange. Plant and Soil, 2014, 382, 17-30.	3.7	9
115	Elevated Root-Zone Dissolved Inorganic Carbon Alters Plant Nutrition of Lettuce and Pepper Grown Hydroponically and Aeroponically. Agronomy, 2020, 10, 403.	3.0	8
116	Agronomic and physiological responses of potato subjected to soil compaction and/or drying. Annals of Applied Biology, 2021, 178, 328-340.	2.5	8
117	Girdling changes root and shoot hormonal balance but does not alter drought-induced stomatal closure in soybean. Environmental and Experimental Botany, 2021, 192, 104657.	4.2	8
118	Soil moisture heterogeneity regulates water use in Populus nigra L. by altering root and xylem sap phytohormone concentrations. Tree Physiology, 2020, 40, 762-773.	3.1	6
119	Different abscisic acidâ€deficient mutants show unique morphological and hydraulic responses to high air humidity. Physiologia Plantarum, 2021, 172, 1795-1807.	5. 2	6
120	Biâ€directional, longâ€distance hormonal signalling between roots and shoots of soil water availability. Physiologia Plantarum, 2022, 174, e13697.	5. 2	6
121	Water relations of the tos1 tomato mutant at contrasting evaporative demand. Physiologia Plantarum, 2009, 137, 36-43.	5. 2	5
122	Distinctive phytohormonal and metabolic profiles of Arabidopsis thaliana and Eutrema salsugineum under similar soil drying. Planta, 2019, 249, 1417-1433.	3.2	5
123	SHui, an EU-Chinese cooperative project to optimize soil and water management in agricultural areas in the XXI century. International Soil and Water Conservation Research, 2020, 8, 1-14.	6.5	5
124	Growing Different Lactuca Genotypes Aeroponically within a Tropical Greenhouseâ€"Cool Rootzone Temperatures Decreased Rootzone Ethylene Concentrations and Increased Shoot Growth. Frontiers in Physiology, 2016, 7, 405.	2.8	4
125	Maintenance of Photosynthesis as Leaves Age Improves Whole Plant Water Use Efficiency in an Australian Wheat Cultivar. Agronomy, 2020, 10, 1102.	3.0	3
126	Cryptochrome 1a of tomato mediates long-distance signaling of soil water deficit. Plant Science, 2021, 303, 110763.	3.6	3

#	Article	IF	CITATIONS
127	Phytohormone Profiles of Lettuce and Pepper Grown Aeroponically with Elevated Root-Zone Carbon Dioxide Concentrations. Agronomy, 2020, 10, 665.	3.0	1
128	Role of Plant Growth Regulators in Stomatal Limitation to Photosynthesis during Water Stress. Books in Soils, Plants, and the Environment, 2005, , .	0.1	0
129	Preface. Journal of Experimental Botany, 2015, 66, 2123-2125.	4.8	O