Tracy A Valentine

List of Publications by Year
in descending order

36 papers	2,877 citations	394421 19 h-index	361022 35 g-index
41 all docs	41 docs citations	41 times ranked	3425 citing authors

#	Article	IF	Citations
1	Root elongation, water stress, and mechanical impedance: a review of limiting stresses and beneficial root tip traits. Journal of Experimental Botany, 2011, 62, 59-68.	4.8	766
2	Root responses to soil physical conditions; growth dynamics from field to cell. Journal of Experimental Botany, 2006, 57, 437-447.	4.8	399
3	Soluble Signals from Cells Identified at the Cell Wall Establish a Developmental Pathway in Carrot.. Plant Cell, 1997, 9, 2225-2241.	6.6	198
4	Functional Analysis of a DNA-Shuffled Movement Protein Reveals That Microtubules Are Dispensable for the Cell-to-Cell Movement of Tobacco mosaic virus. Plant Cell, 2002, 14, 1207-1222.	6.6	178
5	Transparent Soil for Imaging the Rhizosphere. PLoS ONE, 2012, 7, e44276.	2.5	156
6	Root traits for infertile soils. Frontiers in Plant Science, 2013, 4, 193.	3.6	145
7	Soil strength and macropore volume limit root elongation rates in many UK agricultural soils. Annals of Botany, 2012, 110, 259-270.	2.9	138
8	Efficient Virus-Induced Gene Silencing in Roots Using a Modified Tobacco Rattle Virus Vector. Plant Physiology, 2004, 136, 3999-4009.	4.8	122
9	Challenges and opportunities for quantifying roots and rhizosphere interactions through imaging and image analysis. Plant, Cell and Environment, 2015, 38, 1213-1232.	5.7	117
10	Root hair length and rhizosheath mass depend on soil porosity, strength and water content in barley genotypes. Planta, 2014, 239, 643-651.	3.2	101
11	Root cap influences root colonisation by Pseudomonas fluorescens SBW25 on maize. FEMS Microbiology Ecology, 2005, 54, 123-130.	2.7	53
12	Defence gene expression and phloem quality contribute to mesophyll and phloem resistance to aphids in wild barley. Journal of Experimental Botany, 2019, 70, 4011-4026.	4.8	43
13	The price of protection: a defensive endosymbiont impairs nymph growth in the bird cherryâ€oat aphid, Rhopalosiphum padi. Insect Science, 2020, 27, 69-85.	3.0	39
14	Transparent soil microcosms allow 3D spatial quantification of soil microbiological processesin vivo. Plant Signaling and Behavior, 2014, 9, e970421.	2.4	37
15	Soluble Signals from Cells Identified at the Cell Wall Establish a Developmental Pathway in Carrot. Plant Cell, 1997, 9, 2225.	6.6	36
16	Delivery of macromolecules to plant parasitic nematodes using a tobacco rattle virus vector. Plant Biotechnology Journal, 2007, 5, 827-834.	8.3	36
17	Soil tillage effects on the efficacy of cultivars and their mixtures in winter barley. Field Crops Research, 2012, 128, 91-100.	5.1	34
18	Inhibition of tobacco mosaic virus replication in lateral roots is dependent on an activated meristem-derived signal. Protoplasma, 2002, 219, 184-196.	2.1	28

#	Article	IF	Citations
19	Degradation rate of soil function varies with trajectory of agricultural intensification. Agriculture, Ecosystems and Environment, 2015, 202, 160-167.	5.3	28
20	The rise, fall and resurrection of chemicalâ€induced resistance agents. Pest Management Science, 2021, 77, 3900-3909.	3.4	28
21	Myxospermous seed-mucilage quantity correlates with environmental gradients indicative of water-deficit stress: Plantago species as a model. Plant and Soil, 2020, 446, 343-356.	3.7	22
22	PIV as a method for quantifying root cell growth and particle displacement in confocal images. Microscopy Research and Technique, 2010, 73, 27-36.	2.2	20
23	Drought has negative consequences on aphid fitness and plant vigor: Insights from a metaâ€analysis. Ecology and Evolution, 2021, 11, 11915-11929.	1.9	20
24	Estimating the motion of plant root cells from in vivo confocal laser scanning microscopy images. Machine Vision and Applications, 2010, 21, 921-939.	2.7	19
25	Automated motion estimation of root responses to sucrose in two Arabidopsis thaliana genotypes using confocal microscopy. Planta, 2011, 234, 769-784.	3.2	17
26	Field Phenotyping and Long-Term Platforms to Characterise How Crop Genotypes Interact with Soil Processes and the Environment. Agronomy, 2014, 4, 242-278.	3.0	16
27	A fitness cost resulting from Hamiltonella defensa infection is associated with altered probing and feeding behaviour in Rhopalosiphum padi. Journal of Experimental Biology, 2020, 223, .	1.7	16
28	Dwarf alleles differentially affect barley root traits influencing nitrogen acquisition under low nutrient supply. Journal of Experimental Botany, 2011, 62, 3917-3927.	4.8	12
29	Sustainable disease control using weeds as indicators: Capsella bursa-pastoris and Tobacco Rattle Virus. Weed Research, 2010, 50, 511-514.	1.7	8
30	Soil Nitrogen Status Modifies Rice Root Response to Nematode-Bacteria Interactions in the Rhizosphere. PLoS ONE, 2016, 11, e0148021.	2.5	8
31	Variable impacts of reduced and zero tillage on soil carbon storage across 4â€“10 years of UK field experiments. Journal of Soils and Sediments, 2021, 21, 890-904.	3.0	8
32	Part-Based Multi-Frame Registration for Estimation of the Growth Of Cellular Networks in Plant Roots. , 2006, , .		7
33	Towards a characterisation of the wild legume bitter vetch (Lathyrus linifolius L. (Reichard)) Tj ETQq1 1 0.784314 rgBT /Overlock Plant Biology, 2019, 21, 523-532.	3.8	7
34	Drought stress increases the expression of barley defence genes with negative consequences for infesting cereal aphids. Journal of Experimental Botany, 2022, 73, 2238-2250.	4.8	6
35	Probing soil physical and biological resilience data from a broad sampling of arable farms in Scotland. Soil Use and Management, 2015, 31, 491-503.	4.9	4
36	Identifying Spring Barley Cultivars with Differential Response to Tillage. Agronomy, 2020, 10, 686.	3.0	4