Peter J Gregory

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4367686/publications.pdf

Version: 2024-02-01

110 papers	8,089 citations	57758 44 h-index	51608 86 g-index
131 all docs	131 docs citations	131 times ranked	9130 citing authors

#	Article	IF	Citations
1	Climate change and food security. Philosophical Transactions of the Royal Society B: Biological Sciences, 2005, 360, 2139-2148.	4.0	585
2	Rhizosphere geometry and heterogeneity arising from rootâ€mediated physical and chemical processes. New Phytologist, 2005, 168, 293-303.	7.3	480
3	Integrating pests and pathogens into the climate change/food security debate. Journal of Experimental Botany, 2009, 60, 2827-2838.	4.8	433
4	Roots, rhizosphere and soil: the route to a better understanding of soil science?. European Journal of Soil Science, 2006, 57, 2-12.	3.9	372
5	Competition for land. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 2941-2957.	4.0	365
6	Plant roots release phospholipid surfactants that modify the physical and chemical properties of soil. New Phytologist, 2003, 157, 315-326.	7.3	250
7	Matching roots to their environment. Annals of Botany, 2013, 112, 207-222.	2.9	247
8	Soil, food security and human health: a review. European Journal of Soil Science, 2015, 66, 257-276.	3.9	217
9	Modelling Cereal Root Systems for Water and Nitrogen Capture: Towards an Economic Optimum. Annals of Botany, 2003, 91, 383-390.	2.9	213
10	Climate change and sustainable food production. Proceedings of the Nutrition Society, 2013, 72, 21-28.	1.0	210
11	Implications of climate change for diseases, crop yields and food security. Euphytica, 2011, 179, 3-18.	1.2	197
12	Environmental consequences of alternative practices for intensifying crop production. Agriculture, Ecosystems and Environment, 2002, 88, 279-290.	5.3	169
13	Root phenomics of crops: opportunities and challenges. Functional Plant Biology, 2009, 36, 922.	2.1	163
14	Non-invasive imaging of roots with high resolution X-ray micro-tomography. Plant and Soil, 2003, 255, 351-359.	3.7	147
15	Chemically-mediated host-plant location and selection by root-feeding insects. Physiological Entomology, 2006, 31, 1-13.	1.5	145
16	A vision for attaining food security. Current Opinion in Environmental Sustainability, 2012, 4, 7-17.	6.3	140
17	The effects of dwarfing genes on seedling root growth of wheat. Journal of Experimental Botany, 2009, 60, 2565-2573.	4.8	139
18	Contributions of roots and rootstocks to sustainable, intensified crop production. Journal of Experimental Botany, 2013, 64, 1209-1222.	4.8	139

#	Article	IF	Citations
19	Feeding nine billion: the challenge to sustainable crop production. Journal of Experimental Botany, 2011, 62, 5233-5239.	4.8	138
20	Phosphatase activity and organic acids in the rhizosphere of potential agroforestry species and maize. Soil Biology and Biochemistry, 2002, 34, 1487-1494.	8.8	132
21	Root growth models: towards a new generation of continuous approaches. Journal of Experimental Botany, 2010, 61, 2131-2143.	4.8	132
22	Measuring root traits in barley (Hordeum vulgare ssp. vulgare and ssp. spontaneum) seedlings using gel chambers, soil sacs and X-ray microtomography. Plant and Soil, 2009, 316, 285-297.	3.7	127
23	Approaches to reduce zinc and iron deficits in food systems. Global Food Security, 2017, 15, 1-10.	8.1	106
24	Depletion of organic phosphorus from Oxisols in relation to phosphatase activities in the rhizosphere. European Journal of Soil Science, 2006, 57, 47-57.	3.9	98
25	Differential interaction of Aspergillus niger and Peniophora lycii phytases with soil particles affects the hydrolysis of inositol phosphates. Soil Biology and Biochemistry, 2007, 39, 793-803.	8.8	94
26	Global change and food and forest production: future scientific challenges. Agriculture, Ecosystems and Environment, 2000, 82, 3-14.	5.3	93
27	Variation in root-associated phosphatase activities in wheat contributes to the utilization of organic P substrates in vitro, but does not explain differences in the P-nutrition of plants when grown in soils. Environmental and Experimental Botany, 2008, 64, 239-249.	4.2	90
28	New approaches to studying chemical and physical changes in the rhizosphere: an overview. Plant and Soil, 1999, 211, 1-9.	3.7	79
29	Viruses in soils: morphological diversity and abundance in the rhizosphere. Annals of Applied Biology, 2009, 155, 51-60.	2.5	75
30	Measuring variation in potato roots in both field and glasshouse: the search for useful yield predictors and a simple screen for root traits. Plant and Soil, 2013, 368, 231-249.	3.7	74
31	Water resources and their use in food production systems. Aquatic Sciences, 2002, 64, 363-375.	1.5	73
32	Soil Type, Climatic Regime, and the Response of Water Use Efficiency to Crop Management. Agronomy Journal, 2000, 92, 814-820.	1.8	71
33	A tillering inhibition gene influences rootâ€“shoot carbon partitioning and pattern of water use to improve wheat productivity in rainfed environments. Journal of Experimental Botany, 2016, 67, 327-340.	4.8	65
34	Title is missing!. Plant and Soil, 2002, 246, 65-73.	3.7	62
35	Title is missing!. Plant and Soil, 2000, 227, 149-161.	3.7	60
36	Tracking larval insect movement within soil using high resolution X-ray microtomography. Ecological Entomology, 2004, 29, 117-122.	2.2	59

#	Article	IF	Citations
37	The â€˜mother knows bestâ€™ principle: should soil insects be included in the preference-performance debate?. Ecological Entomology, 2006, 31, 395-401.	2.2	59
38	An X-ray micro-tomography system optimised for the low-dose study of living organisms. Applied Radiation and Isotopes, 2003, 58, 177-181.	1.5	57
39	Managing the Nutrition of Plants and People. Applied and Environmental Soil Science, 2012, 2012, 1-13.	1.7	56
40	Physical properties of axenic maize root mucilage. Plant and Soil, 1999, 211, 87-91.	3.7	55
41	Estimating rootâ€“soil contact from 3D Xâ€ray microtomographs. European Journal of Soil Science, 2012, 63, 776-786.	3.9	55
42	Recovery of nitrogen from different sources following applications to winter wheat at and after anthesis. Field Crops Research, 2007, 100, 143-154.	5.1	54
43	Crops For the Future (CFF): an overview of research efforts in the adoption of underutilised species. Planta, 2019, 250, 979-988.	3.2	50
44	Genotype and fungicide effects on late-season root growth of winter wheat. Plant and Soil, 2006, 284, 33-44.	3.7	48
45	Competition in tree row agroforestry systems. 3. Soil water distribution and dynamics. Plant and Soil, 2004, 264, 129-139.	3.7	47
46	Fungicide and cultivar affect post-anthesis patterns of nitrogen uptake, remobilization and utilization efficiency in wheat. Journal of Agricultural Science, 2005, 143, 503-518.	1.3	44
47	Extracellular release ofâ€ƒa heterologous phytase from roots of transgenic plants: does manipulation of rhizosphere biochemistry impact microbial community structure?. FEMS Microbiology Ecology, 2009, 70, 433-445.	2.7	44
48	Elevated atmospheric carbon dioxide impairs the performance of rootâ€feeding vine weevils by modifying root growth and secondary metabolites. Global Change Biology, 2011, 17, 688-695.	9.5	43
49	Field phenotyping of potato to assess root and shoot characteristics associated with drought tolerance. Plant and Soil, 2014, 378, 351-363.	3.7	43
50	Nitrogen balances for households in the mid-hills of Nepal. Agriculture, Ecosystems and Environment, 2000, 79, 61-72.	5.3	41
51	A new three-locus model for rootstock-induced dwarfing in apple revealed by genetic mapping of root bark percentage. Journal of Experimental Botany, 2016, 67, 1871-1881.	4.8	41
52	Non-invasive techniques for investigating and modelling root-feeding insects in managed and natural systems. Agricultural and Forest Entomology, 2007, 9, 39-46.	1.3	39
53	Title is missing!. Plant and Soil, 1998, 207, 183-193.	3.7	38
54	Attractive Properties of an Isoflavonoid Found in White Clover Root Nodules on the Clover Root Weevil. Journal of Chemical Ecology, 2005, 31, 2223-2229.	1.8	35

#	Article	IF	Citations
55	The influence of early sowing of wheat and lupin crops on evapotranspiration and evaporation from the soil surface in a Mediterranean climate. Agricultural Water Management, 1999, 42, 205-218.	5.6	33
56	Land use affects the distribution of soil inorganic nitrogen in smallholder production systems in Kenya. Biology and Fertility of Soils, 2000, 31, 348-355.	4.3	33
57	Utilisation of soil organic P by agroforestry and crop species in the field, western Kenya. Plant and Soil, 2002, 246, 53-63.	3.7	33
58	Fate of nitrogen-15-labelled fertilizer applied to maize-millet cropping systems in the mid-hills of Nepal. Biology and Fertility of Soils, 2002, 35, 27-34.	4.3	32
59	Effects of soil conditions and drought on egg hatching and larval survival of the clover root weevil (Sitona lepidus). Applied Soil Ecology, 2010, 44, 75-79.	4.3	32
60	Attribution of climate change: a methodology to estimate the potential contribution to increases in potato yield in <scp>S</scp>cotland since 1960. Global Change Biology, 2012, 18, 1372-1388.	9.5	31
61	Dynamics of water movement on Chalkland. Journal of Hydrology, 2002, 257, 27-41.	5.4	30
62	A framework for the development of hemp (Cannabis sativa L.) as a crop for the future in tropical environments. Industrial Crops and Products, 2021, 172, 113999.	5.2	29
63	Uneven distribution of nutrients in the root zone affects the incidence of blossom end rot and concentration of calcium and potassium in fruits of tomato. Plant and Soil, 2004, 258, 169-178.	3.7	28
64	A general random walk model for the leptokurtic distribution of organism movement: Theory and application. Ecological Modelling, 2007, 200, 79-88.	2.5	26
65	Title is missing!. Plant and Soil, 1999, 214, 141-152.	3.7	24
66	Dynamics of Potassium Leaching on a Hillslope Grassland Soil. Journal of Environmental Quality, 2004, 33, 192-200.	2.0	23
67	Host plant recognition by the root feeding clover weevil, Sitona lepidus (Coleoptera: Curculionidae). Bulletin of Entomological Research, 2004, 94, 433-439.	1.0	23
68	Soil fertility management in the mid-hills of Nepal: Practices and perceptions. Agriculture and Human Values, 2005, 22, 243-258.	3.0	23
69	A Land Evaluation Framework for Agricultural Diversification. Sustainability, 2020, 12, 3110.	3.2	23
70	RESPONSE OF WHEATâ€“RICE AND MAIZE/MILLET SYSTEMS TO FERTILIZER AND MANURE APPLICATIONS IN THE MID-HILLS OF NEPAL. Experimental Agriculture, 1999, 35, 1-13.	0.9	21
71	Title is missing!. Agroforestry Systems, 2001, 52, 199-205.	2.0	21
72	GROWTH AND BIOMASS PARTITIONING OF MAIZE DURING VEGETATIVE GROWTH IN RESPONSE TO STRIGA HERMONTHICA INFECTION AND NITROGEN SUPPLY. Experimental Agriculture, 2002, 38, 265-276.	0.9	20

#	Article	IF	Citations
73	RUSSELL REVIEW Are plant roots only â€œinâ€•soil or are they â€œofâ€•it? Roots, soil formation and function. European Journal of Soil Science, 2022, 73, .	3.9	19
74	Title is missing!. Plant and Soil, 2000, 221, 239-251.	3.7	18
75	Title is missing!. Plant and Soil, 2002, 247, 177-187.	3.7	17
76	Determination of the impact of continuous defoliation of Lolium perenne and Trifolium repens on bacterial and fungal community structure in rhizosphere soil. Biology and Fertility of Soils, 2005, 41, 109-115.	4.3	17
77	Egg hatching and survival time of soil-dwelling insect larvae: A partial differential equation model and experimental validation. Ecological Modelling, 2007, 202, 493-502.	2.5	17
78	Food Security: Focus on Agriculture. Science, 2010, 328, 172-173.	12.6	16
79	Root systems of major tropical root and tuber crops: Root architecture, size, and growth and initiation of storage organs. Advances in Agronomy, 2020, , 1-25.	5.2	15
80	Root elongation rate is correlated with the length of the bare root apex of maize and lupin roots despite contrasting responses of root growth to compact and dry soils. Plant and Soil, 2013, 372, 609-618.	3.7	14
81	Enhancing the Nutritional Profile of Noodles With Bambara Groundnut (Vigna subterranea) and Moringa (Moringa oleifera): A Food System Approach. Frontiers in Sustainable Food Systems, 2020, 4, .	3.9	14
82	Crop model ideotyping for agricultural diversification. MethodsX, 2021, 8, 101420.	1.6	14
83	Modelling the movement and survival of the root-feeding clover weevil, Sitona lepidus, in the root-zone of white clover. Ecological Modelling, 2006, 190, 133-146.	2.5	13
84	Pattern of grain set in boron-deficient and cold-stressed wheat (Triticum aestivum L.). Journal of Agricultural Science, 2000, 134, 25-31.	1.3	12
85	CARBON (13C) AND NITROGEN (15N) TRANSLOCATION IN A MAIZE-STRIGA HERMONTHICA ASSOCIATION. Experimental Agriculture, 2005, 41, 321-333.	0.9	12
86	Underutilised crops database for supporting agricultural diversification. Computers and Electronics in Agriculture, 2021, 180, 105920.	7.7	11
87	Soils: A Neglected Resource in Urban Areas. , 0, , 1-4.		10
88	Effects of carbon dioxide on the searching behaviour of the root-feeding clover weevil Sitona lepidus (Coleoptera: Curculionidae). Bulletin of Entomological Research, 2006, 96, 361-366.	1.0	10
89	Exudation of Alcohol and Aldehyde Sugars from Roots of Defoliated Lolium perenne L. Grown Under Sterile Conditions. Journal of Chemical Ecology, 2008, 34, 1411-1421.	1.8	9
90	Climate change and the current 'food crisis'.. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources, 0, , 1-10.	1.0	9

#	Article	IF	Citations
91	New methods for new questions about rhizosphere/plant root interactions. Plant and Soil, 2022, 476, 699-712.	3.7	9
92	Leaching of nitrate from cropped rainfed terraces in the mid-hills of Nepal. Nutrient Cycling in Agroecosystems, 2004, 69, 221-232.	2.2	7
93	Movement of newly assimilated ¹³C carbon in the grass Lolium perenne and its incorporation into rhizosphere microbial DNA. Rapid Communications in Mass Spectrometry, 2010, 24, 535-540.	1.5	7
94	Inorganic soil nitrogen distribution in relation to soil properties in smallholder maize fields in the Kenya highlands. Geoderma, 2001, 101, 87-103.	5.1	6
95	One hundred years of research at East Malling: science into practice for perennial fruit crops. Annals of Applied Biology, 2013, 163, 1-11.	2.5	6
96	Rhizosphere Engineering by Plants: Quantifying Soil-Root Interactions. Advances in Agricultural Systems Modeling, 0, , 1-30.	0.3	6
97	Quantifying rooting at depth in a wheat doubled haploid population with introgression from wild emmer. Annals of Botany, 2017, 120, 457-470.	2.9	6
98	Development and Growth of Root Systems. , 0, , 45-79.		5
99	Datasets for the development of hemp (Cannabis sativa L.) as a crop for the future in tropical environments (Malaysia). Data in Brief, 2022, 40, 107807.	1.0	5
100	Dispersal of soil-dwelling clover root weevil (Sitona lepidus Gyllenhal, Coleoptera: Curculionidae) larvae in mixed plant communities. Applied Soil Ecology, 2010, 46, 422-425.	4.3	4
101	Roots and the Biological Environment. , 0, , 174-215.		3
102	Editorial: Crop Traits for Defense against Pests and Disease: Durability, Breakdown and Future Prospects. Frontiers in Plant Science, 2017, 8, 209.	3.6	3
103	Distribution of nutrients in the root zone affects yield, quality and blossom end rot of tomato fruits. Journal of Horticultural Science and Biotechnology, 2004, 79, 158-163.	1.9	2
104	Solute movement through intact columns of cryoturbated Upper Chalk. Hydrological Processes, 2008, 22, 2086-2093.	2.6	2
105	Physical changes in the rhizosphere and their significance for plant-soil interactions. Acta Agronomica Hungarica: an International Multidisciplinary Journal in Agricultural Science, 2000, 48, 107-112.	0.2	1
106	Ecosystem Services: Nature's Balance Sheet. Science, 2013, 342, 421-421.	12.6	1
107	Dennis James Greenland. 13 June 1930â€”23 December 2012. Biographical Memoirs of Fellows of the Royal Society, 2019, 66, 225-241.	0.1	1
108	Root Systems as Management Tools. , 0, , 286-308.		0

#	Article	IF	Citations
109	More Research in Soil Science from Wiley-Blackwell. , 0, , G1-G1.		0
110	Climate and other environmental changes. , 0, , 206-213.		0