Timothy S George

List of Publications by Year
in descending order

111 papers	7,334 citations	53794 45 h-index	62596 80 g-index
115 all docs	115 docs citations	115 times ranked	6675 citing authors

#	Article	IF	Citations
1	Roots and microbiome jointly drive the distributions of 17 phytohormones in the plant soil continuum in a phytohormoneâ€specific manner. Plant and Soil, 2022, 470, 153-165.	3.7	11
2	Sodium hyperaccumulators in the Caryophyllales are characterized by both abnormally large shoot sodium concentrations and [Na]shoot/[Na]root quotients greater than unity. Annals of Botany, 2022, 129, 65-78.	2.9	0
3	Simulated root exudates stimulate the abundance of Saccharimonadales to improve the alkaline phosphatase activity in maize rhizosphere. Applied Soil Ecology, 2022, 170, 104274.	4.3	49
4	Arbuscular mycorrhizal fungi conducting the hyphosphere bacterial orchestra. Trends in Plant Science, 2022, 27, 402-411.	8.8	88
5	Building soil sustainability from rootâ€“soil interface traits. Trends in Plant Science, 2022, 27, 688-698.	8.8	24
6	Genome-Annotated Bacterial Collection of the Barley Rhizosphere Microbiota. Microbiology Resource Announcements, 2022, 11, e0106421.	0.6	3
7	Active and adaptive plasticity in a changing climate. Trends in Plant Science, 2022, 27, 717-728.	8.8	35
8	Organic anions facilitate the mobilization of soil organic phosphorus and its subsequent lability to phosphatases. Plant and Soil, 2022, 476, 161-180.	3.7	11
9	New methods for new questions about rhizosphere/plant root interactions. Plant and Soil, 2022, 476, 699-712.	3.7	9
10	Two isolates of Rhizophagus irregularis select different strategies for improving plants phosphorus uptake at moderate soil P availability. Geoderma, 2022, 421, 115910.	5.1	14
11	Arbuscular mycorrhizal fungi have a greater role than root hairs of maize for priming the rhizosphere microbial community and enhancing rhizosphere organic P mineralization. Soil Biology and Biochemistry, 2022, 171, 108713.	8.8	18
12	Investigating bacterial coupled assimilation of fertilizerâ€‘nitrogen and crop residueâ€‘carbon in upland soils by DNA-qSIP. Science of the Total Environment, 2022, 845, 157279.	8.0	4
13	Significance of root hairs for plant performance under contrasting field conditions and water deficit. Annals of Botany, 2021, 128, 1-16.	2.9	66
14	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
15	Arbuscular mycorrhizal fungi enhance mineralisation of organic phosphorus by carrying bacteria along their extraradical hyphae. New Phytologist, 2021, 230, 304-315.	7.3	167
16	Advances in understanding plant root hairs in relation to nutrient acquisition and crop root function. Burleigh Dodds Series in Agricultural Science, 2021, , 127-162.	0.2	0
17	Facilitation and biodiversityâ€“ecosystem function relationships in crop production systems and their role in sustainable farming. Journal of Ecology, 2021, 109, 2054-2067.	4.0	58
18	Identifying potential novel resistance to the foliar disease â€˜Scaldâ€™ (Rhynchosporium commune) in a population of Scottish Bere barley landrace (Hordeum vulgare L.). Journal of Plant Diseases and Protection, 2021, 128, 999-1012.	2.9	10

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19	Chemical and Physical Mechanisms of Fungal Bioweathering of Rock Phosphate. Geomicrobiology Journal, 2021, 38, 384-394.	2.0	12
20	Plantâ€"environment microscopy tracks interactions of <i>Bacillus subtilis</i> with plant roots across the entire rhizosphere. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	24
21	The influence of phylogeny and ecology on root, shoot and plant ionomes of 14 native Brazilian species. Physiologia Plantarum, 2020, 168, 790-802.	5.2	12
22	Using a meta-analysis approach to understand complexity in soil biodiversity and phosphorus acquisition in plants. Soil Biology and Biochemistry, 2020, 142, 107695.	8.8	22
23	Significance of root hairs at the field scale â€" modelling root water and phosphorus uptake under different field conditions. Plant and Soil, 2020, 447, 281-304.	3.7	42
24	Is Bere barley specifically adapted to fertilisation with seaweed as a nutrient source?. Nutrient Cycling in Agroecosystems, 2020, 118, 149-163.	2.2	5
25	Different Arbuscular Mycorrhizal Fungi Cocolonizing on a Single Plant Root System Recruit Distinct Microbiomes. MSystems, 2020, 5, .	3.8	47
26	Editorial: Legacy Phosphorus in Agriculture: Role of Past Management and Perspectives for the Future. Frontiers in Earth Science, 2020, 8, .	1.8	14
27	Assessing the variation in manganese use efficiency traits in Scottish barley landrace Bere (Hordeum) Tj ETQq1 1 0.784314 rgBT /Overlo	2.9	12
28	Identifying Spring Barley Cultivars with Differential Response to Tillage. Agronomy, 2020, 10, 686.	3.0	4
29	Carbon addition reduces labile soil phosphorus by increasing microbial biomass phosphorus in intensive agricultural systems. Soil Use and Management, 2020, 36, 536-546.	4.9	17
30	Phosphorus leaching from riparian soils with differing management histories under three grass species. Journal of Environmental Quality, 2020, 49, 74-84.	2.0	5
31	Addition of fructose to the maize hyphosphere increases phosphatase activity by changing bacterial community structure. Soil Biology and Biochemistry, 2020, 142, 107724.	8.8	30
32	Effects of schedules of subsurface drip irrigation with air injection on water consumption, yield components and water use efficiency of tomato in a greenhouse in the North China Plain. Scientia Horticulturae, 2020, 269, 109396.	3.6	10
33	Advances in understanding crop use of phosphorus. Burleigh Dodds Series in Agricultural Science, 2020, , 83-114.	0.2	0
34	Ancient barley landraces adapted to marginal soils demonstrate exceptional tolerance to manganese limitation. Annals of Botany, 2019, 123, 831-843.	2.9	29
35	Searching for the Origins of Bere Barley: a Geometric Morphometric Approach to Cereal Landrace Recognition in Archaeology. Journal of Archaeological Method and Theory, 2019, 26, 1125-1142.	3.0	31
36	Interaction between root hairs and soil phosphorus on rhizosphere priming of soil organic matter. Soil Biology and Biochemistry, 2019, 135, 264-266.	8.8	14

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37	Simultaneous Quantification of Soil Phosphorus Labile Pool and Desorption Kinetics Using DGTs and 3D-DIFS. Environmental Science & Technology, 2019, 53, 6718-6728.	10.0	23
38	Microbial mechanisms of the contrast residue decomposition and priming effect in soils with different organic and chemical fertilization histories. Soil Biology and Biochemistry, 2019, 135, 213-221.	8.8	68
39	Surface tension, rheology and hydrophobicity of rhizodeposits and seed mucilage influence soil water retention and hysteresis. Plant and Soil, 2019, 437, 65-81.	3.7	53
40	Is Green Manure from Riparian Buffer Strip Species an Effective Nutrient Source for Crops?. Journal of Environmental Quality, 2019, 48, 385-393.	2.0	4
41	Imaging microstructure of the barley rhizosphere: particle packing and root hair influences. New Phytologist, 2019, 221, 1878-1889.	7.3	51
42	Phosphorus acquisition by citrateâ€•and phytaseâ€exuding <scp><i>Nicotiana tabacum</i></scp> plant mixtures depends on soil phosphorus availability and root intermingling. Physiologia Plantarum, 2018, 163, 356-371.	5.2	35
43	Variation in the angiosperm ionome. Physiologia Plantarum, 2018, 163, 306-322.	5.2	55
44	Differences in nutrient foraging among Trifolium subterraneum cultivars deliver improved P-acquisition efficiency. Plant and Soil, 2018, 424, 539-554.	3.7	34
45	Morphological and genetic characterisation of the root system architecture of selected barley recombinant chromosome substitution lines using an integrated phenotyping approach. Journal of Theoretical Biology, 2018, 447, 84-97.	1.7	9
46	Root development impacts on the distribution of phosphatase activity: Improvements in quantification using soil zymography. Soil Biology and Biochemistry, 2018, 116, 158-166.	8.8	40
47	Organic phosphorus in the terrestrial environment: a perspective on the state of the art and future priorities. Plant and Soil, 2018, 427, 191-208.	3.7	145
48	Opportunities for mobilizing recalcitrant phosphorus from agricultural soils: a review. Plant and Soil, 2018, 427, 5-16.	3.7	191
49	Inter- and intra-species intercropping of barley cultivars and legume species, as affected by soil phosphorus availability. Plant and Soil, 2018, 427, 125-138.	3.7	46
50	Greenhouse Gas Emissions from the Tibetan Alpine Grassland: Effects of Nitrogen and Phosphorus Addition. Sustainability, 2018, 10, 4454.	3.2	9
51	Genetic dissection of quantitative and qualitative traits using a minimum set of barley Recombinant Chromosome Substitution Lines. BMC Plant Biology, 2018, 18, 340.	3.6	7
52	The effect of root exudates on rhizosphere water dynamics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20180149.	2.1	8
53	Closing the Loop on Phosphorus Loss from Intensive Agricultural Soil: A Microbial Immobilization Solution?. Frontiers in Microbiology, 2018, 9, 104.	3.5	38
54	Linear relationships between shoot magnesium and calcium concentrations among angiosperm species are associated with cell wall chemistry. Annals of Botany, 2018, 122, 221-226.	2.9	30

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55	Juvenile root vigour improves phosphorus use efficiency of potato. Plant and Soil, 2018, 432, 45-63.	3.7	27
56	Arbuscular mycorrhizal fungi stimulate organic phosphate mobilization associated with changing bacterial community structure under field conditions. Environmental Microbiology, 2018, 20, 2639-2651.	3.8	100
57	Does the combination of citrate and phytase exudation in Nicotiana tabacum promote the acquisition of endogenous soil organic phosphorus?. Plant and Soil, 2017, 412, 43-59.	3.7	25
58	The rhizosheath â€“ a potential trait for future agricultural sustainability occurs in orders throughout the angiosperms. Plant and Soil, 2017, 418, 115-128.	3.7	92
59	Linking the depletion of rhizosphere phosphorus to the heterologous expression of a fungal phytase in Nicotiana tabacum as revealed by enzyme-labile P and solution 31P NMR spectroscopy. Rhizosphere, 2017, 3, 82-91.	3.0	12
60	Highâ€resolution synchrotron imaging shows that root hairs influence rhizosphere soil structure formation. New Phytologist, 2017, 216, 124-135.	7.3	116
61	Plant exudates may stabilize or weaken soil depending on species, origin and time. European Journal of Soil Science, 2017, 68, 806-816.	3.9	144
62	Effect of citrate on Aspergillus niger phytase adsorption and catalytic activity in soil. Geoderma, 2017, 305, 346-353.	5.1	11
63	Response-based selection of barley cultivars and legume species for complementarity: Root morphology and exudation in relation to nutrient source. Plant Science, 2017, 255, 12-28.	3.6	41
64	Climate Change and Consequences for Potato Production: a Review of Tolerance to Emerging Abiotic Stress. Potato Research, 2017, 60, 239-268.	2.7	50
65	Root Hair Mutations Displace the Barley Rhizosphere Microbiota. Frontiers in Plant Science, 2017, 8, 1094.	3.6	85
66	Phosphorus in soils and plants â€“ facing phosphorus scarcity. Plant and Soil, 2016, 401, 1-6.	3.7	74
67	Morphological responses of wheat (<i>Triticum aestivum</i>L.) roots to phosphorus supply in two contrasting soils. Journal of Agricultural Science, 2016, 154, 98-108.	1.3	25
68	Organic Acids Regulation of Chemicalâ€“Microbial Phosphorus Transformations in Soils. Environmental Science & Technology, 2016, 50, 11521-11531.	10.0	102
69	Barley genotype influences stabilization of rhizodeposition-derived CÂ and soil organic matter mineralization. Soil Biology and Biochemistry, 2016, 95, 60-69.	8.8	63
70	A Holistic Approach to Understanding the Desorption of Phosphorus in Soils. Environmental Science & Technology, 2016, 50, 3371-3381.	10.0	71
71	Land use and soil factors affecting accumulation of phosphorus species in temperate soils. Geoderma, 2015, 257-258, 29-39.	5.1	133
72	Improving intercropping: a synthesis of research in agronomy, plant physiology and ecology. New Phytologist, 2015, 206, 107-117.	7.3	805

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73	Improving crop mineral nutrition. Plant and Soil, 2014, 384, 1-5.	3.7	6
74	Genotypic variation in the ability of landraces and commercial cereal varieties to avoid manganese deficiency in soils with limited manganese availability: is there a role for rootâ€exuded phytases?. Physiologia Plantarum, 2014, 151, 243-256.	5.2	46
75	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
76	Field phenotyping of potato to assess root and shoot characteristics associated with drought tolerance. Plant and Soil, 2014, 378, 351-363.	3.7	43
77	Understanding the genetic control and physiological traits associated with rhizosheath production by barley (<i><scp>H</scp>ordeum vulgare</i>). New Phytologist, 2014, 203, 195-205.	7.3	105
78	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
79	Interactions between root hair length and arbuscular mycorrhizal colonisation in phosphorus deficient barley (Hordeum vulgare). Plant and Soil, 2013, 372, 195-205.	3.7	55
80	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
81	Root hairs improve root penetration, rootâ€"soil contact, and phosphorus acquisition in soils of different strength. Journal of Experimental Botany, 2013, 64, 3711-3721.	4.8	215
82	Matching roots to their environment. Annals of Botany, 2013, 112, 207-222.	2.9	247
83	A conceptual model of root hair ideotypes for future agricultural environments: what combination of traits should be targeted to cope with limited P availability?. Annals of Botany, 2013, 112, 317-330.	2.9	118
84	Root traits for infertile soils. Frontiers in Plant Science, 2013, 4, 193.	3.6	145
85	What are the implications of variation in root hair length on tolerance to phosphorus deficiency in combination with water stress in barley (Hordeum vulgare)?. Annals of Botany, 2012, 110, 319-328.	2.9	175
86	Recovering Phosphorus from Soil: A Root Solution?. Environmental Science & Technology, 2012, 46, 1977-1978.	10.0	116
87	Feeding nine billion: the challenge to sustainable crop production. Journal of Experimental Botany, 2011, 62, 5233-5239.	4.8	138
88	Impact of soil tillage on the robustness of the genetic component of variation in phosphorus (P) use efficiency in barley (Hordeum vulgare L.). Plant and Soil, 2011, 339, 113-123.	3.7	42
89	Crops that feed the world 4. Barley: a resilient crop? Strengths and weaknesses in the context of food security. Food Security, 2011, 3, 141-178.	5.3	216
90	Plant influence on nitrification. Biochemical Society Transactions, 2011, 39, 275-278.	3.4	31

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91	Phosphorus Nutrition: Rhizosphere Processes, Plant Response and Adaptations. Soil Biology, 2011, , 245-271.	0.8	32
92	Biological nitrification inhibition (BNI)-Is there potential for genetic interventions in the Triticeae?. Breeding Science, 2009, 59, 529-545.	1.9	47
93	Strategies and methods for studying the rhizosphereâ€"the plant science toolbox. Plant and Soil, 2009, 321, 431-456.	3.7	159
94	Extracellular release ofâ€ƒ a 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
95	Plant mechanisms to optimise access to soil phosphorus. Crop and Pasture Science, 2009, 60, 124.	1.5	367
96	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
97	Potential and limitations to improving crops for enhanced phosphorus utilization. Plant Ecophysiology, 2008, , 247-270.	1.5	49
98	Accumulation and phosphatase-lability of organic phosphorus in fertilised pasture soils. Australian Journal of Agricultural Research, 2007, 58, 47.	1.5	43
99	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
100	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
101	Expression of a fungal phytase gene in Nicotiana tabacum improves phosphorus nutrition of plants grown in amended soils. Plant Biotechnology Journal, 2005, 3, 129-140.	8.3	135
102	Behaviour of plantâ€derived extracellular phytase upon addition to soil. Soil Biology and Biochemistry, 2005, 37, 977-988.	8.8	123
103	Limitations to the Potential of Transgenic Trifolium subterraneum L. Plants that Exude Phytase when Grown in Soils with a Range of Organic P Content. Plant and Soil, 2005, 278, 263-274.	3.7	51
104	Characterization of transgenic Trifolium subterraneum L. which expresses phyA and releases extracellular phytase: growth and P nutrition in laboratory media and soil. Plant, Cell and Environment, 2004, 27, 1351-1361.	5.7	116
105	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
106	Title is missing!. Plant and Soil, 2002, 246, 65-73.	3.7	62
107	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
108	Title is missing!. Agroforestry Systems, 2001, 52, 199-205.	2.0	21

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109	Rhizosphere Engineering by Plants: Quantifying Soil-Root Interactions. Advances in Agricultural Systems Modeling, 0, , 1-30.	0.3	6
110	Evaluating Variation in Germination and Growth of Landraces of Barley (Hordeum vulgare L.) Under Salinity Stress. Frontiers in Plant Science, 0, 13, .	3.6	3
111	Scientific impact, direction and highlights of Plant and Soil in the 30Âyears since Professor Hans Lambers became Editor in Chief. Plant and Soil, 0, , .	3.7	0