David Robinson

List of Publications by Year in descending order

64 papers	5,618 citations	109321 35 h-index	114465 63 g-index
67 all docs	67 docs citations	67 times ranked	6248 citing authors

#	Article	IF	Citations
1	Directly quantifying multiple interacting influences on plant competition. Plant, Cell and Environment, 2021, 44, 1268-1277.	5.7	12
2	Clothing the Emperor: Dynamic Rootâ€"Shoot Allocation Trajectories in Relation to Whole-Plant Growth Rate and in Response to Temperature. Plants, 2019, 8, 212.	3.5	8
3	Allometry of fine roots in forest ecosystems. Ecology Letters, 2019, 22, 322-331.	6.4	37
4	Demographic quantification of carbon and nitrogen dynamics associated with root turnover in white clover. Plant, Cell and Environment, 2018, 41, 2045-2056.	5.7	1
5	Constraints on Nutrient Dynamics in Terrestrial Vegetation. , 2016, , 254-291.		3
6	Tree speciesâ€™ influences on soil carbon dynamics revealed with natural abundance 13C techniques. Plant and Soil, 2016, 400, 285-296.	3.7	9
7	Accelerated soil carbon turnover under tree plantations limits soil carbon storage. Scientific Reports, 2016, 6, 19693.	3.3	33
8	Understory fine roots are more ephemeral than those of trees in subtropical Chinese fir (Cunninghamia lanceolata (Lamb.) Hook) stands. Annals of Forest Science, 2016, 73, 657-667.	2.0	10
9	Large amounts of easily decomposable carbon stored in subtropical forest subsoil are associated with r-strategy-dominated soil microbes. Soil Biology and Biochemistry, 2016, 95, 233-242.	8.8	54
10	Edaphic rather than climatic controls over ¹³C enrichment between soil and vegetation in alpine grasslands on the Tibetan Plateau. Functional Ecology, 2015, 29, 839-848.	3.6	55
11	Sampling root-respired CO2 in-situ for 13C measurement. Plant and Soil, 2015, 393, 259-271.	3.7	4
12	Allometric constraints on, and tradeâ€offs in, belowground carbon allocation and their control of soil respiration across global forest ecosystems. Global Change Biology, 2014, 20, 1674-1684.	9.5	36
13	Minimising methodological biases to improve the accuracy of partitioning soil respiration using natural abundance ¹³C. Rapid Communications in Mass Spectrometry, 2014, 28, 2341-2351.	1.5	15
14	Temporal and land use effects on soil bacterial community structure of the machair, an EU Habitats Directive Annex I low-input agricultural system. Applied Soil Ecology, 2014, 73, 116-123.	4.3	12
15	Priming of soil organic matter mineralisation is intrinsically insensitive to temperature. Soil Biology and Biochemistry, 2013, 66, 20-28.	8.8	58
16	Plant ecology's guilty little secret: understanding the dynamics of plant competition. Functional Ecology, 2013, 27, 918-929.	3.6	92
17	Vegetation and Soil 15N Natural Abundance in Alpine Grasslands on the Tibetan Plateau: Patterns and Implications. Ecosystems, 2013, 16, 1013-1024.	3.4	33
18	Introduction to the Special Feature on Mechanisms of Plant Competition. Functional Ecology, 2013, 27, 831-832.	3.6	2

#	Article	IF	Citations
19	Allocation of gross primary production in forest ecosystems: allometric constraints and environmental responses. New Phytologist, 2013, 200, 1176-1186.	7.3	60
20	Widespread decreases in topsoil inorganic carbon stocks across <scp>C</scp>hina's grasslands during 1980sâ€“2000s. Global Change Biology, 2012, 18, 3672-3680.	9.5	65
21	A New Hammer to Crack an Old Nut: Interspecific Competitive Resource Capture by Plants Is Regulated by Nutrient Supply, Not Climate. PLoS ONE, 2012, 7, e29413.	2.5	24
22	Dynamic trajectories of growth and nitrogen capture by competing plants. New Phytologist, 2012, 193, 948-958.	7.3	50
23	Significant soil acidification across northern China's grasslands during 1980sâ€“2000s. Global Change Biology, 2012, 18, 2292-2300.	9.5	200
24	Dual-chamber measurements of Î´13C of soil-respired CO2 partitioned using a field-based three end-member model. Soil Biology and Biochemistry, 2012, 47, 106-115.	8.8	17
25	Rootâ€“shoot growth responses during interspecific competition quantified using allometric modelling. Annals of Botany, 2010, 106, 921-926.	2.9	41
26	Implications of a large global root biomass for carbon sink estimates and for soil carbon dynamics. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 2753-2759.	2.6	84
27	PCR profiling of ammonia-oxidizer communities in acidic soils subjected to nitrogen and sulphur deposition. FEMS Microbiology Ecology, 2007, 61, 305-316.	2.7	35
28	A dynamic model of Rubisco turnover in cereal leaves. New Phytologist, 2006, 169, 493-504.	7.3	74
29	On modelling Rubisco turnover: dynamics and applicability. New Phytologist, 2006, 170, 204-205.	7.3	1
30	Nutrient fluxes via litterfall and leaf litter decomposition vary across a gradient of soil nutrient supply in a lowland tropical rain forest. Plant and Soil, 2006, 288, 197-215.	3.7	94
31	Uptake and assimilation of nitrogen from solutions containing multiple N sources. Plant, Cell and Environment, 2005, 28, 813-821.	5.7	73
32	Scaling the depths: below-ground allocation in plants, forests and biomes. Functional Ecology, 2004, 18, 290-295.	3.6	70
33	Modelling Cereal Root Systems for Water and Nitrogen Capture: Towards an Economic Optimum. Annals of Botany, 2003, 91, 383-390.	2.9	213
34	Above-ground grazing affects floristic composition and modifies soil trophic interactions. Soil Biology and Biochemistry, 2002, 34, 1507-1512.	8.8	25
35	Root proliferation, nitrate inflow and their carbon costs during nitrogen capture by competing plants in patchy soil. , 2002, , 41-50.		17
36	Î´15N as an integrator of the nitrogen cycle. Trends in Ecology and Evolution, 2001, 16, 153-162.	8.7	1,085

#	Article	IF	Citations
37	Title is missing!. Plant and Soil, 2001, 232, 41-50.	3.7	105
38	Are microorganisms more effective than plants at competing for nitrogen?. Trends in Plant Science, 2000, 5, 304-308.	8.8	621
39	Decomposition of 13C-labelled wheat root systems following growth at different CO2 concentrations. Soil Biology and Biochemistry, 2000, 32, 403-413.	8.8	32
40	Natural abundances of 15N and 13C indicating physiological responses in Petunia hybrida to infection by longidorid nematodes and nepoviruses. Nematology, 1999, 1, 315-320.	0.6	3
41	Plant root proliferation in nitrogenâ€"rich patches confers competitive advantage. Proceedings of the Royal Society B: Biological Sciences, 1999, 266, 431-435.	2.6	293
42	The magnitude and control of carbon transfer between plants linked by a common mycorrhizal network. Journal of Experimental Botany, 1999, 50, 9-13.	4.8	50
43	Title is missing!. Plant and Soil, 1998, 202, 263-270.	3.7	22
44	A theory for 15 N/ 14 N fractionation in nitrate-grown vascular plants. Planta, 1998, 205, 397-406.	3.2	123
45	A possible plant-mediated feedback between elevated CO2, denitrification and the enhanced greenhouse effect. Soil Biology and Biochemistry, 1998, 31, 43-53.	8.8	45
46	Effects of elevated atmospheric CO2 and soil water availability on root biomass, root length, and N, P and K uptake by wheat. New Phytologist, 1997, 135, 455-465.	7.3	91
47	Variation, co-ordination and compensation in root systems in relation to soil variability. , 1997, , 57-66.		15
48	Variation, co-ordination and compensation in root systems in relation to soil variability. Plant and Soil, 1996, 187, 57-66.	3.7	58
49	Effects of inorganic nitrogen application on the dynamics of the soil solution composition in the root zone of maize. Plant and Soil, 1996, 180, 1-9.	3.7	42
50	Plant growth chambers for the simultaneous control of soil and air temperatures, and of atmospheric carbon dioxide concentration. Global Change Biology, 1995, 1, 455-464.	9.5	9
51	The responses of plants to nonâ€uniform supplies of nutrients. New Phytologist, 1994, 127, 635-674.	7.3	734
52	Capture of nitrate from soil by wheat in relation to root length, nitrogen inflow and availability. New Phytologist, 1994, 128, 297-305.	7.3	79
53	Root-induced nitrogen mineralisation: A nitrogen balance model. Plant and Soil, 1992, 139, 253-263.	3.7	70
54	Phosphorus availability and cortical senescence in cereal roots. Journal of Theoretical Biology, 1990, 145, 257-265.	1.7	31

#	Article	IF	Citations
55	Root-induced nitrogen mineralisation: A theoretical analysis. Plant and Soil, 1989, 117, 185-193.	3.7	63
56	Can the nutrient demand of a plant be sustained by an increase in local inflow rate?. Journal of Theoretical Biology, 1989, 138, 551-554.	1.7	1
57	Optimal relations between root length and nutrient inflow rate in plant root systems. Journal of Theoretical Biology, 1988, 135, 359-370.	1.7	7
58	ROOT HAIRS AND PLANT GROWTH ATLOW NITROGEN AVAILABILITIES. New Phytologist, 1987, 107, 681-693.	7.3	67
59	INVESTIGATIONS INTO THE AUKHORN PEAT MOUNDS, KEISS, CAITHNESS: POLLEN, PLANT MACROFOSSIL AND CHARCOAL ANALYSES. New Phytologist, 1987, 106, 185-200.	7.3	22
60	Compensatory Changes in the Partitioning of Dry Matter in Relation to Nitrogen Uptake and Optimal Variations in Growth. Annals of Botany, 1986, 58, 841-848.	2.9	86
61	Limits to nutrient inflow rates in roots and root systems. Physiologia Plantarum, 1986, 68, 551-559.	5.2	64
62	Calcium as an environmental variable. Plant, Cell and Environment, 1984, 7, 381-390.	5.7	47
63	Relationships between root morphology and nitrogen availability in a recent theoretical model describing nitrogen uptake from soil.. Plant, Cell and Environment, 1983, 6, 641-647.	5.7	69
64	Relationships between root morphology and nitrogen availability in a recent theoretical model describing nitrogen uptake from soil. Plant, Cell and Environment, 1983, 6, 641-647.	5.7	55