

# David Robinson

## List of Publications by Year in descending order

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64  
papers

5,618  
citations

109264

35  
h-index

114418

63  
g-index

67  
all docs

67  
docs citations

67  
times ranked

6248  
citing authors

#	ARTICLE	IF	CITATIONS
1	$\delta^{15}\text{N}$ as an integrator of the nitrogen cycle. <i>Trends in Ecology and Evolution</i> , 2001, 16, 153-162.	4.2	1,085
2	The responses of plants to non-uniform supplies of nutrients. <i>New Phytologist</i> , 1994, 127, 635-674.	3.5	734
3	Are microorganisms more effective than plants at competing for nitrogen?. <i>Trends in Plant Science</i> , 2000, 5, 304-308.	4.3	621
4	Plant root proliferation in nitrogen-rich patches confers competitive advantage. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1999, 266, 431-435.	1.2	293
5	Modelling Cereal Root Systems for Water and Nitrogen Capture: Towards an Economic Optimum. <i>Annals of Botany</i> , 2003, 91, 383-390.	1.4	213
6	Significant soil acidification across northern China's grasslands during 1980s-2000s. <i>Global Change Biology</i> , 2012, 18, 2292-2300.	4.2	200
7	A theory for $^{15}\text{N}/^{14}\text{N}$ fractionation in nitrate-grown vascular plants. <i>Planta</i> , 1998, 205, 397-406.	1.6	123
8	Title is missing!. <i>Plant and Soil</i> , 2001, 232, 41-50.	1.8	105
9	Nutrient fluxes via litterfall and leaf litter decomposition vary across a gradient of soil nutrient supply in a lowland tropical rain forest. <i>Plant and Soil</i> , 2006, 288, 197-215.	1.8	94
10	Plant ecology's guilty little secret: understanding the dynamics of plant competition. <i>Functional Ecology</i> , 2013, 27, 918-929.	1.7	92
11	Effects of elevated atmospheric $\text{CO}_2$ and soil water availability on root biomass, root length, and N, P and K uptake by wheat. <i>New Phytologist</i> , 1997, 135, 455-465.	3.5	91
12	Compensatory Changes in the Partitioning of Dry Matter in Relation to Nitrogen Uptake and Optimal Variations in Growth. <i>Annals of Botany</i> , 1986, 58, 841-848.	1.4	86
13	Implications of a large global root biomass for carbon sink estimates and for soil carbon dynamics. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2007, 274, 2753-2759.	1.2	84
14	Capture of nitrate from soil by wheat in relation to root length, nitrogen inflow and availability. <i>New Phytologist</i> , 1994, 128, 297-305.	3.5	79
15	A dynamic model of Rubisco turnover in cereal leaves. <i>New Phytologist</i> , 2006, 169, 493-504.	3.5	74
16	Uptake and assimilation of nitrogen from solutions containing multiple N sources. <i>Plant, Cell and Environment</i> , 2005, 28, 813-821.	2.8	73
17	Root-induced nitrogen mineralisation: A nitrogen balance model. <i>Plant and Soil</i> , 1992, 139, 253-263.	1.8	70
18	Scaling the depths: below-ground allocation in plants, forests and biomes. <i>Functional Ecology</i> , 2004, 18, 290-295.	1.7	70

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19	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.	2.8	69
20	ROOT HAIRS AND PLANT GROWTH ATLOW NITROGEN AVAILABILITIES. New Phytologist, 1987, 107, 681-693.	3.5	67
21	Widespread decreases in topsoil inorganic carbon stocks across China's grasslands during 1980s–2000s. Global Change Biology, 2012, 18, 3672-3680.	4.2	65
22	Limits to nutrient inflow rates in roots and root systems. Physiologia Plantarum, 1986, 68, 551-559.	2.6	64
23	Root-induced nitrogen mineralisation: A theoretical analysis. Plant and Soil, 1989, 117, 185-193.	1.8	63
24	Allocation of gross primary production in forest ecosystems: allometric constraints and environmental responses. New Phytologist, 2013, 200, 1176-1186.	3.5	60
25	Variation, co-ordination and compensation in root systems in relation to soil variability. Plant and Soil, 1996, 187, 57-66.	1.8	58
26	Priming of soil organic matter mineralisation is intrinsically insensitive to temperature. Soil Biology and Biochemistry, 2013, 66, 20-28.	4.2	58
27	Edaphic rather than climatic controls over <sup>13</sup> C enrichment between soil and vegetation in alpine grasslands on the Tibetan Plateau. Functional Ecology, 2015, 29, 839-848.	1.7	55
28	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.	2.8	55
29	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.	4.2	54
30	Dynamic trajectories of growth and nitrogen capture by competing plants. New Phytologist, 2012, 193, 948-958.	3.5	50
31	The magnitude and control of carbon transfer between plants linked by a common mycorrhizal network. Journal of Experimental Botany, 1999, 50, 9-13.	2.4	50
32	Calcium as an environmental variable. Plant, Cell and Environment, 1984, 7, 381-390.	2.8	47
33	A possible plant-mediated feedback between elevated CO <sub>2</sub> , denitrification and the enhanced greenhouse effect. Soil Biology and Biochemistry, 1998, 31, 43-53.	4.2	45
34	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.	1.8	42
35	Root–shoot growth responses during interspecific competition quantified using allometric modelling. Annals of Botany, 2010, 106, 921-926.	1.4	41
36	Allometry of fine roots in forest ecosystems. Ecology Letters, 2019, 22, 322-331.	3.0	37

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37	Allometric constraints on, and trade-offs in, belowground carbon allocation and their control of soil respiration across global forest ecosystems. <i>Global Change Biology</i> , 2014, 20, 1674-1684.	4.2	36
38	PCR profiling of ammonia-oxidizer communities in acidic soils subjected to nitrogen and sulphur deposition. <i>FEMS Microbiology Ecology</i> , 2007, 61, 305-316.	1.3	35
39	Vegetation and Soil 15N Natural Abundance in Alpine Grasslands on the Tibetan Plateau: Patterns and Implications. <i>Ecosystems</i> , 2013, 16, 1013-1024.	1.6	33
40	Accelerated soil carbon turnover under tree plantations limits soil carbon storage. <i>Scientific Reports</i> , 2016, 6, 19693.	1.6	33
41	Decomposition of 13C-labelled wheat root systems following growth at different CO2 concentrations. <i>Soil Biology and Biochemistry</i> , 2000, 32, 403-413.	4.2	32
42	Phosphorus availability and cortical senescence in cereal roots. <i>Journal of Theoretical Biology</i> , 1990, 145, 257-265.	0.8	31
43	Above-ground grazing affects floristic composition and modifies soil trophic interactions. <i>Soil Biology and Biochemistry</i> , 2002, 34, 1507-1512.	4.2	25
44	A New Hammer to Crack an Old Nut: Interspecific Competitive Resource Capture by Plants Is Regulated by Nutrient Supply, Not Climate. <i>PLoS ONE</i> , 2012, 7, e29413.	1.1	24
45	INVESTIGATIONS INTO THE ALUKHORN PEAT MOUNDS, KEISS, CAITHNESS: POLLEN, PLANT MACROFOSSIL AND CHARCOAL ANALYSES. <i>New Phytologist</i> , 1987, 106, 185-200.	3.5	22
46	Title is missing!. <i>Plant and Soil</i> , 1998, 202, 263-270.	1.8	22
47	Dual-chamber measurements of $\delta^{13}C$ of soil-respired CO2 partitioned using a field-based three end-member model. <i>Soil Biology and Biochemistry</i> , 2012, 47, 106-115.	4.2	17
48	Root proliferation, nitrate inflow and their carbon costs during nitrogen capture by competing plants in patchy soil. , 2002, , 41-50.		17
49	Minimising methodological biases to improve the accuracy of partitioning soil respiration using natural abundance $\delta^{13}C$ . <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 2341-2351.	0.7	15
50	Variation, co-ordination and compensation in root systems in relation to soil variability. , 1997, , 57-66.		15
51	Temporal and land use effects on soil bacterial community structure of the machair, an EU Habitats Directive Annex I low-input agricultural system. <i>Applied Soil Ecology</i> , 2014, 73, 116-123.	2.1	12
52	Directly quantifying multiple interacting influences on plant competition. <i>Plant, Cell and Environment</i> , 2021, 44, 1268-1277.	2.8	12
53	Understory fine roots are more ephemeral than those of trees in subtropical Chinese fir ( <i>Cunninghamia lanceolata</i> (Lamb.) Hook) stands. <i>Annals of Forest Science</i> , 2016, 73, 657-667.	0.8	10
54	Plant growth chambers for the simultaneous control of soil and air temperatures, and of atmospheric carbon dioxide concentration. <i>Global Change Biology</i> , 1995, 1, 455-464.	4.2	9

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55	Tree speciesâ€™ influences on soil carbon dynamics revealed with natural abundance <sup>13</sup> C techniques. <i>Plant and Soil</i> , 2016, 400, 285-296.	1.8	9
56	Clothing the Emperor: Dynamic Rootâ€™Shoot Allocation Trajectories in Relation to Whole-Plant Growth Rate and in Response to Temperature. <i>Plants</i> , 2019, 8, 212.	1.6	8
57	Optimal relations between root length and nutrient inflow rate in plant root systems. <i>Journal of Theoretical Biology</i> , 1988, 135, 359-370.	0.8	7
58	Sampling root-respired CO <sub>2</sub> in-situ for <sup>13</sup> C measurement. <i>Plant and Soil</i> , 2015, 393, 259-271.	1.8	4
59	Natural abundances of <sup>15</sup> N and <sup>13</sup> C indicating physiological responses in <i>Petunia hybrida</i> to infection by longidorid nematodes and nepoviruses. <i>Nematology</i> , 1999, 1, 315-320.	0.2	3
60	Constraints on Nutrient Dynamics in Terrestrial Vegetation. , 2016, , 254-291.		3
61	Introduction to the Special Feature on Mechanisms of Plant Competition. <i>Functional Ecology</i> , 2013, 27, 831-832.	1.7	2
62	Can the nutrient demand of a plant be sustained by an increase in local inflow rate?. <i>Journal of Theoretical Biology</i> , 1989, 138, 551-554.	0.8	1
63	On modelling Rubisco turnover: dynamics and applicability. <i>New Phytologist</i> , 2006, 170, 204-205.	3.5	1
64	Demographic quantification of carbon and nitrogen dynamics associated with root turnover in white clover. <i>Plant, Cell and Environment</i> , 2018, 41, 2045-2056.	2.8	1