

# Anthony Bengough

## List of Publications by Year in descending order

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155  
papers

11,443  
citations

34105

52  
h-index

32842

100  
g-index

160  
all docs

160  
docs citations

160  
times ranked

8889  
citing authors

#	ARTICLE	IF	CITATIONS
1	Root reinforcement: continuum framework for constitutive modelling. <i>Geotechnique</i> , 2023, 73, 600-613.	4.0	4
2	Soil penetration by maize roots is negatively related to ethylene-induced thickening. <i>Plant, Cell and Environment</i> , 2022, 45, 789-804.	5.7	23
3	Modelling of stress transfer in root-reinforced soils informed by four-dimensional X-ray computed tomography and digital volume correlation data. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2022, 478, 20210210.	2.1	2
4	Hydro-mechanical reinforcement of contrasting woody species: a full-scale investigation of a field slope. <i>Geotechnique</i> , 2021, 71, 970-984.	4.0	19
5	Root traits as drivers of plant and ecosystem functioning: current understanding, pitfalls and future research needs. <i>New Phytologist</i> , 2021, 232, 1123-1158.	7.3	277
6	Spectral and Growth Characteristics of Willows and Maize in Soil Contaminated with a Layer of Crude or Refined Oil. <i>Remote Sensing</i> , 2021, 13, 3376.	4.0	5
7	Reversible and irreversible root phenotypic plasticity under fluctuating soil physical conditions. <i>Environmental and Experimental Botany</i> , 2021, 188, 104494.	4.2	7
8	Root age influences failure location in grass species during mechanical testing. <i>Plant and Soil</i> , 2021, 461, 457-469.	3.7	11
9	A starting guide to root ecology: strengthening ecological concepts and standardising root classification, sampling, processing and trait measurements. <i>New Phytologist</i> , 2021, 232, 973-1122.	7.3	216
10	Modelling the seismic performance of root-reinforced slopes using the finite-element method. <i>Geotechnique</i> , 2020, 70, 375-391.	4.0	15
11	A critical evaluation of predictive models for rooted soil strength with application to predicting the seismic deformation of rooted slopes. <i>Landslides</i> , 2020, 17, 93-109.	5.4	23
12	The helical motions of roots are linked to avoidance of particle forces in soil. <i>New Phytologist</i> , 2020, 225, 2356-2367.	7.3	8
13	Significance of root hairs at the field scale – modelling root water and phosphorus uptake under different field conditions. <i>Plant and Soil</i> , 2020, 447, 281-304.	3.7	42
14	Reorganisation of rhizosphere soil pore structure by wild plant species in compacted soils. <i>Journal of Experimental Botany</i> , 2020, 71, 6107-6115.	4.8	14
15	Root anatomical traits contribute to deeper rooting of maize under compacted field conditions. <i>Journal of Experimental Botany</i> , 2020, 71, 4243-4257.	4.8	48
16	Root branching affects the mobilisation of root-reinforcement in direct shear. <i>E3S Web of Conferences</i> , 2019, 92, 12010.	0.5	7
17	Potential of thermal imaging in soil bioengineering to assess plant ability for soil water removal and air cooling. <i>Ecological Engineering</i> , 2019, 141, 105599.	3.6	5
18	Role of hydromechanical properties of plant roots in unsaturated soil shear strength. <i>Japanese Geotechnical Society Special Publication</i> , 2019, 7, 133-138.	0.2	4

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19	Root-reinforced sand: kinematic response of the soil. E3S Web of Conferences, 2019, 92, 12011.	0.5	3
20	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
21	Measuring the Strength of Root-Reinforced Soil on Steep Natural Slopes Using the Corkscrew Extraction Method. Forests, 2019, 10, 1135.	2.1	5
22	Analysis of coupled axial and lateral deformation of roots in soil. International Journal for Numerical and Analytical Methods in Geomechanics, 2019, 43, 684-707.	3.3	14
23	Imaging microstructure of the barley rhizosphere: particle packing and root hair influences. New Phytologist, 2019, 221, 1878-1889.	7.3	51
24	Measuring root system traits of wheat in 2D images to parameterize 3D root architecture models. Plant and Soil, 2018, 425, 457-477.	3.7	21
25	Hydrologic reinforcement induced by contrasting woody species during summer and winter. Plant and Soil, 2018, 427, 369-390.	3.7	23
26	Mechanistic framework to link root growth models with weather and soil physical properties, including example applications to soybean growth in Brazil. Plant and Soil, 2018, 428, 67-92.	3.7	45
27	In situ measurement of root reinforcement using corkscrew extraction method. Canadian Geotechnical Journal, 2018, 55, 1372-1390.	2.8	31
28	The search for the meaning of life in soil: an opinion. European Journal of Soil Science, 2018, 69, 31-38.	3.9	15
29	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
30	In situ root identification through blade penetrometer testing “ part 2: field testing. Geotechnique, 2018, 68, 320-331.	4.0	10
31	In situ root identification through blade penetrometer testing “ part 1: interpretative models and laboratory testing. Geotechnique, 2018, 68, 303-319.	4.0	5
32	Effects of root dehydration on biomechanical properties of woody roots of Ulex europaeus. Plant and Soil, 2018, 431, 347-369.	3.7	41
33	Rhizosphere Scale Quantification of Hydraulic and Mechanical Properties of Soil Impacted by Root and Seed Exudates. Vadose Zone Journal, 2018, 17, 1-12.	2.2	41
34	Scaling of plant roots for geotechnical centrifuge tests using juvenile live roots or 3D printed analogues. , 2018, , 401-406.		0
35	Root biomechanical properties during establishment of woody perennials. Ecological Engineering, 2017, 109, 196-206.	3.6	60
36	Small-scale modelling of plant root systems using 3D printing, with applications to investigate the role of vegetation on earthquake-induced landslides. Landslides, 2017, 14, 1747-1765.	5.4	49

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37	A new model for root growth in soil with macropores. <i>Plant and Soil</i> , 2017, 415, 99-116.	3.7	32
38	Scaling of the reinforcement of soil slopes by living plants in a geotechnical centrifuge. <i>Ecological Engineering</i> , 2017, 109, 207-227.	3.6	70
39	High-resolution synchrotron imaging shows that root hairs influence rhizosphere soil structure formation. <i>New Phytologist</i> , 2017, 216, 124-135.	7.3	116
40	Fluid flow in porous media using image-based modelling to parametrize Richards' equation. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2017, 473, 20170178.	2.1	17
41	Plant exudates may stabilize or weaken soil depending on species, origin and time. <i>European Journal of Soil Science</i> , 2017, 68, 806-816.	3.9	144
42	Correlating hydrologic reinforcement of vegetated soil with plant traits during establishment of woody perennials. <i>Plant and Soil</i> , 2017, 416, 437-451.	3.7	53
43	Developmental morphology of cover crop species exhibit contrasting behaviour to changes in soil bulk density, revealed by X-ray computed tomography. <i>PLoS ONE</i> , 2017, 12, e0181872.	2.5	48
44	Non-invasive Protocol for Kinematic Monitoring of Root Growth under Infrared Light. <i>Bio-protocol</i> , 2017, 7, e2390.	0.4	1
45	Desirable leaf traits for hydrological reinforcement of soil. <i>E3S Web of Conferences</i> , 2016, 9, 12006.	0.5	5
46	Rainfall infiltration and soil hydrological characteristics below ancient forest, planted forest and grassland in a temperate northern climate. <i>Ecohydrology</i> , 2016, 9, 585-600.	2.4	36
47	3D deformation field in growing plant roots reveals both mechanical and biological responses to axial mechanical forces. <i>Journal of Experimental Botany</i> , 2016, 67, 5605-5614.	4.8	30
48	New in situ techniques for measuring the properties of root-reinforced soil – laboratory evaluation. <i>Geotechnique</i> , 2016, 66, 27-40.	4.0	25
49	Root hairs aid soil penetration by anchoring the root surface to pore walls. <i>Journal of Experimental Botany</i> , 2016, 67, 1071-1078.	4.8	75
50	Analysis of root growth from a phenotyping data set using a density-based model. <i>Journal of Experimental Botany</i> , 2016, 67, 1045-1058.	4.8	26
51	Reinforcement of Soil by Fibrous Roots. <i>Advances in Agricultural Systems Modeling</i> , 2015, , 197-228.	0.3	2
52	Effect of root age on the biomechanics of seminal and nodal roots of barley ( <i>Hordeum vulgare</i> L.) in contrasting soil environments. <i>Plant and Soil</i> , 2015, 395, 253-261.	3.7	35
53	Root hair length and rhizosheath mass depend on soil porosity, strength and water content in barley genotypes. <i>Planta</i> , 2014, 239, 643-651.	3.2	101
54	Understanding the genetic control and physiological traits associated with rhizosheath production by barley ( <i>Hordeum vulgare</i> ). <i>New Phytologist</i> , 2014, 203, 195-205.	7.3	105

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55	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. <i>Plant and Soil</i> , 2013, 372, 609-618.	3.7	14
56	Biomechanics of nodal, seminal and lateral roots of barley: effects of diameter, waterlogging and mechanical impedance. <i>Plant and Soil</i> , 2013, 370, 407-418.	3.7	57
57	Timelapse scanning reveals spatial variation in tomato ( <i>Solanum lycopersicum</i> L.) root elongation rates during partial waterlogging. <i>Plant and Soil</i> , 2013, 369, 467-477.	3.7	34
58	Root hairs improve root penetration, root-soil contact, and phosphorus acquisition in soils of different strength. <i>Journal of Experimental Botany</i> , 2013, 64, 3711-3721.	4.8	215
59	Contributions of roots and rootstocks to sustainable, intensified crop production. <i>Journal of Experimental Botany</i> , 2013, 64, 1209-1222.	4.8	139
60	Application of Bayesian Belief Networks to quantify and map areas at risk to soil threats: Using soil compaction as an example. <i>Soil and Tillage Research</i> , 2013, 132, 56-68.	5.6	50
61	Matching roots to their environment. <i>Annals of Botany</i> , 2013, 112, 207-222.	2.9	247
62	Can root electrical capacitance be used to predict root mass in soil?. <i>Annals of Botany</i> , 2013, 112, 457-464.	2.9	49
63	Preface. <i>Journal of Experimental Botany</i> , 2013, 64, 1179-1179.	4.8	1
64	Biophysics of the Vadose Zone: From Reality to Model Systems and Back Again. <i>Vadose Zone Journal</i> , 2013, 12, 1-17.	2.2	47
65	Root-soil friction: quantification provides evidence for measurable benefits for manipulation of root tip traits. <i>Plant, Cell and Environment</i> , 2013, 36, 1085-1092.	5.7	35
66	Soil strength and macropore volume limit root elongation rates in many UK agricultural soils. <i>Annals of Botany</i> , 2012, 110, 259-270.	2.9	138
67	Analyzing Lateral Root Development: How to Move Forward. <i>Plant Cell</i> , 2012, 24, 15-20.	6.6	125
68	A new physical interpretation of plant root capacitance. <i>Journal of Experimental Botany</i> , 2012, 63, 6149-6159.	4.8	49
69	Water Dynamics of the Root Zone: Rhizosphere Biophysics and Its Control on Soil Hydrology. <i>Vadose Zone Journal</i> , 2012, 11, vjz2011.0111.	2.2	105
70	Predicting Penetrometer Resistance from the Compression Characteristic of Soil. <i>Soil Science Society of America Journal</i> , 2012, 76, 361-369.	2.2	21
71	Centrifuge modelling of soil slopes containing model plant roots. <i>Canadian Geotechnical Journal</i> , 2012, 49, 1-17.	2.8	40
72	Estimating root-soil contact from 3D X-ray microtomographs. <i>European Journal of Soil Science</i> , 2012, 63, 776-786.	3.9	55

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73	Root elongation is restricted by axial but not by radial pressures: so what happens in field soil?. <i>Plant and Soil</i> , 2012, 360, 15-18.	3.7	65
74	Soil tillage effects on the efficacy of cultivars and their mixtures in winter barley. <i>Field Crops Research</i> , 2012, 128, 91-100.	5.1	34
75	Root elongation, water stress, and mechanical impedance: a review of limiting stresses and beneficial root tip traits. <i>Journal of Experimental Botany</i> , 2011, 62, 59-68.	4.8	766
76	Automated motion estimation of root responses to sucrose in two <i>Arabidopsis thaliana</i> genotypes using confocal microscopy. <i>Planta</i> , 2011, 234, 769-784.	3.2	17
77	PIV as a method for quantifying root cell growth and particle displacement in confocal images. <i>Microscopy Research and Technique</i> , 2010, 73, 27-36.	2.2	20
78	Estimating the motion of plant root cells from in vivo confocal laser scanning microscopy images. <i>Machine Vision and Applications</i> , 2010, 21, 921-939.	2.7	19
79	Soil compactionâ€N interactions in barley: Root growth and tissue composition. <i>Soil and Tillage Research</i> , 2010, 106, 241-246.	5.6	44
80	Planting density influence on fibrous root reinforcement of soils. <i>Ecological Engineering</i> , 2010, 36, 276-284.	3.6	156
81	Quantifying rhizosphere particle movement around mutant maize roots using timeâ€lapse imaging and particle image velocimetry. <i>European Journal of Soil Science</i> , 2010, 61, 926-939.	3.9	54
82	Root growth models: towards a new generation of continuous approaches. <i>Journal of Experimental Botany</i> , 2010, 61, 2131-2143.	4.8	132
83	Centrifuge modelling of soil slopes reinforced with vegetation. <i>Canadian Geotechnical Journal</i> , 2010, 47, 1415-1430.	2.8	51
84	Resistance of simple plant root systems to uplift loads. <i>Canadian Geotechnical Journal</i> , 2010, 47, 78-95.	2.8	36
85	Scaling root growth responses from seedlings to field. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2009, 153, S222.	1.8	0
86	Imaging the 3D kinematics of circumnutation in maize roots. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2009, 153, S225.	1.8	0
87	Disentangling the impact of AM fungi versus roots on soil structure and water transport. <i>Plant and Soil</i> , 2009, 314, 183-196.	3.7	159
88	Measuring root traits in barley ( <i>Hordeum vulgare</i> ssp. <i>vulgare</i> and ssp. <i>spontaneum</i> ) seedlings using gel chambers, soil sacs and X-ray microtomography. <i>Plant and Soil</i> , 2009, 316, 285-297.	3.7	127
89	Rhizosphere: biophysics, biogeochemistry and ecological relevance. <i>Plant and Soil</i> , 2009, 321, 117-152.	3.7	950
90	Desirable plant root traits for protecting natural and engineered slopes against landslides. <i>Plant and Soil</i> , 2009, 324, 1-30.	3.7	513

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91	Quantitative image analysis of earthworm-mediated soil displacement. <i>Biology and Fertility of Soils</i> , 2009, 45, 821-828.	4.3	22
92	Deep rooting and drought screening of cereal crops: A novel field-based method and its application. <i>Field Crops Research</i> , 2009, 112, 165-171.	5.1	85
93	Root phenomics of crops: opportunities and challenges. <i>Functional Plant Biology</i> , 2009, 36, 922.	2.1	163
94	Mechanical Reinforcement of Soil by Willow Roots: Impacts of Root Properties and Root Failure Mechanism. <i>Soil Science Society of America Journal</i> , 2009, 73, 1276-1285.	2.2	128
95	Centrifuge modelling of climatic effects on clay embankments. <i>Proceedings of the Institution of Civil Engineers: Engineering Sustainability</i> , 2009, 162, 91-100.	0.7	23
96	Characterisation of flow paths and saturated conductivity in a soil block in relation to chloride breakthrough. <i>Journal of Hydrology</i> , 2008, 348, 431-441.	5.4	16
97	Performance evaluation of the cell-based algorithms for domain decomposition in flow simulation. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2008, 18, 656-672.	2.8	9
98	Material stiffness, branching pattern and soil matric potential affect the pullout resistance of model root systems. <i>European Journal of Soil Science</i> , 2007, 58, 1471-1481.	3.9	110
99	Root responses to soil physical conditions; growth dynamics from field to cell. <i>Journal of Experimental Botany</i> , 2006, 57, 437-447.	4.8	399
100	Impact of fungal and bacterial biocides on microbial induced water repellency in arable soil. <i>Geoderma</i> , 2006, 135, 72-80.	5.1	66
101	Part-Based Multi-Frame Registration for Estimation of the Growth Of Cellular Networks in Plant Roots. , 2006, , .		7
102	Biomechanics of Plant Roots: estimating Localised Deformation with Particle Image Velocimetry. <i>Biosystems Engineering</i> , 2006, 94, 119-132.	4.3	19
103	Upscaling from Rhizosphere to Whole Root System: Modelling the Effects of Phospholipid Surfactants on Water and Nutrient Uptake. <i>Plant and Soil</i> , 2006, 283, 57-72.	3.7	57
104	Root cap influences root colonisation by <i>Pseudomonas fluorescens</i> SBW25 on maize. <i>FEMS Microbiology Ecology</i> , 2005, 54, 123-130.	2.7	53
105	Domain-decomposition method for parallel lattice Boltzmann simulation of incompressible flow in porous media. <i>Physical Review E</i> , 2005, 72, 016706.	2.1	68
106	Determination of soil hydraulic conductivity with the lattice Boltzmann method and soil thin-section technique. <i>Journal of Hydrology</i> , 2005, 306, 59-70.	5.4	73
107	A mass balance based numerical method for the fractional advection-dispersion equation: Theory and application. <i>Water Resources Research</i> , 2005, 41, .	4.2	74
108	Root Border Cells Take Up and Release Glucose-C. <i>Annals of Botany</i> , 2004, 93, 221-224.	2.9	30

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109	Method to quantify root border cells in sandy soil. <i>Soil Biology and Biochemistry</i> , 2004, 36, 1517-1519.	8.8	11
110	Gel observation chamber for rapid screening of root traits in cereal seedlings. <i>Plant and Soil</i> , 2004, 262, 63-70.	3.7	118
111	Spatial variation of effective porosity and its implications for discharge in an upland headwater catchment in Scotland. <i>Journal of Hydrology</i> , 2004, 290, 217-228.	5.4	20
112	Title is missing!. <i>Plant and Soil</i> , 2003, 250, 273-282.	3.7	97
113	Plant roots release phospholipid surfactants that modify the physical and chemical properties of soil. <i>New Phytologist</i> , 2003, 157, 315-326.	7.3	250
114	Plant influence on rhizosphere hydraulic properties: direct measurements using a miniaturized infiltrometer. <i>New Phytologist</i> , 2003, 157, 597-603.	7.3	108
115	Root cap structure and cell production rates of maize ( <i>Zea mays</i> ) roots in compacted sand. <i>New Phytologist</i> , 2003, 160, 127-134.	7.3	51
116	Root cap removal increases root penetration resistance in maize ( <i>Zea mays</i> L.). <i>Journal of Experimental Botany</i> , 2003, 54, 2105-2109.	4.8	71
117	Soil factors determined nematode community composition in a two year pot experiment. <i>Nematology</i> , 2003, 5, 889-897.	0.6	28
118	Does the Presence of Detached Root Border Cells of <i>Zea mays</i> Alter the Activity of the Pathogenic Nematode <i>Meloidogyne incognita</i> ?. <i>Phytopathology</i> , 2003, 93, 1111-1114.	2.2	22
119	The extent to which nematode communities are affected by soil factors-a pot experiment. <i>Nematology</i> , 2002, 4, 943-952.	0.6	23
120	A novel three-dimensional lattice Boltzmann model for solute transport in variably saturated porous media. <i>Water Resources Research</i> , 2002, 38, 6-1-6-10.	4.2	46
121	Efficient methods for solving water flow in variably saturated soils under prescribed flux infiltration. <i>Journal of Hydrology</i> , 2002, 260, 75-87.	5.4	18
122	Root Caps and Rhizosphere. <i>Journal of Plant Growth Regulation</i> , 2002, 21, 352-367.	5.1	144
123	Influence of soil strength on root growth: experiments and analysis using a critical-state model. <i>European Journal of Soil Science</i> , 2002, 53, 119-127.	3.9	74
124	A lattice BGK model for advection and anisotropic dispersion equation. <i>Advances in Water Resources</i> , 2002, 25, 1-8.	3.8	107
125	On boundary conditions in the lattice Boltzmann model for advection and anisotropic dispersion equation. <i>Advances in Water Resources</i> , 2002, 25, 601-609.	3.8	44
126	Image Analysis of Maize Root Caps—Estimating Cell Numbers from 2-D Longitudinal Sections. <i>Annals of Botany</i> , 2001, 87, 693-698.	2.9	14



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127	Sloughing of cap cells and carbon exudation from maize seedling roots in compacted sand. <i>New Phytologist</i> , 2000, 145, 477-482.	7.3	114
128	Root- and microbial-derived mucilages affect soil structure and water transport. <i>European Journal of Soil Science</i> , 2000, 51, 435-443.	3.9	340
129	The effect of mechanical impedance on root growth in pea ( <i>Pisum sativum</i> ). II. Cell expansion and wall rheology during recovery. <i>Physiologia Plantarum</i> , 2000, 109, 150-159.	5.2	54
130	The effect of mechanical impedance on root growth in pea ( <i>Pisum sativum</i> ). I. Rates of cell flux, mitosis, and strain during recovery. <i>Physiologia Plantarum</i> , 1999, 107, 277-286.	5.2	43
131	Tribology of the root cap in maize ( <i>Zea mays</i> ) and peas ( <i>Pisum sativum</i> ). <i>New Phytologist</i> , 1999, 142, 421-425.	7.3	21
132	Title is missing!. <i>Plant and Soil</i> , 1999, 209, 101-109.	3.7	25
133	Title is missing!. <i>Plant and Soil</i> , 1998, 200, 157-167.	3.7	44
134	Water stress induced by PEG decreases the maximum growth pressure of the roots of pea seedlings. <i>Journal of Experimental Botany</i> , 1998, 49, 1689-1694.	4.8	45
135	Sloughing of root cap cells decreases the frictional resistance to maize ( <i>Zea mays</i> L.) root growth. <i>Journal of Experimental Botany</i> , 1997, 48, 885-893.	4.8	134
136	Estimating soil frictional resistance to metal probes and its relevance to the penetration of soil by roots. <i>European Journal of Soil Science</i> , 1997, 48, 603-612.	3.9	41
137	A biophysical analysis of root growth under mechanical stress. <i>Plant and Soil</i> , 1997, 189, 155-164.	3.7	88
138	Modelling minirhizotron observations to test experimental procedures. <i>Plant and Soil</i> , 1997, 189, 81-89.	3.7	22
139	Mechanical impedance of root growth directly reduces leaf elongation rates of cereals. <i>New Phytologist</i> , 1997, 135, 613-619.	7.3	69
140	Modelling Rooting Depth and Soil Strength in a Drying Soil Profile. <i>Journal of Theoretical Biology</i> , 1997, 186, 327-338.	1.7	52
141	Biophysics of the growth responses of pea roots to changes in penetration resistance. <i>Plant and Soil</i> , 1994, 167, 135-141.	3.7	22
142	Simultaneous measurement of root force and elongation for seedling pea roots. <i>Journal of Experimental Botany</i> , 1994, 45, 95-102.	4.8	39
143	Differences in potato development ( <i>Solanum tuberosum</i> cv. Maris Piper) in zero and conventional traffic treatments are related to soil physical conditions and radiation interception. <i>Soil and Tillage Research</i> , 1993, 26, 341-359.	5.6	8
144	Root elongation of seedling peas through layered soil of different penetration resistances. <i>Plant and Soil</i> , 1993, 149, 129-139.	3.7	72

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145	Relations between root length densities and root intersections with horizontal and vertical planes using root growth modelling in 3-dimensions. <i>Plant and Soil</i> , 1992, 145, 245-252.	3.7	42
146	Non-destructive analysis of root growth in porous media. <i>Plant, Cell and Environment</i> , 1992, 15, 123-128.	5.7	12
147	Penetrometer resistance equation: Its derivation and the effect of soil adhesion. <i>Biosystems Engineering</i> , 1992, 53, 163-168.	0.4	7
148	Hardsetting and structural regeneration in two unstable British sandy loams and their influence on crop growth. <i>Soil and Tillage Research</i> , 1991, 19, 383-394.	5.6	21
149	The design, construction and use of a rotating-tip penetrometer. <i>Biosystems Engineering</i> , 1991, 48, 223-227.	0.4	8
150	Penetrometer resistance, root penetration resistance and root elongation rate in two sandy loam soils. <i>Plant and Soil</i> , 1991, 131, 59-66.	3.7	138
151	Mechanical impedance to root growth: a review of experimental techniques and root growth responses. <i>Journal of Soil Science</i> , 1990, 41, 341-358.	1.2	485
152	The resistance experienced by roots growing in a pressurised cell. A reappraisal. <i>Plant and Soil</i> , 1990, 123, 73-82.	3.7	19
153	Hard-setting soils. <i>Soil Use and Management</i> , 1987, 3, 79-83.	4.9	97
154	Rhizosphere Engineering by Plants: Quantifying Soil-Root Interactions. <i>Advances in Agricultural Systems Modeling</i> , 0, , 1-30.	0.3	6
155	Plant age effects on soil infiltration rate during early plant establishment. <i>Geotechnique</i> , 0, , 1-7.	4.0	22