Gary D Bending

List of Publications by Year
in descending order

103 papers	7,401 citations	47006 47 h-index	56724 83 g-index
110 all docs	110 docs citations	110 times ranked	8478 citing authors

#	Article	IF	Citations
1	Agricultural landâ€use favours Mucoromycotinian, but not Glomeromycotinian, arbuscular mycorrhizal fungi across ten biomes. New Phytologist, 2022, 233, 1369-1382.	7.3	19
2	Diversity and Ecological Guild Analysis of the Oil Palm Fungal Microbiome Across Root, Rhizosphere, and Soil Compartments. Frontiers in Microbiology, 2022, 13, 792928.	3.5	7
3	Building soil sustainability from rootâ€“soil interface traits. Trends in Plant Science, 2022, 27, 688-698.	8.8	24
4	2â€Aminoethylphosphonate utilization in <i>Pseudomonas putida</i>â€‰<scp>BIRD</scp>â€1 is controlled by multiple master regulators. Environmental Microbiology, 2022, 24, 1902-1917.	3.8	4
5	Stimulation of Distinct Rhizosphere Bacteria Drives Phosphorus and Nitrogen Mineralization in Oilseed Rape under Field Conditions. MSystems, 2022, 7, .	3.8	7
6	Evidence for Niche Differentiation in the Environmental Responses of Co-occurring Mucoromycotinian Fine Root Endophytes and Glomeromycotinian Arbuscular Mycorrhizal Fungi. Microbial Ecology, 2021, 81, 864-873.	2.8	17
7	Niche-adaptation in plant-associated <i>Bacteroidetes</i> favours specialisation in organic phosphorus mineralisation. ISME Journal, 2021, 15, 1040-1055.	9.8	74
8	Identification of microbial signatures linked to oilseed rape yield decline at the landscape scale. Microbiome, 2021, 9, 19.	11.1	31
9	A Novel Signaling Pathway Required for Arabidopsis Endodermal Root Organization Shapes the Rhizosphere Microbiome. Plant and Cell Physiology, 2021, 62, 248-261.	3.1	17
10	Contrasting Responses of Rhizosphere Bacterial, Fungal, Protist, and Nematode Communities to Nitrogen Fertilization and Crop Genotype in Field Grown Oilseed Rape (Brassica napus). Frontiers in Sustainable Food Systems, 2021, 5, .	3.9	8
11	Transporter characterisation reveals aminoethylphosphonate mineralisation as a key step in the marine phosphorus redox cycle. Nature Communications, 2021, 12, 4554.	12.8	21
12	Tree phyllospheres are a habitat for diverse populations of <scp>CO</scp>â€oxidizing bacteria. Environmental Microbiology, 2021, 23, 6309-6327.	3.8	5
13	Natural attenuation of legacy hydrocarbon spills in pristine soils is feasible despite difficult environmental conditions in the monsoon tropics. Science of the Total Environment, 2021, 799, 149335.	8.0	3
14	Longâ€read metabarcoding of the eukaryotic rDNA operon to phylogenetically and taxonomically resolve environmental diversity. Molecular Ecology Resources, 2020, 20, 429-443.	4.8	68
15	Longitudinal dispersion of microplastics in aquatic flows using fluorometric techniques. Water Research, 2020, 170, 115337.	11.3	45
16	Relationships between yield, rotation length, and abundance of Olpidium brassicae and Pyrenochaeta sp. in the rhizosphere of oilseed rape. Applied Soil Ecology, 2020, 147, 103433.	4.3	3
17	Bedform characteristics and biofilm community development interact to modify hyporheic exchange. Science of the Total Environment, 2020, 749, 141397.	8.0	23
18	First Cryo-Scanning Electron Microscopy Images and X-Ray Microanalyses of Mucoromycotinian Fine Root Endophytes in Vascular Plants. Frontiers in Microbiology, 2020, 11, 2018.	3.5	16

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19	Inclusion of seasonal variation in river system microbial communities and phototroph activity increases environmental relevance of laboratory chemical persistence tests. Science of the Total Environment, 2020, 733, 139070.	8.0	10
20	Urban meadows as an alternative to short mown grassland: effects of composition and height on biodiversity. Ecological Applications, 2019, 29, e01946.	3.8	76
21	Preceding crop and seasonal effects influence fungal, bacterial and nematode diversity in wheat and oilseed rape rhizosphere and soil. Applied Soil Ecology, 2018, 126, 34-46.	4.3	43
22	Extreme rainfall affects assembly of the rootâ€associated fungal community. New Phytologist, 2018, 220, 1172-1184.	7.3	60
23	Partial maintenance of organ-specific epigenetic marks during plant asexual reproduction leads to heritable phenotypic variation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9145-E9152.	7.1	65
24	Plant Rhizosphere Selection of Plasmodiophorid Lineages from Bulk Soil: The Importance of â€œHiddenâ€• Diversity. Frontiers in Microbiology, 2018, 9, 168.	3.5	7
25	The â€˜knownâ€™ genetic potential for microbial communities to degrade organic phosphorus is reduced in lowâ€pH soils. MicrobiologyOpen, 2017, 6, e00474.	3.0	34
26	Converting highly productive arable cropland in Europe to grassland: â€“a poor candidate for carbon sequestration. Scientific Reports, 2017, 7, 10493.	3.3	27
27	Identification of extracellular glycerophosphodiesterases in Pseudomonas and their role in soil organic phosphorus remineralisation. Scientific Reports, 2017, 7, 2179.	3.3	30
28	Functional differences in the microbial processing of recent assimilates under two contrasting perennial bioenergy plantations. Soil Biology and Biochemistry, 2017, 114, 248-262.	8.8	17
29	Fine endophytes (<i>Glomus tenue</i>) are related to Mucoromycotina, not Glomeromycota. New Phytologist, 2017, 213, 481-486.	7.3	101
30	Temporally Variable Geographical Distance Effects Contribute to the Assembly of Root-Associated Fungal Communities. Frontiers in Microbiology, 2016, 7, 195.	3.5	36
31	Spatio-Temporal Variation of Core and Satellite Arbuscular Mycorrhizal Fungus Communities in Miscanthus giganteus. Frontiers in Microbiology, 2016, 7, 1278.	3.5	23
32	Comparative genomic, proteomic and exoproteomic analyses of three <i>Pseudomonas</i> strains reveals novel insights into the phosphorus scavenging capabilities of soil bacteria. Environmental Microbiology, 2016, 18, 3535-3549.	3.8	95
33	Spatial and temporal variability in the potential of river water biofilms to degrade p-nitrophenol. Chemosphere, 2016, 164, 355-362.	8.2	5
34	Changes in activity and structure of the soil microbial community after application of azoxystrobin or pirimicarb and an organic amendment to an agricultural soil. Applied Soil Ecology, 2016, 106, 47-57.	4.3	56
35	The priming potential of environmentally weathered pyrogenic carbon during landâ€use transition to biomass crop production. GCB Bioenergy, 2016, 8, 805-817.	5.6	4
36	Evidence for functional redundancy in arbuscular mycorrhizal fungi and implications for agroecosystem management. Mycorrhiza, 2016, 26, 77-83.	2.8	62

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37	Cultivar-level genotype differences influence diversity and composition of lettuce (Lactuca sp.) phyllosphere fungal communities. Fungal Ecology, 2015, 17, 183-186.	1.6	46
38	Abiotic and Biotic Processes Governing the Fate of Phenylurea Herbicides in Soils: A Review. Critical Reviews in Environmental Science and Technology, 2015, 45, 1947-1998.	12.8	77
39	Characterization of <i>para</i> -Nitrophenol-Degrading Bacterial Communities in River Water by Using Functional Markers and Stable Isotope Probing. Applied and Environmental Microbiology, 2015, 81, 6890-6900.	3.1	33
40	Growth and nutritional responses to arbuscular mycorrhizal fungi are dependent on onion genotype and fungal species. Biology and Fertility of Soils, 2015, 51, 801-813.	4.3	27
41	An empirical model approach for assessing soil organic carbon stock changes following biomass crop establishment in Britain. Biomass and Bioenergy, 2015, 83, 141-151.	5.7	9
42	Impact of fresh root material and mature crop residues of oilseed rape (Brassica napus) on microbial communities associated with subsequent oilseed rape. Biology and Fertility of Soils, 2014, 50, 1267-1279.	4.3	22
43	Distribution and diversity of Paraglomus spp. in tilled agricultural soils. Mycorrhiza, 2014, 24, 1-11.	2.8	47
44	Impact of biochar on mineralisation of C and N from soil and willow litter and its relationship with microbial community biomass and structure. Biology and Fertility of Soils, 2014, 50, 695-702.	4.3	216
45	Isolation and characterisation of azoxystrobin degrading bacteria from soil. Chemosphere, 2014, 95, 370-378.	8.2	43
46	Diversity of fungi associated with hair roots of ericaceous plants is affected by land use. FEMS Microbiology Ecology, 2014, 87, 586-600.	2.7	36
47	Resistance and resilience responses of a range of soil eukaryote and bacterial taxa to fungicide application. Chemosphere, 2014, 112, 194-202.	8.2	20
48	Temporal variation outweighs effects of biosolids applications in shaping arbuscular mycorrhizal fungi communities on plants grown in pasture and arable soils. Applied Soil Ecology, 2014, 82, 52-60.	4.3	16
49	Root traits and microbial community interactions in relation to phosphorus availability and acquisition, with particular reference to Brassica. Frontiers in Plant Science, 2014, 5, 27.	3.6	111
50	The effect of crop sequences on soil microbial, chemical and physical indicators and its relationship with soybean sudden death syndrome (complex of Fusarium species). Spanish Journal of Agricultural Research, 2014, 12, 252.	0.6	29
51	Impact of black carbon on the bioaccessibility of organic contaminants in soil. Journal of Hazardous Materials, 2013, 261, 808-816.	12.4	105
52	The role of local environment and geographical distance in determining community composition of arbuscular mycorrhizal fungi at the landscape scale. ISME Journal, 2013, 7, 498-508.	9.8	242
53	Impacts of biochar on bioavailability of the fungicide azoxystrobin: A comparison of the effect on biodegradation rate and toxicity to the fungal community. Chemosphere, 2013, 91, 1525-1533.	8.2	44
54	What are the primary factors controlling the light fraction and particulate soil organic matter content of agricultural soils?. Biology and Fertility of Soils, 2013, 49, 1001-1014.	4.3	86

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55	Contrasting arbuscular mycorrhizal communities colonizing different host plants show a similar response to a soil phosphorus concentration gradient. New Phytologist, 2013, 198, 546-556.	7.3	183
56	Non-UV Light Influences the Degradation Rate of Crop Protection Products. Environmental Science & Technology, 2013, 47, 130712083104003.	10.0	5
57	Impact of Shortened Crop Rotation of Oilseed Rape on Soil and Rhizosphere Microbial Diversity in Relation to Yield Decline. PLoS ONE, 2013, 8, e59859.	2.5	95
58	Light Structures Phototroph, Bacterial and Fungal Communities at the Soil Surface. PLoS ONE, 2013, 8, e69048.	2.5	24
59	Cross-taxa congruence, indicators and environmental gradients in soils under agricultural and extensive land management. European Journal of Soil Biology, 2012, 49, 55-62.	3.2	32
60	Long-term effect of tillage systems on soil microbiological, chemical and physical parameters and the incidence of charcoal rot by Macrophomina phaseolina (Tassi) Goid in soybean. Crop Protection, 2012, 40, 73-82.	2.1	56
61	Meeting the demand for crop production: the challenge of yield decline in crops grown in short rotations. Biological Reviews, 2012, 87, 52-71.	10.4	342
62	Assessing the chemical and biological accessibility of the herbicide isoproturon in soil amended with biochar. Chemosphere, 2012, 88, 77-83.	8.2	99
63	Assessing the effect of organic residue quality on active decomposing fungi in a tropical Vertisol using 15N-DNA stable isotope probing. Fungal Ecology, 2011, 4, 115-119.	1.6	33
64	Identification of active bacteria involved in decomposition of complex maize and soybean residues in a tropical Vertisol using 15N-DNA stable isotope probing. Pedobiologia, 2011, 54, 187-193.	1.2	57
65	Spatial scaling of arbuscular mycorrhizal fungal diversity is affected by farming practice. Environmental Microbiology, 2011, 13, 241-249.	3.8	93
66	Organic management of tilled agricultural soils results in a rapid increase in colonisation potential and spore populations of arbuscular mycorrhizal fungi. Agriculture, Ecosystems and Environment, 2010, 139, 273-279.	5.3	48
67	Development of novel assays for lignin degradation: comparative analysis of bacterial and fungal lignin degraders. Molecular BioSystems, 2010, 6, 815.	2.9	238
68	Biodegradation of the herbicide mecoprop-p with soil depth and its relationship with class III tfdA genes. Soil Biology and Biochemistry, 2010, 42, 32-39.	8.8	26
69	Both Leaf Properties and Microbe-Microbe Interactions Influence Within-Species Variation in Bacterial Population Diversity and Structure in the Lettuce (<i>Lactuca</i> Species) Phyllosphere. Applied and Environmental Microbiology, 2010, 76, 8117-8125.	3.1	176
70	Evaluation of riceâ€"legumeâ€"rice cropping system on grain yield, nutrient uptake, nitrogen fixation, and chemical, physical, and biological properties of soil. Biology and Fertility of Soils, 2009, 45, 237-251.	4.3	20
71	Incorporation of nitrogen from crop residues into light-fraction organic matter in soils with contrasting management histories. Biology and Fertility of Soils, 2009, 45, 281-287.	4.3	9
72	Mycorrhizas and biomass crops: opportunities for future sustainable development. Trends in Plant Science, 2009, 14, 542-549.	8.8	65

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73	Chapter 7 Human Pathogens and the Phyllosphere. Advances in Applied Microbiology, 2008, 64, 183-221.	2.4	47
74	Study of the spatial variation of the biodegradation rate of the herbicide bentazone with soil depth using contrasting incubation methods. Chemosphere, 2008, 73, 1211-1215.	8.2	18
75	Microbial aspects of the interaction between soil depth and biodegradation of the herbicide isoproturon. Chemosphere, 2007, 66, 664-671.	8.2	50
76	Fungicide impacts on microbial communities in soils with contrasting management histories. Chemosphere, 2007, 69, 82-88.	8.2	183
77	What are the mechanisms and specificity of mycorrhization helper bacteria?. New Phytologist, 2007, 174, 707-710.	7.3	15
78	Changes to the structure ofSphingomonasspp. communities associated with biodegradation of the herbicide isoproturon in soil. FEMS Microbiology Letters, 2007, 269, 110-116.	1.8	28
79	Spatial variation in the degradation rate of the pesticides isoproturon, azoxystrobin and diflufenican in soil and its relationship with chemical and microbial properties. Environmental Pollution, 2006, 139, 279-287.	7.5	144
80	Importance of mycorrhization helper bacteria cell density and metabolite localization for the Pinus sylvestrisÃ¢Â€Â“Lactarius rufus symbiosis. FEMS Microbiology Ecology, 2006, 56, 25-33.	2.7	40
81	Mycorrhization helper bacteria: a case of specificity for altering ectomycorrhiza architecture but not ectomycorrhiza formation. Mycorrhiza, 2006, 16, 533-541.	2.8	48
82	Field-scale study of the variability in pesticide biodegradation with soil depth and its relationship with soil characteristics. Soil Biology and Biochemistry, 2006, 38, 2910-2918.	8.8	92
83	Significance of Microbial Interactions in the Mycorrhizosphere. Advances in Applied Microbiology, 2006, 60, 97-132.	2.4	40
84	Technical considerations for the use of15N-DNA stable-isotope probing for functional microbial activity in soils. Rapid Communications in Mass Spectrometry, 2005, 19, 1424-1428.	1.5	64
85	Microbial and biochemical soil quality indicators and their potential for differentiating areas under contrasting agricultural management regimes. Soil Biology and Biochemistry, 2004, 36, 1785-1792.	8.8	311
86	Microbial degradation of isoproturon and related phenylurea herbicides in and below agricultural fields. FEMS Microbiology Ecology, 2003, 45, 1-11.	2.7	189
87	Litter decomposition, ectomycorrhizal roots and the 'Gadgil' effect. New Phytologist, 2003, 158, 228-229.	7.3	44
88	In-Field Spatial Variability in the Degradation of the Phenyl-Urea Herbicide Isoproturon Is the Result of Interactions between Degradative Sphingomonas spp. and Soil pH. Applied and Environmental Microbiology, 2003, 69, 827-834.	3.1	141
89	Interactions between crop residue and soil organic matter quality and the functional diversity of soil microbial communities. Soil Biology and Biochemistry, 2002, 34, 1073-1082.	8.8	288
90	Degradation of contrasting pesticides by white rot fungi and its relationship with ligninolytic potential. FEMS Microbiology Letters, 2002, 212, 59-63.	1.8	190

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91	Characterisation of bacteria from Pinus sylvestrisÃ¢Â€Â“Suillus luteus mycorrhizas and their effects on rootÃ¢Â€Â“fungus interactions and plant growth. FEMS Microbiology Ecology, 2002, 39, 219-227.	2.7	69
92	Degradation of contrasting pesticides by white rot fungi and its relationship with ligninolytic potential. FEMS Microbiology Letters, 2002, 212, 59-63.	1.8	4
93	Spatial heterogeneity in the metabolism and dynamics of isoproturon degrading microbial communities in soil. Biology and Fertility of Soils, 2001, 33, 484-489.	4.3	58
94	Bacteria associated with Pinus sylvestris â€“ Lactarius rufus ectomycorrhizas and their effects on mycorrhiza formation in vitro. New Phytologist, 2001, 151, 743-751.	7.3	160
95	Inhibition of soil nitrifying bacteria communities and their activities by glucosinolate hydrolysis products. Soil Biology and Biochemistry, 2000, 32, 1261-1269.	8.8	141
96	Characterisation of volatile sulphur-containing compounds produced during decomposition of Brassica juncea tissues in soil. Soil Biology and Biochemistry, 1999, 31, 695-703.	8.8	131
97	Fate of nitrogen from crop residues as affected by biochemical quality and the microbial biomass. Soil Biology and Biochemistry, 1998, 30, 2055-2065.	8.8	87
98	Lignin and soluble phenolic degradation by ectomycorrhizal and ericoid mycorrhizal fungi. Mycological Research, 1997, 101, 1348-1354.	2.5	181
99	Effects of the soluble polyphenol tannic acid on the activities of ericoid and ectomycorrhizal fungi. Soil Biology and Biochemistry, 1996, 28, 1595-1602.	8.8	94
100	Nitrogen mobilization from protein-polyphenol complex by ericoid and ectomycorrhizal fungi. Soil Biology and Biochemistry, 1996, 28, 1603-1612.	8.8	187
101	The structure and function of the vegetative mycelium of ectomycorrhizal plants. VI. Activities of nutrient mobilizing enzymes in birch litter colonized by Paxillus involutus (Fr.) Fr.. New Phytologist, 1995, 130, 411-417.	7.3	110
102	The structure and function of the vegetative mycelium of ectomycorrhizal plants. V. Foraging behaviour and translocation of nutrients from exploited litter. New Phytologist, 1995, 130, 401-409.	7.3	282
103	Two Receptor-Like Kinases Required for Arabidopsis Endodermal Root Organisation Shape the Rhizosphere Microbiome. SSRN Electronic Journal, 0, , .	0.4	2