Ivan A Janssens

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5126665/publications.pdf

Version: 2024-02-01

342 papers	47,505 citations	2538 96 h-index	2027 205 g-index
378 all docs	378 docs citations	378 times ranked	33180 citing authors

#	Article	IF	Citations
1	Temperature sensitivity of soil carbon decomposition and feedbacks to climate change. Nature, 2006, 440, 165-173.	13.7	5,114
2	Persistence of soil organic matter as an ecosystem property. Nature, 2011, 478, 49-56.	13.7	4,243
3	Temperature increase reduces global yields of major crops in four independent estimates. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9326-9331.	3.3	1,708
4	Reduction of forest soil respiration in response to nitrogen deposition. Nature Geoscience, 2010, 3, 315-322.	5.4	1,254
5	Environmental controls over carbon dioxide and water vapor exchange of terrestrial vegetation. Agricultural and Forest Meteorology, 2002, 113, 97-120.	1.9	1,133
6	On the variability of respiration in terrestrial ecosystems: moving beyond Q 10. Global Change Biology, 2006, 12, 154-164.	4.2	1,055
7	Human-induced nitrogenâ€“phosphorus imbalances alter natural and managed ecosystems across the globe. Nature Communications, 2013, 4, 2934.	5.8	1,013
8	Plant phenology and global climate change: Current progresses and challenges. Global Change Biology, 2019, 25, 1922-1940.	4.2	944
9	Anthropogenic perturbation of the carbon fluxes from land to ocean. Nature Geoscience, 2013, 6, 597-607.	5.4	937
10	CO₂ balance of boreal, temperate, and tropical forests derived from a global database. Global Change Biology, 2007, 13, 2509-2537.	4.2	863
11	Productivity overshadows temperature in determining soil and ecosystem respiration across European forests. Global Change Biology, 2001, 7, 269-278.	4.2	843
12	Declining global warming effects on the phenology of spring leaf unfolding. Nature, 2015, 526, 104-107.	13.7	637
13	The likely impact of elevated [CO 2], nitrogen deposition, increased temperature and management on carbon sequestration in temperate and boreal forest ecosystems: a literature review. New Phytologist, 2007, 173, 463-480.	3.5	579
14	Europe's Terrestrial Biosphere Absorbs 7 to 12% of European Anthropogenic CO2 Emissions. Science, 2003, 300, 1538-1542.	6.0	551
15	Evidence for soil water control on carbon and water dynamics in European forests during the extremely dry year: 2003. Agricultural and Forest Meteorology, 2007, 143, 123-145.	1.9	509
16	Asymmetric effects of daytime and night-time warming on Northern Hemisphere vegetation. Nature, 2013, 501, 88-92.	13.7	482
17	The humanâ€induced imbalance between C, N and P in Earth's life system. Global Change Biology, 2012, 18, 3-6.	4.2	458
18	Global Convergence in the Temperature Sensitivity of Respiration at Ecosystem Level. Science, 2010, 329, 838-840.	6.0	446

#	Article	IF	Citations
19	Temporal and amongâ€site variability of inherent water use efficiency at the ecosystem level. Global Biogeochemical Cycles, 2009, 23, .	1.9	422
20	Comparison of different chamber techniques for measuring soil CO2 efflux. Agricultural and Forest Meteorology, 2004, 123, 159-176.	1.9	420
21	Precipitation manipulation experiments â€“ challenges and recommendations for the future. Ecology Letters, 2012, 15, 899-911.	3.0	411
22	Annual Q10 of soil respiration reflects plant phenological patterns as well as temperature sensitivity. Global Change Biology, 2004, 10, 161-169.	4.2	392
23	Leaf onset in the northern hemisphere triggered by daytime temperature. Nature Communications, 2015, 6, 6911.	5.8	384
24	Nutrient availability as the key regulator of global forest carbon balance. Nature Climate Change, 2014, 4, 471-476.	8.1	383
25	Precipitation impacts on vegetation spring phenology on the <scp>T</scp>ibetan <scp>P</scp>lateau. Global Change Biology, 2015, 21, 3647-3656.	4.2	377
26	Simple additive effects are rare: a quantitative review of plant biomass and soil process responses to combined manipulations of <scp><scp>CO₂</scp></scp> and temperature. Global Change Biology, 2012, 18, 2681-2693.	4.2	365
27	Large seasonal changes in Q 10 of soil respiration in a beech forest. Global Change Biology, 2003, 9, 911-918.	4.2	359
28	Mycorrhizal Hyphal Turnover as a Dominant Process for Carbon Input into Soil Organic Matter. Plant and Soil, 2006, 281, 15-24.	1.8	345
29	Delayed autumn phenology in the Northern Hemisphere is related to change in both climate and spring phenology. Global Change Biology, 2016, 22, 3702-3711.	4.2	319
30	Recent global decline of CO ₂ fertilization effects on vegetation photosynthesis. Science, 2020, 370, 1295-1300.	6.0	317
31	Air temperature optima of vegetation productivity across global biomes. Nature Ecology and Evolution, 2019, 3, 772-779.	3.4	316
32	Importance of methane and nitrous oxide for Europe's terrestrial greenhouse-gas balance. Nature Geoscience, 2009, 2, 842-850.	5.4	310
33	Global patterns of phosphatase activity in natural soils. Scientific Reports, 2017, 7, 1337.	1.6	296
34	Fertile forests produce biomass more efficiently. Ecology Letters, 2012, 15, 520-526.	3.0	273
35	Joint control of terrestrial gross primary productivity by plant phenology and physiology. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2788-2793.	3.3	265
36	Potential for large-scale CO2 removal via enhanced rock weathering with croplands. Nature, 2020, 583, 242-248.	13.7	263

#	Article	IF	Citations
37	Summer soil drying exacerbated by earlier spring greening of northern vegetation. Science Advances, 2020, 6, eaax0255.	4.7	258
38	Variation in leaf flushing date influences autumnal senescence and next yearâ€™s flushing date in two temperate tree species. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7355-7360.	3.3	254
39	Sensitivity of decomposition rates of soil organic matter with respect to simultaneous changes in temperature and moisture. Journal of Advances in Modeling Earth Systems, 2015, 7, 335-356.	1.3	252
40	The European carbon balance. Part 3: forests. Global Change Biology, 2010, 16, 1429-1450.	4.2	247
41	Interactive effects of temperature and precipitation on soil respiration in a temperate maritime pine forest. Tree Physiology, 2003, 23, 1263-1270.	1.4	239
42	Soil respiration under climate warming: differential response of heterotrophic and autotrophic respiration. Global Change Biology, 2014, 20, 3229-3237.	4.2	239
43	Microbial carbon limitation: The need for integrating microorganisms into our understanding of ecosystem carbon cycling. Global Change Biology, 2020, 26, 1953-1961.	4.2	239
44	Microbial temperature sensitivity and biomass change explain soil carbon loss with warming. Nature Climate Change, 2018, 8, 885-889.	8.1	230
45	Strong impacts of daily minimum temperature on the greenâ€up date and summer greenness of the Tibetan Plateau. Global Change Biology, 2016, 22, 3057-3066.	4.2	223
46	Wholeâ€system responses of experimental plant communities to climate extremes imposed in different seasons. New Phytologist, 2011, 189, 806-817.	3.5	220
47	Global comparison of light use efficiency models for simulating terrestrial vegetation gross primary production based on the LaThuile database. Agricultural and Forest Meteorology, 2014, 192-193, 108-120.	1.9	220
48	Recent spring phenology shifts in western <scp>C</scp>entral <scp>E</scp>urope based on multiscale observations. Global Ecology and Biogeography, 2014, 23, 1255-1263.	2.7	208
49	Quality control of CarboEurope flux data â€“ Part 1: Coupling footprint analyses with flux data quality assessment to evaluate sites in forest ecosystems. Biogeosciences, 2008, 5, 433-450.	1.3	192
50	Soil water repellency and its implications for organic matter decomposition - is there a link to extreme climatic events?. Global Change Biology, 2011, 17, 2640-2656.	4.2	191
51	Extension of the growing season increases vegetation exposure to frost. Nature Communications, 2018, 9, 426.	5.8	190
52	The European carbon balance. Part 2: croplands. Global Change Biology, 2010, 16, 1409-1428.	4.2	185
53	Weakening temperature control on the interannual variations of spring carbon uptake across northern lands. Nature Climate Change, 2017, 7, 359-363.	8.1	183
54	The carbon budget of terrestrial ecosystems at country-scale â€“ a European case study. Biogeosciences, 2005, 2, 15-26.	1.3	178

#	Article	IF	Citations
55	Changes in nutrient concentrations of leaves and roots in response to global change factors. Global Change Biology, 2017, 23, 3849-3856.	4.2	174
56	Forest annual carbon cost: a globalâ€scale analysis of autotrophic respiration. Ecology, 2010, 91, 652-661.	1.5	171
57	Shifting from a fertilization-dominated to a warming-dominated period. Nature Ecology and Evolution, 2017, 1, 1438-1445.	3.4	167
58	Net ecosystem CO2 exchange of mixed forest in Belgium over 5 years. Agricultural and Forest Meteorology, 2003, 119, 209-227.	1.9	166
59	Global trends in carbon sinks and their relationships with CO2 and temperature. Nature Climate Change, 2019, 9, 73-79.	8.1	163
60	Unexpected role of winter precipitation in determining heat requirement for spring vegetation greenâ€up at northern middle and high latitudes. Global Change Biology, 2014, 20, 3743-3755.	4.2	159
61	Assessing forest soil CO2 efflux: an in situ comparison of four techniques. Tree Physiology, 2000, 20, 23-32.	1.4	158
62	Increased heat requirement for leaf flushing in temperate woody species over 1980â€“2012: effects of chilling, precipitation and insolation. Global Change Biology, 2015, 21, 2687-2697.	4.2	158
63	Global forest carbon uptake due to nitrogen and phosphorus deposition from 1850 to 2100. Global Change Biology, 2017, 23, 4854-4872.	4.2	158
64	The European carbon balance. Part 4: integration of carbon and other traceâ€gas fluxes. Global Change Biology, 2010, 16, 1451-1469.	4.2	157
65	Summer heat and drought extremes trigger unexpected changes in productivity of a temperate annual/biannual plant community. Environmental and Experimental Botany, 2012, 79, 21-30.	2.0	152
66	Aboveâ€ground woody carbon sequestration measured from tree rings is coherent with net ecosystem productivity at five eddyâ€covariance sites. New Phytologist, 2014, 201, 1289-1303.	3.5	152
67	Physiological, biochemical, and genomeâ€wide transcriptional analysis reveals that elevated <scp>CO</scp>₂ mitigates the impact of combined heat wave and drought stress in Arabidopsis thaliana at multiple organizational levels. Global Change Biology, 2014, 20, 3670-3685.	4.2	152
68	Plant invasion is associated with higher plantâ€“soil nutrient concentrations in nutrientâ€poor environments. Global Change Biology, 2017, 23, 1282-1291.	4.2	147
69	Hidden, abiotic CO2 flows and gaseous reservoirs in the terrestrial carbon cycle: Review and perspectives. Agricultural and Forest Meteorology, 2010, 150, 321-329.	1.9	146
70	Phase and amplitude of ecosystem carbon release and uptake potentials as derived from FLUXNET measurements. Agricultural and Forest Meteorology, 2002, 113, 75-95.	1.9	145
71	Climatic characteristics of heat waves and their simulation in plant experiments. Global Change Biology, 2010, 16, 1992-2000.	4.2	144
72	The bioelements, the elementome, and the biogeochemical niche. Ecology, 2019, 100, e02652.	1.5	139

#	Article	IF	Citations
73	Anthropogenic global shifts in biospheric N and P concentrations and ratios and their impacts on biodiversity, ecosystem productivity, food security, and human health. Global Change Biology, 2020, 26, 1962-1985.	4.2	138
74	Impact of priming on global soil carbon stocks. Global Change Biology, 2018, 24, 1873-1883.	4.2	134
75	Basal rates of soil respiration are correlated with photosynthesis in a mixed temperate forest. Global Change Biology, 2007, 13, 2008-2017.	4.2	133
76	The impact of lateral carbon fluxes on the European carbon balance. Biogeosciences, 2008, 5, 1259-1271.	1.3	130
77	The contribution of nitrogen deposition to the photosynthetic capacity of forests. Global Biogeochemical Cycles, 2013, 27, 187-199.	1.9	127
78	Larger temperature response of autumn leaf senescence than spring leafâ€out phenology. Global Change Biology, 2018, 24, 2159-2168.	4.2	124
79	Effects of CO2Enrichment on Trees and Forests: Lessons to be Learned in View of Future Ecosystem Studies. Annals of Botany, 1999, 84, 577-590.	1.4	122
80	Pathways for balancing CO2 emissions and sinks. Nature Communications, 2017, 8, 14856.	5.8	122
81	A representation of the phosphorus cycle for ORCHIDEE (revisionÂ4520). Geoscientific Model Development, 2017, 10, 3745-3770.	1.3	122
82	The global cropland-sparing potential of high-yield farming. Nature Sustainability, 2020, 3, 281-289.	11.5	121
83	Above- and belowground biomass and net primary production in a 73-year-old Scots pine forest. Tree Physiology, 2003, 23, 505-516.	1.4	119
84	How to spend a dwindling greenhouse gas budget. Nature Climate Change, 2018, 8, 7-10.	8.1	119
85	Divergent changes in the elevational gradient of vegetation activities over the last 30 years. Nature Communications, 2019, 10, 2970.	5.8	119
86	The carbon cost of fine root turnover in a Scots pine forest. Forest Ecology and Management, 2002, 168, 231-240.	1.4	118
87	Steeper declines in forest photosynthesis than respiration explain age-driven decreases in forest growth. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8856-8860.	3.3	114
88	Plausible rice yield losses under future climate warming. Nature Plants, 2017, 3, 16202.	4.7	114
89	Biomass production efficiency controlled by management in temperate and boreal ecosystems. Nature Geoscience, 2015, 8, 843-846.	5.4	109
90	Chemical characterisation of atmospheric aerosols during a 2007 summer field campaign at Brasschaat, Belgium: sources and source processes of biogenic secondary organic aerosol. Atmospheric Chemistry and Physics, 2012, 12, 125-138.	1.9	107

#	Article	IF	Citations
91	Are ecological gradients in seasonal Q10 of soil respiration explained by climate or by vegetation seasonality?. Soil Biology and Biochemistry, 2010, 42, 1728-1734.	4.2	106
92	Global pattern and controls of soil microbial metabolic quotient. Ecological Monographs, 2017, 87, 429-441.	2.4	106
93	Few multiyear precipitationâ€“reduction experiments find aÂshift in the productivityâ€“precipitation relationship. Global Change Biology, 2016, 22, 2570-2581.	4.2	105
94	Above- and belowground phytomass and carbon storage in a Belgian Scots pine stand. Annales Des Sciences ForestiÃ¨res, 1999, 56, 81-90.	1.1	104
95	The phosphorus trilemma. Nature Geoscience, 2013, 6, 897-898.	5.4	103
96	Soil respiration in a mixed temperate forest and its contribution to total ecosystem respiration. Tree Physiology, 2005, 25, 609-619.	1.4	101
97	Foliar elemental composition of <scp>E</scp>uropean forest tree species associated with evolutionary traits and present environmental and competitive conditions. Global Ecology and Biogeography, 2015, 24, 240-255.	2.7	100
98	Soil respiration at mean annual temperature predicts annual total across vegetation types and biomes. Biogeosciences, 2010, 7, 2147-2157.	1.3	99
99	Foliar and soil concentrations and stoichiometry of nitrogen and phosphorous across <scp>E</scp>uropean <scp>P</scp>inus sylvestris forests: relationships with climate, <scp>N</scp> deposition and tree growth. Functional Ecology, 2016, 30, 676-689.	1.7	99
100	The three major axes of terrestrial ecosystem function. Nature, 2021, 598, 468-472.	13.7	99
101	Elevated atmospheric CO2increases fine root production, respiration, rhizosphere respiration and soil CO2efflux in Scots pine seedlings. Global Change Biology, 1998, 4, 871-878.	4.2	96
102	Emergent constraint on crop yield response to warmer temperature from field experiments. Nature Sustainability, 2020, 3, 908-916.	11.5	96
103	Can flux tower research neglect geochemical CO2 exchange?. Agricultural and Forest Meteorology, 2008, 148, 1045-1054.	1.9	95
104	Sensitivity of leaf unfolding to experimental warming in three temperate tree species. Agricultural and Forest Meteorology, 2013, 181, 125-132.	1.9	95
105	Forest floor CO2 fluxes estimated by eddy covariance and chamber-based model. Agricultural and Forest Meteorology, 2001, 106, 61-69.	1.9	94
106	Latitudinal patterns of magnitude and interannual variability in net ecosystem exchange regulated by biological and environmental variables. Global Change Biology, 2009, 15, 2905-2920.	4.2	94
107	Seasonal changes in photosynthesis, respiration and NEE of a mixed temperate forest. Agricultural and Forest Meteorology, 2004, 126, 15-31.	1.9	93
108	Linking variability in soil solution dissolved organic carbon to climate, soil type, and vegetation type. Global Biogeochemical Cycles, 2014, 28, 497-509.	1.9	91

#	Article	IF	Citations
109	Fluxes of the greenhouse gases (CO2, CH4 and N2O) above a short-rotation poplar plantation after conversion from agricultural land. Agricultural and Forest Meteorology, 2013, 169, 100-110.	1.9	90
110	The influence of local spring temperature variance on temperature sensitivity of spring phenology. Global Change Biology, 2014, 20, 1473-1480.	4.2	90
111	Evaluating the convergence between eddy-covariance and biometric methods for assessing carbon budgets of forests. Nature Communications, 2016, 7, 13717.	5.8	90
112	High clay content accelerates the decomposition of fresh organic matter in artificial soils. Soil Biology and Biochemistry, 2014, 77, 100-108.	4.2	89
113	Daylength helps temperate deciduous trees to leafâ€out at the optimal time. Global Change Biology, 2019, 25, 2410-2418.	4.2	88
114	Stand age and species richness dampen interannual variation of ecosystem-level photosynthetic capacity. Nature Ecology and Evolution, 2017, 1, 48.	3.4	85
115	Climate Extreme Effects on the Chemical Composition of Temperate Grassland Species under Ambient and Elevated CO2: A Comparison of Fructan and Non-Fructan Accumulators. PLoS ONE, 2014, 9, e92044.	1.1	84
116	The Impact of Winter and Spring Temperatures on Temperate Tree Budburst Dates: Results from an Experimental Climate Manipulation. PLoS ONE, 2012, 7, e47324.	1.1	83
117	Three times greater weight of daytime than of nightâ€time temperature on leaf unfolding phenology in temperate trees. New Phytologist, 2016, 212, 590-597.	3.5	82
118	Comparison of Fine Root Dynamics in Scots Pine and Pedunculate Oak in Sandy Soil. Plant and Soil, 2005, 276, 33-45.	1.8	80
119	Velocity of change in vegetation productivity over northern high latitudes. Nature Ecology and Evolution, 2017, 1, 1649-1654.	3.4	79
120	Lipid biomarker temperature proxy responds to abrupt shift in the bacterial community composition in geothermally heated soils. Organic Geochemistry, 2019, 137, 103897.	0.9	78
121	Thermal acclimation of organic matter decomposition in an artificial forest soil is related to shifts in microbial community structure. Soil Biology and Biochemistry, 2014, 71, 1-12.	4.2	77
122	Nutrient-cycling mechanisms other than the direct absorption from soil may control forest structure and dynamics in poor Amazonian soils. Scientific Reports, 2017, 7, 45017.	1.6	76
123	Net carbon storage in a poplar plantation (POPFACE) after three years of free-air CO2 enrichment. Tree Physiology, 2005, 25, 1399-1408.	1.4	74
124	Contrasting net primary productivity and carbon distribution between neighboring stands of Quercus robur and Pinus sylvestris. Tree Physiology, 2005, 25, 701-712.	1.4	74
125	Irrigation and enhanced soil carbon input effects on belowâ€ground carbon cycling in semiarid temperate grasslands. New Phytologist, 2007, 174, 835-846.	3.5	74
126	Bayesian comparison of six different temperature-based budburst models for four temperate tree species. Ecological Modelling, 2012, 230, 92-100.	1.2	74

#	Article	IF	Citations
127	Can current moisture responses predict soil CO₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments. Biogeosciences, 2014, 11, 2991-3013.	1.3	74
128	Future Climate CO2 Levels Mitigate Stress Impact on Plants: Increased Defense or Decreased Challenge?. Frontiers in Plant Science, 2016, 7, 556.	1.7	74
129	European land CO2 sink influenced by NAO and East-Atlantic Pattern coupling. Nature Communications, 2016, 7, 10315.	5.8	74
130	Soil properties explain tree growth and mortality, but not biomass, across phosphorus-depleted tropical forests. Scientific Reports, 2020, 10, 2302.	1.6	74
131	Nitrogen's carbon bonus. Nature Geoscience, 2009, 2, 318-319.	5.4	72
132	Seasonally different response of photosynthetic activity to daytime and nightâ€time warming in the Northern Hemisphere. Global Change Biology, 2015, 21, 377-387.	4.2	72
133	Priming of soil organic matter decomposition scales linearly with microbial biomass response to litter input in steppe vegetation. Oikos, 2015, 124, 649-657.	1.2	70
134	Photosynthesis drives anomalies in net carbon-exchange of pine forests at different latitudes. Global Change Biology, 2007, 13, 2110-2127.	4.2	69
135	Potential CO2 removal from enhanced weathering by ecosystem responses to powdered rock. Nature Geoscience, 2021, 14, 545-549.	5.4	69
136	Enhanced Weathering and related element fluxes â€“ a cropland mesocosm approach. Biogeosciences, 2020, 17, 103-119.	1.3	68
137	Asymmetric sensitivity of first flowering date to warming and cooling in alpine plants. Ecology, 2014, 95, 3387-3398.	1.5	67
138	African crop yield reductions due to increasingly unbalanced Nitrogen and Phosphorus consumption. Global Change Biology, 2014, 20, 1278-1288.	4.2	67
139	Dynamics of metabolic responses to periods of combined heat and drought in Arabidopsis thaliana under ambient and elevated atmospheric CO2. Journal of Experimental Botany, 2018, 69, 2159-2170.	2.4	67
140	Spatial variance of spring phenology in temperate deciduous forests is constrained by background climatic conditions. Nature Communications, 2019, 10, 5388.	5.8	66
141	Soil [N] modulates soil C cycling in CO₂â€fumigated tree stands: a metaâ€analysis. Plant, Cell and Environment, 2010, 33, 2001-2011.	2.8	65
142	How do climate warming and species richness affect CO 2 fluxes in experimental grasslands?. New Phytologist, 2007, 175, 512-522.	3.5	63
143	Short photoperiod reduces the temperature sensitivity of leafâ€out in saplings of Fagus sylvatica but not in horse chestnut. Global Change Biology, 2019, 25, 1696-1703.	4.2	63
144	Water flux estimates from a Belgian Scots pine stand: a comparison of different approaches. Journal of Hydrology, 2003, 270, 230-252.	2.3	62

#	Article	IF	Citations
145	Seasonal hysteresis of net ecosystem exchange in response to temperature change: patterns and causes. Global Change Biology, 2011, 17, 3102-3114.	4.2	62
146	Spatial variability and controls over biomass stocks, carbon fluxes, and resource-use efficiencies across forest ecosystems. Trees - Structure and Function, 2014, 28, 597-611.	0.9	62
147	Atmospheric deposition, CO2, and change in the land carbon sink. Scientific Reports, 2017, 7, 9632.	1.6	62
148	Soil microbial CNP and respiration responses to organic matter and nutrient additions: Evidence from a tropical soil incubation. Soil Biology and Biochemistry, 2018, 122, 141-149.	4.2	62
149	Toward a consistency crossâ€check of eddy covariance fluxâ€"based and biometric estimates of ecosystem carbon balance. Global Biogeochemical Cycles, 2009, 23, .	1.9	61
150	Pan-European delta13C values of air and organic matter from forest ecosystems. Global Change Biology, 2005, 11, 1065-1093.	4.2	60
151	The importance of dissolved organic carbon fluxes for the carbon balance of a temperate Scots pine forest. Agricultural and Forest Meteorology, 2011, 151, 270-278.	1.9	60
152	Do successive climate extremes weaken the resistance of plant communities? An experimental study using plant assemblages. Biogeosciences, 2014, 11, 109-121.	1.3	60
153	Proton Transfer Reaction Time-of-Flight Mass Spectrometric (PTR-TOF-MS) determination of volatile organic compounds (VOCs) emitted from a biomass fire developed under stable nocturnal conditions. Atmospheric Environment, 2014, 97, 54-67.	1.9	59
154	Diagnosing phosphorus limitations in natural terrestrial ecosystems in carbon cycle models. Earth's Future, 2017, 5, 730-749.	2.4	59
155	The effect of global change on soil phosphatase activity. Global Change Biology, 2021, 27, 5989-6003.	4.2	59
156	Field-experiment constraints on the enhancement of the terrestrial carbon sink by CO2 fertilization. Nature Geoscience, 2019, 12, 809-814.	5.4	58
157	Increasing atmospheric CO2 concentrations correlate with declining nutritional status of European forests. Communications Biology, 2020, 3, 125.	2.0	58
158	Spatially explicit analysis identifies significant potential for bioenergy with carbon capture and storage in China. Nature Communications, 2021, 12, 3159.	5.8	58
159	Recent advances and future research in ecological stoichiometry. Perspectives in Plant Ecology, Evolution and Systematics, 2021, 50, 125611.	1.1	57
160	Geothermal ecosystems as natural climate change experiments: The ForHot research site in Iceland as a case study. Icelandic Agricultural Sciences, 0, 29, 53-71.	0.0	55
161	Ecosystem CO₂ fluxes of arbuscular and ectomycorrhizal dominated vegetation types are differentially influenced by precipitation and temperature. New Phytologist, 2010, 185, 226-236.	3.5	53
162	Physiological and molecular alterations in plants exposed to high [CO2] under phosphorus stress. Biotechnology Advances, 2015, 33, 303-316.	6.0	53

#	Article	IF	Citations
163	Nutrient scarcity as a selective pressure for mast seeding. Nature Plants, 2019, 5, 1222-1228.	4.7	53
164	ORCHIDEE-SOM: modeling soil organic carbon (SOC) and dissolved organic carbon (DOC) dynamics along vertical soil profiles in Europe. Geoscientific Model Development, 2018, 11, 937-957.	1.3	52
165	Stored water use and transpiration in Scots pine: a modeling analysis with ANAFORE. Tree Physiology, 2007, 27, 1671-1685.	1.4	51
166	Energy and climate benefits of bioelectricity from low-input short rotation woody crops on agricultural land over a two-year rotation. Applied Energy, 2013, 111, 862-870.	5.1	51
167	Net ecosystem production and carbon balance of an SRC poplar plantation during its first rotation. Biomass and Bioenergy, 2013, 56, 412-422.	2.9	51
168	New feed sources key to ambitious climate targets. Carbon Balance and Management, 2015, 10, 26.	1.4	51
169	Empirical support for the biogeochemical niche hypothesis in forest trees. Nature Ecology and Evolution, 2021, 5, 184-194.	3.4	50
170	On the causes of trends in the seasonal amplitude of atmospheric <scp>CO</scp>₂. Global Change Biology, 2018, 24, 608-616.	4.2	48
171	Climatic Influences on Seasonal and Spatial Differences in Soil CO2 Efflux. Ecological Studies, 2003, , 233-253.	0.4	48
172	Phenological responses of Icelandic subarctic grasslands to shortâ€term and longâ€term natural soil warming. Global Change Biology, 2017, 23, 4932-4945.	4.2	47
173	Future climate alleviates stress impact on grassland productivity through altered antioxidant capacity. Environmental and Experimental Botany, 2014, 99, 150-158.	2.0	45
174	N2O fluxes of a bio-energy poplar plantation during a two years rotation period. GCB Bioenergy, 2013, 5, 536-547.	2.5	44
175	New insights in the capability of climate models to simulate the impact of LUC based on temperature decomposition of paired site observations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5417-5436.	1.2	44
176	Simulating the onset of spring vegetation growth across the Northern Hemisphere. Global Change Biology, 2018, 24, 1342-1356.	4.2	44
177	The Integrated Carbon Observation System in Europe. Bulletin of the American Meteorological Society, 2022, 103, E855-E872.	1.7	44
178	Variation of specific leaf area and upscaling to leaf area index in mature Scots pine. Trees - Structure and Function, 2006, 20, 304-310.	0.9	43
179	The role of nutrients, productivity and climate in determining tree fruit production in European forests. New Phytologist, 2017, 213, 669-679.	3.5	42
180	Modeling leaf senescence of deciduous tree species in Europe. Global Change Biology, 2020, 26, 4104-4118.	4.2	41

#	Article	IF	Citations
181	Calibration and validation of an empirical approach to model soil CO2 efflux in a deciduous forest. Biogeochemistry, 2005, 73, 209-230.	1.7	40
182	Climatic Warming Increases Spatial Synchrony in Spring Vegetation Phenology Across the Northern Hemisphere. Geophysical Research Letters, 2019, 46, 1641-1650.	1.5	40
183	Below-ground carbon inputs contribute more than above-ground inputs to soil carbon accrual in a bioenergy poplar plantation. Plant and Soil, 2019, 434, 363-378.	1.8	40
184	Essential outcomes for COP26. Global Change Biology, 2022, 28, 1-3.	4.2	40
185	Can publication bias affect ecological research? A case study on soil respiration under elevated CO₂. New Phytologist, 2011, 190, 517-521.	3.5	39
186	Fine root biomass and turnover of two fast-growing poplar genotypes in a short-rotation coppice culture. Plant and Soil, 2013, 373, 269-283.	1.8	39
187	ORCHIMIC (v1.0), a microbe-mediated model for soil organic matter decomposition. Geoscientific Model Development, 2018, 11, 2111-2138.	1.3	39
188	Ecometabolomics for a Better Understanding of Plant Responses and Acclimation to Abiotic Factors Linked to Global Change. Metabolites, 2020, 10, 239.	1.3	39
189	Biometric and eddy covariance-based assessment of decadal carbon sequestration of a temperate Scots pine forest. Agricultural and Forest Meteorology, 2013, 174-175, 135-143.	1.9	38
190	Atmospheric turbulence triggers pronounced diel pattern in karst carbonate geochemistry. Biogeosciences, 2013, 10, 5009-5017.	1.3	38
191	Importance of nondiffusive transport for soil CO₂ efflux in a temperate mountain grassland. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 502-512.	1.3	38
192	Topographic influences on soil properties and aboveground biomass in lucerne-rich vegetation in a semi-arid environment. Geoderma, 2019, 344, 137-143.	2.3	38
193	Nutrient availability alters the correlation between spring leaf-out and autumn leaf senescence dates. Tree Physiology, 2019, 39, 1277-1284.	1.4	37
194	Towards comparable assessment of the soil nutrient status across scalesâ€"Review and development of nutrient metrics. Global Change Biology, 2020, 26, 392-409.	4.2	37
195	Soil carbon and belowground carbon balance of a shortâ€rotation coppice: assessments from three different approaches. GCB Bioenergy, 2017, 9, 299-313.	2.5	36
196	The consecutive disparity index, D: a measure of temporal variability in ecological studies. Ecosphere, 2018, 9, e02527.	1.0	36
197	Using research networks to create the comprehensive datasets needed to assess nutrient availability as a key determinant of terrestrial carbon cycling. Environmental Research Letters, 2018, 13, 125006.	2.2	36
198	Terrestrial nitrogen cycling in Earth system models revisited. New Phytologist, 2016, 210, 1165-1168.	3.5	35

#	Article	IF	Citations
199	Atmospheric deposition of elements and its relevance for nutrient budgets of tropical forests. Biogeochemistry, 2020, 149, 175-193.	1.7	35
200	Simulated soil CO2 efflux and net ecosystem exchange in a 70-year-old Belgian Scots pine stand using the process model SECRETS. Annals of Forest Science, 2001, 58, 31-46.	0.8	34
201	The influence of soil chemistry on branched tetraether lipids in mid- and high latitude soils: Implications for brGDGT- based paleothermometry. Geochimica Et Cosmochimica Acta, 2021, 310, 95-112.	1.6	34
202	Footprint-adjusted net ecosystem CO2 exchange and carbon balance components of a temperate forest. Agricultural and Forest Meteorology, 2006, 139, 344-360.	1.9	33
203	Does an extreme drought event alter the response of grassland communities to a changing climate?. Environmental and Experimental Botany, 2011, 70, 151-157.	2.0	33
204	A systemic overreaction to years versus decades of warming in a subarctic grassland ecosystem. Nature Ecology and Evolution, 2020, 4, 101-108.	3.4	33
205	Decadal water balance of a temperate Scots pine forest (<i>Pinus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 502 Td	1.3	33
206	Is the climate change mitigation effect of enhanced silicate weathering governed by biological processes?. Global Change Biology, 2022, 28, 711-726.	4.2	32
207	Simultaneous leaf- and ecosystem-level fluxes of volatile organic compounds from a poplar-based SRC plantation. Agricultural and Forest Meteorology, 2014, 187, 22-35.	1.9	31
208	Emerging negative impact of warming on summer carbon uptake in northern ecosystems. Nature Communications, 2018, 9, 5391.	5.8	31
209	Favorable effect of mycorrhizae on biomass production efficiency exceeds their carbon cost in a fertilization experiment. Ecology, 2018, 99, 2525-2534.	1.5	31
210	Needle age-related and seasonal photosynthetic capacity variation is negligible for modelling yearly gas exchange of a sparse temperate Scots pine forest. Biogeosciences, 2010, 7, 199-215.	1.3	30
211	Thermal adaptation of net ecosystem exchange. Biogeosciences, 2011, 8, 1453-1463.	1.3	30
212	Fine root and litterfall dynamics of three Korean pine (Pinus koraiensis) forests along an altitudinal gradient. Plant and Soil, 2014, 374, 19-32.	1.8	30
213	Towards a representation of priming on soil carbon decomposition in the global land biosphere model ORCHIDEE (versionÂ1.9.5.2). Geoscientific Model Development, 2016, 9, 841-855.	1.3	30
214	Combined effects of warming and elevated CO2 on the impact of drought in grassland species. Plant and Soil, 2013, 369, 497-507.	1.8	29
215	Rapid leaf development drives the seasonal pattern of volatile organic compound (VOC) fluxes in a â€˜coppicedâ€™ bioenergy poplar plantation. Plant, Cell and Environment, 2016, 39, 539-555.	2.8	29
216	Spatial Variation of Soil CO2, CH4 and N2O Fluxes Across Topographical Positions in Tropical Forests of the Guiana Shield. Ecosystems, 2018, 21, 1445-1458.	1.6	29

#	Article	IF	Citations
217	Prolonged exposure does not increase soil microbial community compositional response to warming along geothermal gradients. FEMS Microbiology Ecology, 2018, 94, .	1.3	29
218	Soil microbial community composition does not predominantly determine the variance of heterotrophic soil respiration across four subtropical forests. Scientific Reports, 2015, 5, 7854.	1.6	28
219	The North Atlantic Oscillation synchronises fruit production in western European forests. Ecography, 2017, 40, 864-874.	2.1	28
220	Towards more predictive and interdisciplinary climate change ecosystem experiments. Nature Climate Change, 2019, 9, 809-816.	8.1	28
221	Warming homogenizes apparent temperature sensitivity of ecosystem respiration. Science Advances, 2021, 7, .	4.7	28
222	Bryophyte C:N:P stoichiometry, biogeochemical niches and elementome plasticity driven by environment and coexistence. Ecology Letters, 2021, 24, 1375-1386.	3.0	28
223	Model analysis of the effects of atmospheric drivers on storage water use in Scots pine. Biogeosciences, 2007, 4, 657-671.	1.3	27
224	No signs of thermal acclimation of heterotrophic respiration from peat soils exposed to different water levels. Soil Biology and Biochemistry, 2009, 41, 2014-2016.	4.2	27
225	Carbon and water vapor fluxes over four forests in two contrasting climatic zones. Agricultural and Forest Meteorology, 2013, 180, 211-224.	1.9	27
226	Automatic high-frequency measurements of full soil greenhouse gas fluxes in a tropical forest. Biogeosciences, 2019, 16, 785-796.	1.3	27
227	Under-story contributions to stand level GPP using the process model SECRETS. Agricultural and Forest Meteorology, 2006, 139, 94-104.	1.9	26
228	Temperature dependence of greenhouse gas emissions from three hydromorphic soils at different groundwater levels. Geobiology, 2009, 7, 465-476.	1.1	25
229	Effects of arbuscular mycorrhizal fungi on grassland productivity are altered by future climate and below-ground resource availability. Environmental and Experimental Botany, 2012, 81, 62-71.	2.0	25
230	Coupled carbon and nitrogen losses in response to seven years of chronic warming in subarctic soils. Soil Biology and Biochemistry, 2019, 134, 152-161.	4.2	25
231	Soil CO₂ efflux rates in different tropical vegetation types in French Guiana. Annales Des Sciences ForestiÃ¨res, 1998, 55, 671-680.	1.1	25
232	Nitrogen biogeochemistry of a mature Scots pine forest subjected to high nitrogen loads. Biogeochemistry, 2008, 91, 201-222.	1.7	24
233	Insights into ozone deposition patterns from decade-long ozone flux measurements over a mixed temperate forest. Journal of Environmental Monitoring, 2012, 14, 1684.	2.1	24
234	Strong resilience of soil respiration components to drought-induced die-off resulting in forest secondary succession. Oecologia, 2016, 182, 27-41.	0.9	24

#	Article	IF	Citations
235	Carbon budget of Pinus sylvestris saplings after four years of exposure to elevated atmospheric carbon dioxide concentration. Tree Physiology, 2005, 25, 325-337.	1.4	23
236	An optimized fine root sampling methodology balancing accuracy and time investment. Plant and Soil, 2013, 366, 351-361.	1.8	23
237	Trends in soil solution dissolved organic carbon (DOC) concentrations across European forests. Biogeosciences, 2016, 13, 5567-5585.	1.3	23
238	Fast attrition of springtail communities by experimental drought and richnessâ€“decomposition relationships across Europe. Global Change Biology, 2019, 25, 2727-2738.	4.2	23
239	Regulation of nitrogen fixation from free-living organisms in soil and leaf litter of two tropical forests of the Guiana shield. Plant and Soil, 2020, 450, 93-110.	1.8	23
240	Uncovering the critical soil moisture thresholds of plant water stress for European ecosystems. Global Change Biology, 2022, 28, 2111-2123.	4.2	23
241	Estimation of Gross Primary Productivity (GPP) Phenology of a Short-Rotation Plantation Using Remotely Sensed Indices Derived from Sentinel-2 Images. Remote Sensing, 2020, 12, 2104.	1.8	22
242	Improving Accuracy of Herbage Yield Predictions in Perennial Ryegrass with UAV-Based Structural and Spectral Data Fusion and Machine Learning. Remote Sensing, 2021, 13, 3459.	1.8	22
243	Effects of forest management on biomass stocks in Romanian beech forests. Forest Ecosystems, 2019, 6, .	1.3	21
244	Carbonâ€“nitrogen interactions in European forests and semi-natural vegetation â€“ Part 1: Fluxes and budgets of carbon, nitrogen and greenhouse gases from ecosystem monitoring and modelling. Biogeosciences, 2020, 17, 1583-1620.	1.3	21
245	Shortened temperatureâ€relevant period of spring leafâ€out in temperateâ€zone trees. Global Change Biology, 2019, 25, 4282-4290.	4.2	20
246	Sectoral approaches to improve regional carbon budgets. Climatic Change, 2008, 88, 209-249.	1.7	19
247	Bayesian calibration of the Unified budburst model in six temperate tree species. International Journal of Biometeorology, 2012, 56, 153-164.	1.3	19
248	Patterns of local, intercontinental and interseasonal variation of soil bacterial and eukaryotic microbial communities. FEMS Microbiology Ecology, 2020, 96, .	1.3	19
249	Role of subterranean microbiota in the carbon cycle and greenhouse gas dynamics. Science of the Total Environment, 2022, 831, 154921.	3.9	19
250	Increasing calcium scarcity along Afrotropical forest succession. Nature Ecology and Evolution, 2022, 6, 1122-1131.	3.4	19
251	Modeling the effects of varying data quality on trend detection in environmental monitoring. Ecological Informatics, 2007, 2, 167-176.	2.3	18
252	Nutrient scarcity strengthens soil fauna control over leaf litter decomposition in tropical rainforests. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191300.	1.2	18

#	Article	IF	Citations
253	Phosphorus alleviation of nitrogenâ€suppressed methane sink in global grasslands. Ecology Letters, 2020, 23, 821-830.	3.0	18
254	Carbonâ€“nitrogen interactions in European forests and semi-natural vegetation â€“ Part 2: Untangling climatic, edaphic, management and nitrogen deposition effects on carbon sequestration potentials. Biogeosciences, 2020, 17, 1621-1654.	1.3	18
255	High foliar K and P resorption efficiencies in oldâ€growth tropical forests growing on nutrientâ€poor soils. Ecology and Evolution, 2021, 11, 8969-8982.	0.8	18
256	Down-regulation of the bacterial protein biosynthesis machinery in response to weeks, years, and decades of soil warming. Science Advances, 2022, 8, eabm3230.	4.7	18
257	Geothermally warmed soils reveal persistent increases in the respiratory costs of soil microbes contributing to substantial C losses. Biogeochemistry, 2018, 138, 245-260.	1.7	17
258	Weather and trade-offs between growth and reproduction regulate fruit production in European forests. Agricultural and Forest Meteorology, 2019, 279, 107711.	1.9	17
259	Coping with branch excision when measuring leaf net photosynthetic rates in a lowland tropical forest. Biotropica, 2020, 52, 608-615.	0.8	17
260	Different â€œmetabolomic nichesâ€•of the highly diverse tree species of the French Guiana rainforests. Scientific Reports, 2020, 10, 6937.	1.6	16
261	Soil thawing regulates the spring growth onset in tundra and alpine biomes. Science of the Total Environment, 2020, 742, 140637.	3.9	16
262	Influences of international agricultural trade on the global phosphorus cycle and its associated issues. Global Environmental Change, 2021, 69, 102282.	3.6	16
263	Predicting the effect of confinement on the COVID-19 spread using machine learning enriched with satellite air pollution observations. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	16
264	Bio-Energy Retains Its Mitigation Potential Under Elevated CO2. PLoS ONE, 2010, 5, e11648.	1.1	16
265	Radiocarbon dating reveals different past managements of adjacent forest soils in the Campine region, Belgium. Geoderma, 2009, 149, 137-142.	2.3	15
266	Global vegetation biomass production efficiency constrained by models and observations. Global Change Biology, 2020, 26, 1474-1484.	4.2	15
267	Response to Comments on â€œRecent global decline of CO ₂ fertilization effects on vegetation photosynthesisâ€• Science, 2021, 373, eabg7484.	6.0	15
268	Measurement of Soil Respiration. Ecological Studies, 2003, , 37-54.	0.4	15
269	Global maps and factors driving forest foliar elemental composition: the importance of evolutionary history. New Phytologist, 2022, 233, 169-181.	3.5	15
270	Effects of climate warming and declining species richness in grassland model ecosystems: acclimation of CO₂ fluxes. Biogeosciences, 2007, 4, 27-36.	1.3	14

#	Article	IF	Citations
271	Effects of seabird nitrogen input on biomass and carbon accumulation after 50 years of primary succession on a young volcanic island, Surtsey. Biogeosciences, 2014, 11, 6237-6250.	1.3	14
272	Simultaneous tree stem and soil greenhouse gas (CO₂, CH₄, N₂O) flux measurements: a novel design for continuous monitoring towards improving flux estimates and temporal resolution. New Phytologist, 2021, 230, 2487-2500.	3.5	14
273	Increased microbial expression of organic nitrogen cycling genes in long-term warmed grassland soils. ISME Communications, 2021, 1, .	1.7	14
274	Increasing gap in human height between rich and poor countries associated to their different intakes of N and P. Scientific Reports, 2017, 7, 17671.	1.6	13
275	The role of climate, foliar stoichiometry and plant diversity on ecosystem carbon balance. Global Change Biology, 2020, 26, 7067-7078.	4.2	13
276	A call for international soil experiment networks for studying, predicting, and managing global change impacts. Soil, 2015, 1, 575-582.	2.2	12
277	Strong stoichiometric resilience after litter manipulation experiments; a case study in a Chinese grassland. Biogeosciences, 2015, 12, 757-767.	1.3	12
278	Nutrient availability and climate as the main determinants of the ratio of biomass to NPP in woody and non-woody forest compartments. Trees - Structure and Function, 2016, 30, 775-783.	0.9	12
279	Impact of Soil Warming on the Plant Metabolome of Icelandic Grasslands. Metabolites, 2017, 7, 44.	1.3	12
280	No impact of tropospheric ozone on the gross primary productivity of a Belgian pine forest. Biogeosciences, 2017, 14, 1839-1855.	1.3	12
281	Different determinants of radiation use efficiency in cold and temperate forests. Global Ecology and Biogeography, 2019, 28, 1649-1667.	2.7	12
282	Unaltered soil microbial community composition, but decreased metabolic activity in a semiarid grassland after two years of passive experimental warming. Ecology and Evolution, 2020, 10, 12327-12340.	0.8	12
283	Diverging models introduce large uncertainty in future climate warming impact on spring phenology of temperate deciduous trees. Science of the Total Environment, 2021, 757, 143903.	3.9	12
284	Ecometabolomics of plantâ€“herbivore and plantâ€“fungi interactions: a synthesis study. Ecosphere, 2021, 12, e03736.	1.0	12
285	Long-term warming reduced microbial biomass but increased recent plant-derived C in microbes of a subarctic grassland. Soil Biology and Biochemistry, 2022, 167, 108590.	4.2	12
286	Arbuscular Mycorrhizal Fungi May Mitigate the Influence of a Joint Rise of Temperature and Atmospheric<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mtext>CO</mml:mtext></mml:mr Soil Respiration in Grasslands. International Journal of Ecology, 2009, 2009, 1-10.	0.3	10
287	Zea mays rhizosphere respiration, but not soil organic matter decomposition was stable across a temperature gradient. Soil Biology and Biochemistry, 2010, 42, 2030-2033.	4.2	10
288	Corrigendum to "Can current moisture responses predict soil CO₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments". Biogeosciences, 2014, 11, 3307-3308.	1.3	10

#	Article	IF	Citations
289	Combining a land surface model with life cycle assessment for identifying the optimal management of short rotation coppice in Belgium. Biomass and Bioenergy, 2019, 121, 78-88.	2.9	10
290	Comparable canopy and soil free-living nitrogen fixation rates in a lowland tropical forest. Science of the Total Environment, 2021, 754, 142202.	3.9	10
291	Negative priming of soil organic matter following long-term in situ warming of sub-arctic soils. Geoderma, 2022, 410, 115652.	2.3	10
292	Impact of Lockdowns and Winter Temperatures on Natural Gas Consumption in Europe. Earth's Future, 2022, 10, .	2.4	10
293	The inhibitory effect of difluoromethane on CH4 oxidation in reconstructed peat columns and side-effects on CO2 and N2O emissions at two water levels. Soil Biology and Biochemistry, 2009, 41, 1117-1123.	4.2	9
294	Soil carbon breakdown. Nature Geoscience, 2010, 3, 823-824.	5.4	9
295	Response to Comment on â€œGlobal Convergence in the Temperature Sensitivity of Respiration at Ecosystem Levelâ€• Science, 2011, 331, 1265-1265.	6.0	9
296	Long-term linear trends mask phenological shifts. International Journal of Biometeorology, 2016, 60, 1611-1613.	1.3	9
297	Disentangling Drought and Nutrient Effects on Soil Carbon Dioxide and Methane Fluxes in a Tropical Forest. Frontiers in Environmental Science, 2019, 7, .	1.5	9
298	Rapid root assimilation of added phosphorus in a lowland tropical rainforest of French Guiana. Soil Biology and Biochemistry, 2020, 140, 107646.	4.2	9
299	Could Global Intensification of Nitrogen Fertilisation Increase Immunogenic Proteins and Favour the Spread of Coeliac Pathology?. Foods, 2020, 9, 1602.	1.9	9
300	The Mediterranean Region as a Paradigm of the Global Decoupling of N and P Between Soils and Freshwaters. Global Biogeochemical Cycles, 2021, 35, e2020GB006874.	1.9	9
301	Decay of similarity across tropical forest communities: integrating spatial distance with soil nutrients. Ecology, 2022, 103, e03599.	1.5	9
302	Decelerating Autumn CO 2 Release With Warming Induced by Attenuated Temperature Dependence of Respiration in Northern Ecosystems. Geophysical Research Letters, 2018, 45, 5562-5571.	1.5	8
303	Soil nutrient variation along a shallow catena in Paracou, French Guiana. Soil Research, 2021, 59, 130.	0.6	8
304	Coniferous Forests (Scots and Maritime Pine): Carbon and Water Fluxes, Balances, Ecological and Ecophysiological Determinants. Ecological Studies, 2003, , 71-97.	0.4	8
305	Tropical wood stores substantial amounts of nutrients, but we have limited understanding why. Biotropica, 2022, 54, 596-606.	0.8	8
306	Phosphorus stress strongly reduced plant physiological activity, but only temporarily, in a mesocosm experiment with <i>Zea mays</i> colonized by arbuscular mycorrhizal fungi. Biogeosciences, 2022, 19, 2353-2364.	1.3	8

#	Article	IF	Citations
307	Altered response to nitrogen supply of mixed grassland communities in a future climate: a controlled environment microcosm study. Plant and Soil, 2011, 345, 375-385.	1.8	7
308	Contribution from Selected Organic Species to PM2.5 Aerosol during a Summer Field Campaign at K-Puszta, Hungary. Atmosphere, 2017, 8, 221.	1.0	7
309	Country-Level Relationships of the Human Intake of N and P, Animal and Vegetable Food, and Alcoholic Beverages with Cancer and Life Expectancy. International Journal of Environmental Research and Public Health, 2020, 17, 7240.	1.2	7
310	31P-NMR Metabolomics Revealed Species-Specific Use of Phosphorous in Trees of a French Guiana Rainforest. Molecules, 2020, 25, 3960.	1.7	7
311	Weather, pollution and biotic factors drive net forest - atmosphere exchange of CO2 at different temporal scales in a temperate-zone mixed forest. Agricultural and Forest Meteorology, 2020, 291, 108059.	1.9	7
312	Higher temperature sensitivity of flowering than leafâ€out alters the time between phenophases across temperate tree species. Global Ecology and Biogeography, 2022, 31, 901-911.	2.7	7
313	Does the stress tolerance of mixed grassland communities change in a future climate? A test with heavy metal stress (zinc pollution). Environmental Pollution, 2011, 159, 3294-3301.	3.7	6
314	Radiocarbon based assessment of soil organic matter contribution to soil respiration in a pine stand of the Campine region, Belgium. Plant and Soil, 2011, 344, 273-282.	1.8	6
315	Western Palaearctic breeding geese can alter carbon cycling in their winter habitat. Ecosphere, 2014, 5, 1-20.	1.0	6
316	Icelandic grasslands as long-term C sinks under elevated organic N inputs. Biogeochemistry, 2017, 134, 279-299.	1.7	6
317	Reply to: Nutrient scarcity cannot cause mast seeding. Nature Plants, 2020, 6, 763-765.	4.7	6
318	Vertical profiles of leaf photosynthesis and leaf traits and soil nutrients in two tropical rainforests in French Guiana before and after a 3-year nitrogen and phosphorus addition experiment. Earth System Science Data, 2022, 14, 5-18.	3.7	6
319	Contrasting phenology responses to climate warming across the northern extra-tropics. Fundamental Research, 2022, 2, 708-715.	1.6	6
320	The European carbon balance. Part 4: integration of carbon and other trace-gas fluxes. Global Change Biology, 2009, 16, 2399-2399.	4.2	5
321	Belowground carbon pools and dynamics in China's warm temperate and sub-tropical deciduous forests. Biogeosciences, 2010, 7, 275-287.	1.3	5
322	Recovery dynamics and invasibility of herbaceous plant communities after exposure to experimental climate extremes. Basic and Applied Ecology, 2015, 16, 583-591.	1.2	5
323	Fine-Root Turnover, Litterfall, and Soil Microbial Community of Three Mixed Coniferousâ€“Deciduous Forests Dominated by Korean Pine (Pinus koraiensis) Along a Latitudinal Gradient. Frontiers in Plant Science, 2019, 10, 1298.	1.7	5
324	The Lateral Carbon Pump, and the European Carbon Balance. Ecological Studies, 2008, , 341-360.	0.4	5

#	Article	IF	Citations
325	Fluorescence ratio and photochemical reflectance index as a proxy for photosynthetic quantum efficiency of photosystem II along a phosphorus gradient. Agricultural and Forest Meteorology, 2022, 322, 109019.	1.9	5
326	ORCHIDEE-SRC v1.0: an extension of the land surface model ORCHIDEE for simulating short rotation coppice poplar plantations. Geoscientific Model Development, 2015, 8, 1461-1471.	1.3	4
327	Warming affects soil metabolome: The case study of Icelandic grasslands. European Journal of Soil Biology, 2021, 105, 103317.	1.4	4
328	Impact of Nutrient Additions on Freeâ€Living Nitrogen Fixation in Litter and Soil of Two Frenchâ€Guianese Lowland Tropical Forests. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG006023.	1.3	4
329	Forest annual carbon cost: reply. Ecology, 2011, 92, 1998-2002.	1.5	3
330	Contrasting nitrogen and phosphorus fertilization effects on soil terpene exchanges in a tropical forest. Science of the Total Environment, 2022, 802, 149769.	3.9	3
331	Fine Root and Rhizosphere Respiration of Young Scots Pine Seedlings under Elevated and Ambient CO2. Forestry Sciences, 1997, , 187-192.	0.4	3
332	Replies to the comments by F. Hupet, M. Vanclooster on â€˜Water flux estimates from a Belgian Scots pine stand: a comparison of different approachesâ€™. Journal of Hydrology, 2004, 291, 154-157.	2.3	2
333	Semi-empirical modelling of the response of soil respiration to environmental factors in laboratory and field conditions. , 2010, , 207-220.		2
334	Corrigendum to â€œFluxes of the greenhouse gases (CO2, CH4 and N2O) above a short-rotation poplar plantation after conversion from agricultural landâ€•[Agric. For. Meteorol. 169 (2012) 100â€“110]. Agricultural and Forest Meteorology, 2013, 169, 211.	1.9	2
335	Reply to 'Uncertain effects of nutrient availability on global forest carbon balance' and 'Data quality and the role of nutrients in forest carbon-use efficiency'. Nature Climate Change, 2015, 5, 960-961.	8.1	2
336	Can lightâ€saturated photosynthesis in lowland tropical forests be estimated by one light level?. Biotropica, 2020, 52, 1183-1193.	0.8	2
337	Tree Species and Epiphyte Taxa Determine the â€œMetabolomic nicheâ€•of Canopy Suspended Soils in a Species-Rich Lowland Tropical Rainforest. Metabolites, 2021, 11, 718.	1.3	2
338	Nutrients control reproductive traits of hygrophytic bryophytes. Freshwater Biology, 2021, 66, 1436-1446.	1.2	1
339	Possible pathways for balancing CO2 emissions and sinks as agreed in Paris COP21. Ecosistemas, 2017, 26, 103-105.	0.2	1
340	Appendix: Towards a standardized protocol for the measurement of soil CO₂ efflux. , 2010, , 272-280.		0
341	Accounting the Drought into the in Situ Vegetation Indices in Heathland Ecosystem. , 2021, , .		0
342	Landscape heterogeneity around flux measurement stations investigated through Sentinel-2 and PROBA-V satellite imagery. , 2018, , .		0