

Ivan A Janssens

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/5126665/ivan-a-janssens-publications-by-year.pdf>

Version: 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

345
papers

34,135
citations

83
h-index

180
g-index

378
ext. papers

40,944
ext. citations

9
avg, IF

7.2
L-index

#	Paper	IF	Citations
345	Contrasting phenology responses to climate warming across the northern extra-tropics. <i>Fundamental Research</i> , 2022 ,		1
344	Impact of Lockdowns and Winter Temperatures on Natural Gas Consumption in Europe. <i>Earth's Future</i> , 2022 , 10,	7.9	3
343	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. <i>Earth System Science Data</i> , 2022 , 14, 5-18	10.5	0
342	Negative priming of soil organic matter following long-term in situ warming of sub-arctic soils. <i>Geoderma</i> , 2022 , 410, 115652	6.7	1
341	Global maps and factors driving forest foliar elemental composition: the importance of evolutionary history. <i>New Phytologist</i> , 2022 , 233, 169-181	9.8	3
340	Contrasting nitrogen and phosphorus fertilization effects on soil terpene exchanges in a tropical forest. <i>Science of the Total Environment</i> , 2022 , 802, 149769	10.2	
339	Higher temperature sensitivity of flowering than leaf-out alters the time between phenophases across temperate tree species. <i>Global Ecology and Biogeography</i> , 2022 , 31, 901-911	6.1	1
338	Down-regulation of the bacterial protein biosynthesis machinery in response to weeks, years, and decades of soil warming.. <i>Science Advances</i> , 2022 , 8, eabm3230	14.3	0
337	Long-term warming reduced microbial biomass but increased recent plant-derived C in microbes of a subarctic grassland. <i>Soil Biology and Biochemistry</i> , 2022 , 167, 108590	7.5	1
336	Role of subterranean microbiota in the carbon cycle and greenhouse gas dynamics.. <i>Science of the Total Environment</i> , 2022 , 154921	10.2	0
335	Phosphorus stress strongly reduced plant physiological activity, but only temporarily, in a mesocosm experiment with <i>Zea mays</i> colonized by arbuscular mycorrhizal fungi. <i>Biogeosciences</i> , 2022 , 19, 2353-2364	4.6	0
334	Fluorescence ratio and photochemical reflectance index as a proxy for photosynthetic quantum efficiency of photosystem II along a phosphorus gradient. <i>Agricultural and Forest Meteorology</i> , 2022 , 322, 109019	5.8	0
333	Decay of similarity across tropical forest communities: integrating spatial distance with soil nutrients. <i>Ecology</i> , 2021 , e03599	4.6	1
332	Is the climate change mitigation effect of enhanced silicate weathering governed by biological processes?. <i>Global Change Biology</i> , 2021 ,	11.4	1
331	The Integrated Carbon Observation System in Europe. <i>Bulletin of the American Meteorological Society</i> , 2021 , 1-54	6.1	6
330	Warming homogenizes apparent temperature sensitivity of ecosystem respiration. <i>Science Advances</i> , 2021 , 7,	14.3	6
329	Simultaneous tree stem and soil greenhouse gas (CO ₂ , CH ₄ , N ₂ O) flux measurements: a novel design for continuous monitoring towards improving flux estimates and temporal resolution. <i>New Phytologist</i> , 2021 , 230, 2487-2500	9.8	2

328	Bryophyte C:N:P stoichiometry, biogeochemical niches and elementome plasticity driven by environment and coexistence. <i>Ecology Letters</i> , 2021 , 24, 1375-1386	10	6
327	Nutrients control reproductive traits of hygrophytic bryophytes. <i>Freshwater Biology</i> , 2021 , 66, 1436-1446	6.1	1
326	Spatially explicit analysis identifies significant potential for bioenergy with carbon capture and storage in China. <i>Nature Communications</i> , 2021 , 12, 3159	17.4	14
325	Recent advances and future research in ecological stoichiometry. <i>Perspectives in Plant Ecology, Evolution and Systematics</i> , 2021 , 50, 125611	3	10
324	High foliar K and P resorption efficiencies in old-growth tropical forests growing on nutrient-poor soils. <i>Ecology and Evolution</i> , 2021 , 11, 8969-8982	2.8	4
323	Influences of international agricultural trade on the global phosphorus cycle and its associated issues. <i>Global Environmental Change</i> , 2021 , 69, 102282	10.1	2
322	Potential CO ₂ removal from enhanced weathering by ecosystem responses to powdered rock. <i>Nature Geoscience</i> , 2021 , 14, 545-549	18.3	10
321	Warming affects soil metabolome: The case study of Icelandic grasslands. <i>European Journal of Soil Biology</i> , 2021 , 105, 103317	2.9	
320	Impact of Nutrient Additions on Free-Living Nitrogen Fixation in Litter and Soil of Two French-Guianese Lowland Tropical Forests. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021 , 126, e2020JG006023	3.7	2
319	Diverging models introduce large uncertainty in future climate warming impact on spring phenology of temperate deciduous trees. <i>Science of the Total Environment</i> , 2021 , 757, 143903	10.2	3
318	Comparable canopy and soil free-living nitrogen fixation rates in a lowland tropical forest. <i>Science of the Total Environment</i> , 2021 , 754, 142202	10.2	3
317	Empirical support for the biogeochemical niche hypothesis in forest trees. <i>Nature Ecology and Evolution</i> , 2021 , 5, 184-194	12.3	14
316	The Mediterranean Region as a Paradigm of the Global Decoupling of N and P Between Soils and Freshwaters. <i>Global Biogeochemical Cycles</i> , 2021 , 35, e2020GB006874	5.9	2
315	Predicting the effect of confinement on the COVID-19 spread using machine learning enriched with satellite air pollution observations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	4
314	The effect of global change on soil phosphatase activity. <i>Global Change Biology</i> , 2021 , 27, 5989-6003	11.4	8
313	Improving Accuracy of Herbage Yield Predictions in Perennial Ryegrass with UAV-Based Structural and Spectral Data Fusion and Machine Learning. <i>Remote Sensing</i> , 2021 , 13, 3459	5	6
312	The three major axes of terrestrial ecosystem function. <i>Nature</i> , 2021 , 598, 468-472	50.4	8
311	Ecometabolomics of plant-herbivore and plant-fungi interactions: a synthesis study. <i>Ecosphere</i> , 2021 , 12, e03736	3.1	3

310	Response to Comments on "Recent global decline of CO fertilization effects on vegetation photosynthesis". <i>Science</i> , 2021 , 373, eabg7484	33.3	2
309	The influence of soil chemistry on branched tetraether lipids in mid- and high latitude soils: Implications for brGDGT- based paleothermometry. <i>Geochimica Et Cosmochimica Acta</i> , 2021 , 310, 95-112	5.5	7
308	Soil nutrient variation along a shallow catena in Paracou, French Guiana. <i>Soil Research</i> , 2021 , 59, 130	1.8	2
307	Uncovering the critical soil moisture thresholds of plant water stress for European ecosystems.. <i>Global Change Biology</i> , 2021 ,	11.4	5
306	Recent global decline of CO fertilization effects on vegetation photosynthesis. <i>Science</i> , 2020 , 370, 1295-1300	13.9	107
305	Atmospheric deposition of elements and its relevance for nutrient budgets of tropical forests. <i>Biogeochemistry</i> , 2020 , 149, 175-193	3.8	17
304	Ecometabolomics for a Better Understanding of Plant Responses and Acclimation to Abiotic Factors Linked to Global Change. <i>Metabolites</i> , 2020 , 10,	5.6	20
303	Reply to: Nutrient scarcity cannot cause mast seeding. <i>Nature Plants</i> , 2020 , 6, 763-765	11.5	3
302	Can light-saturated photosynthesis in lowland tropical forests be estimated by one light level?. <i>Biotropica</i> , 2020 , 52, 1183-1193	2.3	1
301	Different "metabolomic niches" of the highly diverse tree species of the French Guiana rainforests. <i>Scientific Reports</i> , 2020 , 10, 6937	4.9	6
300	Weather, pollution and biotic factors drive net forest - atmosphere exchange of CO ₂ at different temporal scales in a temperate-zone mixed forest. <i>Agricultural and Forest Meteorology</i> , 2020 , 291, 108059	5.8	2
299	Coping with branch excision when measuring leaf net photosynthetic rates in a lowland tropical forest. <i>Biotropica</i> , 2020 , 52, 608-615	2.3	5
298	Increasing atmospheric CO concentrations correlate with declining nutritional status of European forests. <i>Communications Biology</i> , 2020 , 3, 125	6.7	25
297	Emergent constraint on crop yield response to warmer temperature from field experiments. <i>Nature Sustainability</i> , 2020 , 3, 908-916	22.1	30
296	Potential for large-scale CO removal via enhanced rock weathering with croplands. <i>Nature</i> , 2020 , 583, 242-248	50.4	89
295	Soil thawing regulates the spring growth onset in tundra and alpine biomes. <i>Science of the Total Environment</i> , 2020 , 742, 140637	10.2	5
294	Phosphorus alleviation of nitrogen-suppressed methane sink in global grasslands. <i>Ecology Letters</i> , 2020 , 23, 821-830	10	9
293	Soil properties explain tree growth and mortality, but not biomass, across phosphorus-depleted tropical forests. <i>Scientific Reports</i> , 2020 , 10, 2302	4.9	35

292	Patterns of local, intercontinental and interseasonal variation of soil bacterial and eukaryotic microbial communities. <i>FEMS Microbiology Ecology</i> , 2020 , 96,	4.3	6
291	CarbonNitrogen interactions in European forests and semi-natural vegetation [Part 1: Fluxes and budgets of carbon, nitrogen and greenhouse gases from ecosystem monitoring and modelling. <i>Biogeosciences</i> , 2020 , 17, 1583-1620	4.6	12
290	Modeling leaf senescence of deciduous tree species in Europe. <i>Global Change Biology</i> , 2020 , 26, 4104-4118	11.4	17
289	Rapid root assimilation of added phosphorus in a lowland tropical rainforest of French Guiana. <i>Soil Biology and Biochemistry</i> , 2020 , 140, 107646	7.5	3
288	Anthropogenic global shifts in biospheric N and P concentrations and ratios and their impacts on biodiversity, ecosystem productivity, food security, and human health. <i>Global Change Biology</i> , 2020 , 26, 1962	11.4	50
287	Summer soil drying exacerbated by earlier spring greening of northern vegetation. <i>Science Advances</i> , 2020 , 6, eaax0255	14.3	106
286	A systemic overreaction to years versus decades of warming in a subarctic grassland ecosystem. <i>Nature Ecology and Evolution</i> , 2020 , 4, 101-108	12.3	20
285	Unaltered soil microbial community composition, but decreased metabolic activity in a semiarid grassland after two years of passive experimental warming. <i>Ecology and Evolution</i> , 2020 , 10, 12327-12340	2.8	5
284	The role of climate, foliar stoichiometry and plant diversity on ecosystem carbon balance. <i>Global Change Biology</i> , 2020 , 26, 7067-7078	11.4	2
283	Could Global Intensification of Nitrogen Fertilisation Increase Immunogenic Proteins and Favour the Spread of Coeliac Pathology?. <i>Foods</i> , 2020 , 9,	4.9	4
282	Estimation of Gross Primary Productivity (GPP) Phenology of a Short-Rotation Plantation Using Remotely Sensed Indices Derived from Sentinel-2 Images. <i>Remote Sensing</i> , 2020 , 12, 2104	5	9
281	Country-Level Relationships of the Human Intake of N and P, Animal and Vegetable Food, and Alcoholic Beverages with Cancer and Life Expectancy. <i>International Journal of Environmental Research and Public Health</i> , 2020 , 17,	4.6	5
280	P-NMR Metabolomics Revealed Species-Specific Use of Phosphorous in Trees of a French Guiana Rainforest. <i>Molecules</i> , 2020 , 25,	4.8	2
279	Regulation of nitrogen fixation from free-living organisms in soil and leaf litter of two tropical forests of the Guiana shield. <i>Plant and Soil</i> , 2020 , 450, 93-110	4.2	10
278	Global vegetation biomass production efficiency constrained by models and observations. <i>Global Change Biology</i> , 2020 , 26, 1474-1484	11.4	5
277	Towards comparable assessment of the soil nutrient status across scales-Review and development of nutrient metrics. <i>Global Change Biology</i> , 2020 , 26, 392-409	11.4	22
276	The global cropland-sparing potential of high-yield farming. <i>Nature Sustainability</i> , 2020 , 3, 281-289	22.1	59
275	Enhanced Weathering and related element fluxes [a cropland mesocosm approach. <i>Biogeosciences</i> , 2020 , 17, 103-119	4.6	17

274	Carbon-Nitrogen interactions in European forests and semi-natural vegetation [Part 2: Untangling climatic, edaphic, management and nitrogen deposition effects on carbon sequestration potentials. <i>Biogeosciences</i> , 2020 , 17, 1621-1654	4.6	8
273	Disentangling Drought and Nutrient Effects on Soil Carbon Dioxide and Methane Fluxes in a Tropical Forest. <i>Frontiers in Environmental Science</i> , 2019 , 7,	4.8	4
272	Towards more predictive and interdisciplinary climate change ecosystem experiments. <i>Nature Climate Change</i> , 2019 , 9, 809-816	21.4	20
271	Different determinants of radiation use efficiency in cold and temperate forests. <i>Global Ecology and Biogeography</i> , 2019 , 28, 1649-1667	6.1	4
270	Nutrient scarcity strengthens soil fauna control over leaf litter decomposition in tropical rainforests. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2019 , 286, 20191300	4.4	11
269	Field-experiment constraints on the enhancement of the terrestrial carbon sink by CO ₂ fertilization. <i>Nature Geoscience</i> , 2019 , 12, 809-814	18.3	33
268	Weather and trade-offs between growth and reproduction regulate fruit production in European forests. <i>Agricultural and Forest Meteorology</i> , 2019 , 279, 107711	5.8	11
267	Fine-Root Turnover, Litterfall, and Soil Microbial Community of Three Mixed Coniferous-Deciduous Forests Dominated by Korean Pine () Along a Latitudinal Gradient. <i>Frontiers in Plant Science</i> , 2019 , 10, 1298	6.2	0
266	Combining a land surface model with life cycle assessment for identifying the optimal management of short rotation coppice in Belgium. <i>Biomass and Bioenergy</i> , 2019 , 121, 78-88	5.3	9
265	Climatic Warming Increases Spatial Synchrony in Spring Vegetation Phenology Across the Northern Hemisphere. <i>Geophysical Research Letters</i> , 2019 , 46, 1641-1650	4.9	18
264	Fast attrition of springtail communities by experimental drought and richness-decomposition relationships across Europe. <i>Global Change Biology</i> , 2019 , 25, 2727-2738	11.4	9
263	Nutrient availability alters the correlation between spring leaf-out and autumn leaf senescence dates. <i>Tree Physiology</i> , 2019 , 39, 1277-1284	4.2	16
262	The bioelements, the elementome, and the biogeochemical niche. <i>Ecology</i> , 2019 , 100, e02652	4.6	71
261	Plant phenology and global climate change: Current progresses and challenges. <i>Global Change Biology</i> , 2019 , 25, 1922-1940	11.4	382
260	Automatic high-frequency measurements of full soil greenhouse gas fluxes in a tropical forest. <i>Biogeosciences</i> , 2019 , 16, 785-796	4.6	15
259	Air temperature optima of vegetation productivity across global biomes. <i>Nature Ecology and Evolution</i> , 2019 , 3, 772-779	12.3	128
258	Topographic influences on soil properties and aboveground biomass in lucerne-rich vegetation in a semi-arid environment. <i>Geoderma</i> , 2019 , 344, 137-143	6.7	21
257	Coupled carbon and nitrogen losses in response to seven years of chronic warming in subarctic soils. <i>Soil Biology and Biochemistry</i> , 2019 , 134, 152-161	7.5	13

256	Daylength helps temperate deciduous trees to leaf-out at the optimal time. <i>Global Change Biology</i> , 2019 , 25, 2410-2418	11.4	50
255	Effects of forest management on biomass stocks in Romanian beech forests. <i>Forest Ecosystems</i> , 2019 , 6,	3.8	12
254	Lipid biomarker temperature proxy responds to abrupt shift in the bacterial community composition in geothermally heated soils. <i>Organic Geochemistry</i> , 2019 , 137, 103897	3.1	37
253	Divergent changes in the elevational gradient of vegetation activities over the last 30 years. <i>Nature Communications</i> , 2019 , 10, 2970	17.4	59
252	Shortened temperature-relevant period of spring leaf-out in temperate-zone trees. <i>Global Change Biology</i> , 2019 , 25, 4282-4290	11.4	12
251	Microbial carbon limitation: The need for integrating microorganisms into our understanding of ecosystem carbon cycling. <i>Global Change Biology</i> , 2019 , 26, 1953	11.4	74
250	Short photoperiod reduces the temperature sensitivity of leaf-out in saplings of <i>Fagus sylvatica</i> but not in horse chestnut. <i>Global Change Biology</i> , 2019 , 25, 1696-1703	11.4	32
249	Spatial variance of spring phenology in temperate deciduous forests is constrained by background climatic conditions. <i>Nature Communications</i> , 2019 , 10, 5388	17.4	24
248	Nutrient scarcity as a selective pressure for mast seeding. <i>Nature Plants</i> , 2019 , 5, 1222-1228	11.5	34
247	Global trends in carbon sinks and their relationships with CO ₂ and temperature. <i>Nature Climate Change</i> , 2019 , 9, 73-79	21.4	77
246	Below-ground carbon inputs contribute more than above-ground inputs to soil carbon accrual in a bioenergy poplar plantation. <i>Plant and Soil</i> , 2019 , 434, 363-378	4.2	21
245	Dynamics of metabolic responses to periods of combined heat and drought in <i>Arabidopsis thaliana</i> under ambient and elevated atmospheric CO ₂ . <i>Journal of Experimental Botany</i> , 2018 , 69, 2159-2170	7	44
244	Spatial Variation of Soil CO ₂ , CH ₄ and N ₂ O Fluxes Across Topographical Positions in Tropical Forests of the Guiana Shield. <i>Ecosystems</i> , 2018 , 21, 1445-1458	3.9	20
243	Geothermally warmed soils reveal persistent increases in the respiratory costs of soil microbes contributing to substantial C losses. <i>Biogeochemistry</i> , 2018 , 138, 245-260	3.8	6
242	Extension of the growing season increases vegetation exposure to frost. <i>Nature Communications</i> , 2018 , 9, 426	17.4	106
241	Impact of priming on global soil carbon stocks. <i>Global Change Biology</i> , 2018 , 24, 1873-1883	11.4	64
240	Prolonged exposure does not increase soil microbial community compositional response to warming along geothermal gradients. <i>FEMS Microbiology Ecology</i> , 2018 , 94,	4.3	17
239	Simulating the onset of spring vegetation growth across the Northern Hemisphere. <i>Global Change Biology</i> , 2018 , 24, 1342-1356	11.4	25

238	On the causes of trends in the seasonal amplitude of atmospheric CO. <i>Global Change Biology</i> , 2018 , 24, 608-616	11.4	35
237	Decelerating Autumn CO ₂ Release With Warming Induced by Attenuated Temperature Dependence of Respiration in Northern Ecosystems. <i>Geophysical Research Letters</i> , 2018 , 45, 5562-5571	4.9	4
236	Larger temperature response of autumn leaf senescence than spring leaf-out phenology. <i>Global Change Biology</i> , 2018 , 24, 2159-2168	11.4	62
235	ORCHIMIC (v1.0), a microbe-mediated model for soil organic matter decomposition. <i>Geoscientific Model Development</i> , 2018 , 11, 2111-2138	6.3	31
234	Emerging negative impact of warming on summer carbon uptake in northern ecosystems. <i>Nature Communications</i> , 2018 , 9, 5391	17.4	13
233	The consecutive disparity index, D: a measure of temporal variability in ecological studies. <i>Ecosphere</i> , 2018 , 9, e02527	3.1	19
232	Using research networks to create the comprehensive datasets needed to assess nutrient availability as a key determinant of terrestrial carbon cycling. <i>Environmental Research Letters</i> , 2018 , 13, 125006	6.2	21
231	Favorable effect of mycorrhizae on biomass production efficiency exceeds their carbon cost in a fertilization experiment. <i>Ecology</i> , 2018 , 99, 2525-2534	4.6	19
230	Microbial temperature sensitivity and biomass change explain soil carbon loss with warming. <i>Nature Climate Change</i> , 2018 , 8, 885-889	21.4	110
229	Soil microbial CNP and respiration responses to organic matter and nutrient additions: Evidence from a tropical soil incubation. <i>Soil Biology and Biochemistry</i> , 2018 , 122, 141-149	7.5	30
228	ORCHIDEE-SOM: modeling soil organic carbon (SOC) and dissolved organic carbon (DOC) dynamics along vertical soil profiles in Europe. <i>Geoscientific Model Development</i> , 2018 , 11, 937-957	6.3	28
227	Soil carbon and belowground carbon balance of a short-rotation coppice: assessments from three different approaches. <i>GCB Bioenergy</i> , 2017 , 9, 299-313	5.6	28
226	Plant invasion is associated with higher plant-soil nutrient concentrations in nutrient-poor environments. <i>Global Change Biology</i> , 2017 , 23, 1282-1291	11.4	91
225	The North Atlantic Oscillation synchronises fruit production in western European forests. <i>Ecography</i> , 2017 , 40, 864-874	6.5	26
224	Stand age and species richness dampen interannual variation of ecosystem-level photosynthetic capacity. <i>Nature Ecology and Evolution</i> , 2017 , 1, 48	12.3	60
223	Pathways for balancing CO emissions and sinks. <i>Nature Communications</i> , 2017 , 8, 14856	17.4	72
222	Changes in nutrient concentrations of leaves and roots in response to global change factors. <i>Global Change Biology</i> , 2017 , 23, 3849-3856	11.4	106
221	Nutrient-cycling mechanisms other than the direct absorption from soil may control forest structure and dynamics in poor Amazonian soils. <i>Scientific Reports</i> , 2017 , 7, 45017	4.9	53

220	Weakening temperature control on the interannual variations of spring carbon uptake across northern lands. <i>Nature Climate Change</i> , 2017 , 7, 359-363	21.4	107
219	Phenological responses of Icelandic subarctic grasslands to short-term and long-term natural soil warming. <i>Global Change Biology</i> , 2017 , 23, 4932-4945	11.4	26
218	Global patterns of phosphatase activity in natural soils. <i>Scientific Reports</i> , 2017 , 7, 1337	4.9	179
217	Global forest carbon uptake due to nitrogen and phosphorus deposition from 1850 to 2100. <i>Global Change Biology</i> , 2017 , 23, 4854-4872	11.4	95
216	Diagnosing phosphorus limitations in natural terrestrial ecosystems in carbon cycle models. <i>Earth's Future</i> , 2017 , 5, 730-749	7.9	33
215	Global pattern and controls of soil microbial metabolic quotient. <i>Ecological Monographs</i> , 2017 , 87, 429-441	6.8	68
214	Velocity of change in vegetation productivity over northern high latitudes. <i>Nature Ecology and Evolution</i> , 2017 , 1, 1649-1654	12.3	43
213	ORCHIDEE-SOM: Modeling soil organic carbon (SOC) and dissolved organic carbon (DOC) dynamics along vertical soil profiles in Europe 2017 ,		1
212	No impact of tropospheric ozone on the gross primary productivity of a Belgian pine forest. <i>Biogeosciences</i> , 2017 , 14, 1839-1855	4.6	8
211	Shifting from a fertilization-dominated to a warming-dominated period. <i>Nature Ecology and Evolution</i> , 2017 , 1, 1438-1445	12.3	99
210	Atmospheric deposition, CO ₂ , and change in the land carbon sink. <i>Scientific Reports</i> , 2017 , 7, 9632	4.9	41
209	Icelandic grasslands as long-term C sinks under elevated organic N inputs. <i>Biogeochemistry</i> , 2017 , 134, 279-299	3.8	3
208	Temperature increase reduces global yields of major crops in four independent estimates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 9326-9331	11.5	886
207	The role of nutrients, productivity and climate in determining tree fruit production in European forests. <i>New Phytologist</i> , 2017 , 213, 669-679	9.8	31
206	Increasing gap in human height between rich and poor countries associated to their different intakes of N and P. <i>Scientific Reports</i> , 2017 , 7, 17671	4.9	10
205	A representation of the phosphorus cycle for ORCHIDEE (revision 4520). <i>Geoscientific Model Development</i> , 2017 , 10, 3745-3770	6.3	78
204	Impact of Soil Warming on the Plant Metabolome of Icelandic Grasslands. <i>Metabolites</i> , 2017 , 7,	5.6	7
203	Contribution from Selected Organic Species to PM _{2.5} Aerosol during a Summer Field Campaign at K-Puszt, Hungary. <i>Atmosphere</i> , 2017 , 8, 221	2.7	5

202	Plausible rice yield losses under future climate warming. <i>Nature Plants</i> , 2016 , 3, 16202	11.5	55
201	Three times greater weight of daytime than of night-time temperature on leaf unfolding phenology in temperate trees. <i>New Phytologist</i> , 2016 , 212, 590-597	9.8	52
200	European land CO2 sink influenced by NAO and East-Atlantic Pattern coupling. <i>Nature Communications</i> , 2016 , 7, 10315	17.4	54
199	Foliar and soil concentrations and stoichiometry of nitrogen and phosphorous across European <i>Pinus sylvestris</i> forests: relationships with climate, N deposition and tree growth. <i>Functional Ecology</i> , 2016 , 30, 676-689	5.6	63
198	Delayed autumn phenology in the Northern Hemisphere is related to change in both climate and spring phenology. <i>Global Change Biology</i> , 2016 , 22, 3702-3711	11.4	199
197	Nutrient availability and climate as the main determinants of the ratio of biomass to NPP in woody and non-woody forest compartments. <i>Trees - Structure and Function</i> , 2016 , 30, 775-783	2.6	10
196	Strong resilience of soil respiration components to drought-induced die-off resulting in forest secondary succession. <i>Oecologia</i> , 2016 , 182, 27-41	2.9	18
195	Geothermal ecosystems as natural climate change experiments: The ForHot research site in Iceland as a case study. <i>Icelandic Agricultural Sciences</i> , 2016 , 29, 53-71		26
194	Trends in soil solution dissolved organic carbon (DOC) concentrations across European forests. <i>Biogeosciences</i> , 2016 , 13, 5567-5585	4.6	15
193	Towards a representation of priming on soil carbon decomposition in the global land biosphere model ORCHIDEE (version 9.5.2). <i>Geoscientific Model Development</i> , 2016 , 9, 841-855	6.3	19
192	Future Climate CO2 Levels Mitigate Stress Impact on Plants: Increased Defense or Decreased Challenge?. <i>Frontiers in Plant Science</i> , 2016 , 7, 556	6.2	49
191	Few multiyear precipitation-reduction experiments find a shift in the productivity-precipitation relationship. <i>Global Change Biology</i> , 2016 , 22, 2570-81	11.4	84
190	Strong impacts of daily minimum temperature on the green-up date and summer greenness of the Tibetan Plateau. <i>Global Change Biology</i> , 2016 , 22, 3057-66	11.4	147
189	Terrestrial nitrogen cycling in Earth system models revisited. <i>New Phytologist</i> , 2016 , 210, 1165-8	9.8	22
188	Rapid leaf development drives the seasonal pattern of volatile organic compound (VOC) fluxes in a 'coppiced' bioenergy poplar plantation. <i>Plant, Cell and Environment</i> , 2016 , 39, 539-55	8.4	22
187	Evaluating the convergence between eddy-covariance and biometric methods for assessing carbon budgets of forests. <i>Nature Communications</i> , 2016 , 7, 13717	17.4	64
186	Long-term linear trends mask phenological shifts. <i>International Journal of Biometeorology</i> , 2016 , 60, 1611-1613		134
185	Increased heat requirement for leaf flushing in temperate woody species over 1980-2012: effects of chilling, precipitation and insolation. <i>Global Change Biology</i> , 2015 , 21, 2687-2697	11.4	103

184	Soil microbial community composition does not predominantly determine the variance of heterotrophic soil respiration across four subtropical forests. <i>Scientific Reports</i> , 2015 , 5, 7854	4.9	21
183	A call for international soil experiment networks for studying, predicting, and managing global change impacts 2015 ,		4
182	Precipitation impacts on vegetation spring phenology on the Tibetan Plateau. <i>Global Change Biology</i> , 2015 , 21, 3647-56	11.4	260
181	Leaf onset in the northern hemisphere triggered by daytime temperature. <i>Nature Communications</i> , 2015 , 6, 6911	17.4	261
180	Physiological and molecular alterations in plants exposed to high [CO ₂] under phosphorus stress. <i>Biotechnology Advances</i> , 2015 , 33, 303-16	17.8	42
179	Declining global warming effects on the phenology of spring leaf unfolding. <i>Nature</i> , 2015 , 526, 104-7	50.4	409
178	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'. <i>Nature Climate Change</i> , 2015 , 5, 960-961	21.4	2
177	Seasonally different response of photosynthetic activity to daytime and night-time warming in the Northern Hemisphere. <i>Global Change Biology</i> , 2015 , 21, 377-87	11.4	48
176	Biomass production efficiency controlled by management in temperate and boreal ecosystems. <i>Nature Geoscience</i> , 2015 , 8, 843-846	18.3	79
175	Recovery dynamics and invasibility of herbaceous plant communities after exposure to experimental climate extremes. <i>Basic and Applied Ecology</i> , 2015 , 16, 583-591	3.2	4
174	Foliar elemental composition of European forest tree species associated with evolutionary traits and present environmental and competitive conditions. <i>Global Ecology and Biogeography</i> , 2015 , 24, 240-255	6.1	73
173	New insights in the capability of climate models to simulate the impact of LUC based on temperature decomposition of paired site observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 5417-5436	4.4	36
172	New feed sources key to ambitious climate targets. <i>Carbon Balance and Management</i> , 2015 , 10, 26	3.6	39
171	Importance of nondiffusive transport for soil CO ₂ efflux in a temperate mountain grassland. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015 , 120, 502-512	3.7	30
170	A call for international soil experiment networks for studying, predicting, and managing global change impacts. <i>Soil</i> , 2015 , 1, 575-582	5.8	11
169	Strong stoichiometric resilience after litter manipulation experiments; a case study in a Chinese grassland. <i>Biogeosciences</i> , 2015 , 12, 757-767	4.6	6
168	ORCHIDEE-SRC v1.0: an extension of the land surface model ORCHIDEE for simulating short rotation coppice poplar plantations. <i>Geoscientific Model Development</i> , 2015 , 8, 1461-1471	6.3	4
167	Priming of soil organic matter decomposition scales linearly with microbial biomass response to litter input in steppe vegetation. <i>Oikos</i> , 2015 , 124, 649-657	4	48

166	Joint control of terrestrial gross primary productivity by plant phenology and physiology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 2788-93	11.5	181
165	Sensitivity of decomposition rates of soil organic matter with respect to simultaneous changes in temperature and moisture. <i>Journal of Advances in Modeling Earth Systems</i> , 2015 , 7, 335-356	7.1	178
164	Above-ground woody carbon sequestration measured from tree rings is coherent with net ecosystem productivity at five eddy-covariance sites. <i>New Phytologist</i> , 2014 , 201, 1289-1303	9.8	126
163	Unexpected role of winter precipitation in determining heat requirement for spring vegetation green-up at northern middle and high latitudes. <i>Global Change Biology</i> , 2014 , 20, 3743-55	11.4	122
162	Physiological, biochemical, and genome-wide transcriptional analysis reveals that elevated CO ₂ mitigates the impact of combined heat wave and drought stress in <i>Arabidopsis thaliana</i> at multiple organizational levels. <i>Global Change Biology</i> , 2014 , 20, 3670-85	11.4	111
161	Soil respiration under climate warming: differential response of heterotrophic and autotrophic respiration. <i>Global Change Biology</i> , 2014 , 20, 3229-37	11.4	177
160	Thermal acclimation of organic matter decomposition in an artificial forest soil is related to shifts in microbial community structure. <i>Soil Biology and Biochemistry</i> , 2014 , 71, 1-12	7.5	69
159	Future climate alleviates stress impact on grassland productivity through altered antioxidant capacity. <i>Environmental and Experimental Botany</i> , 2014 , 99, 150-158	5.9	32
158	Recent spring phenology shifts in western Central Europe based on multiscale observations. <i>Global Ecology and Biogeography</i> , 2014 , 23, 1255-1263	6.1	143
157	High clay content accelerates the decomposition of fresh organic matter in artificial soils. <i>Soil Biology and Biochemistry</i> , 2014 , 77, 100-108	7.5	66
156	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. <i>Atmospheric Environment</i> , 2014 , 97, 54-67	5.3	47
155	Spatial variability and controls over biomass stocks, carbon fluxes, and resource-use efficiencies across forest ecosystems. <i>Trees - Structure and Function</i> , 2014 , 28, 597-611	2.6	44
154	Variation in leaf flushing date influences autumnal senescence and next year's flushing date in two temperate tree species. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 7355-60	11.5	178
153	Steeper declines in forest photosynthesis than respiration explain age-driven decreases in forest growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 8856-60	11.5	79
152	Global comparison of light use efficiency models for simulating terrestrial vegetation gross primary production based on the LaThuile database. <i>Agricultural and Forest Meteorology</i> , 2014 , 192-193, 108-120	5.8	145
151	Simultaneous leaf- and ecosystem-level fluxes of volatile organic compounds from a poplar-based SRC plantation. <i>Agricultural and Forest Meteorology</i> , 2014 , 187, 22-35	5.8	27
150	Can current moisture responses predict soil CO ₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments. <i>Biogeosciences</i> , 2014 , 11, 2991-3013	4.6	60
149	Climate extreme effects on the chemical composition of temperate grassland species under ambient and elevated CO ₂ : a comparison of fructan and non-fructan accumulators. <i>PLoS ONE</i> , 2014 , 9, e92044	3.7	61

148	Western Palaearctic breeding geese can alter carbon cycling in their winter habitat. <i>Ecosphere</i> , 2014 , 5, art139	3.1	4
147	Effects of seabird nitrogen input on biomass and carbon accumulation after 50 years of primary succession on a young volcanic island, Surtsey. <i>Biogeosciences</i> , 2014 , 11, 6237-6250	4.6	9
146	Corrigendum to "Can current moisture responses predict soil CO ₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments"; <i>Biogeosciences</i> , 2014 , 11, 3307-3308	4.6	8
145	Do successive climate extremes weaken the resistance of plant communities? An experimental study using plant assemblages. <i>Biogeosciences</i> , 2014 , 11, 109-121	4.6	39
144	Asymmetric sensitivity of first flowering date to warming and cooling in alpine plants. <i>Ecology</i> , 2014 , 95, 3387-3398	4.6	52
143	Nutrient availability as the key regulator of global forest carbon balance. <i>Nature Climate Change</i> , 2014 , 4, 471-476	21.4	269
142	The influence of local spring temperature variance on temperature sensitivity of spring phenology. <i>Global Change Biology</i> , 2014 , 20, 1473-80	11.4	61
141	Linking variability in soil solution dissolved organic carbon to climate, soil type, and vegetation type. <i>Global Biogeochemical Cycles</i> , 2014 , 28, 497-509	5.9	69
140	Fine root and litterfall dynamics of three Korean pine (<i>Pinus koraiensis</i>) forests along an altitudinal gradient. <i>Plant and Soil</i> , 2014 , 374, 19-32	4.2	25
139	African crop yield reductions due to increasingly unbalanced Nitrogen and Phosphorus consumption. <i>Global Change Biology</i> , 2014 , 20, 1278-88	11.4	54
138	Fine root biomass and turnover of two fast-growing poplar genotypes in a short-rotation coppice culture. <i>Plant and Soil</i> , 2013 , 373, 269-283	4.2	31
137	An optimized fine root sampling methodology balancing accuracy and time investment. <i>Plant and Soil</i> , 2013 , 366, 351-361	4.2	18
136	Combined effects of warming and elevated CO ₂ on the impact of drought in grassland species. <i>Plant and Soil</i> , 2013 , 369, 497-507	4.2	24
135	Energy and climate benefits of bioelectricity from low-input short rotation woody crops on agricultural land over a two-year rotation. <i>Applied Energy</i> , 2013 , 111, 862-870	10.7	45
134	Asymmetric effects of daytime and night-time warming on Northern Hemisphere vegetation. <i>Nature</i> , 2013 , 501, 88-92	50.4	328
133	Net ecosystem production and carbon balance of an SRC poplar plantation during its first rotation. <i>Biomass and Bioenergy</i> , 2013 , 56, 412-422	5.3	40
132	Human-induced nitrogen-phosphorus imbalances alter natural and managed ecosystems across the globe. <i>Nature Communications</i> , 2013 , 4, 2934	17.4	679
131	Carbon and water vapor fluxes over four forests in two contrasting climatic zones. <i>Agricultural and Forest Meteorology</i> , 2013 , 180, 211-224	5.8	21

130	Sensitivity of leaf unfolding to experimental warming in three temperate tree species. <i>Agricultural and Forest Meteorology</i> , 2013 , 181, 125-132	5.8	60
129	Biometric and eddy covariance-based assessment of decadal carbon sequestration of a temperate Scots pine forest. <i>Agricultural and Forest Meteorology</i> , 2013 , 174-175, 135-143	5.8	31
128	Anthropogenic perturbation of the carbon fluxes from land to ocean. <i>Nature Geoscience</i> , 2013 , 6, 597-607	7.3	695
127	Fluxes of the greenhouse gases (CO ₂ , CH ₄ and N ₂ O) above a short-rotation poplar plantation after conversion from agricultural land. <i>Agricultural and Forest Meteorology</i> , 2013 , 169, 100-110	5.8	82
126	The contribution of nitrogen deposition to the photosynthetic capacity of forests. <i>Global Biogeochemical Cycles</i> , 2013 , 27, 187-199	5.9	101
125	N ₂ O fluxes of a bio-energy poplar plantation during a two years rotation period. <i>GCB Bioenergy</i> , 2013 , 5, 536-547	5.6	39
124	Atmospheric turbulence triggers pronounced diel pattern in karst carbonate geochemistry. <i>Biogeosciences</i> , 2013 , 10, 5009-5017	4.6	30
123	Bayesian comparison of six different temperature-based budburst models for four temperate tree species. <i>Ecological Modelling</i> , 2012 , 230, 92-100	3	61
122	Summer heat and drought extremes trigger unexpected changes in productivity of a temperate annual/biannual plant community. <i>Environmental and Experimental Botany</i> , 2012 , 79, 21-30	5.9	115
121	Effects of arbuscular mycorrhizal fungi on grassland productivity are altered by future climate and below-ground resource availability. <i>Environmental and Experimental Botany</i> , 2012 , 81, 62-71	5.9	20
120	Simple additive effects are rare: a quantitative review of plant biomass and soil process responses to combined manipulations of CO ₂ and temperature. <i>Global Change Biology</i> , 2012 , 18, 2681-93	11.4	286
119	Fertile forests produce biomass more efficiently. <i>Ecology Letters</i> , 2012 , 15, 520-6	10	211
118	Precipitation manipulation experiments--challenges and recommendations for the future. <i>Ecology Letters</i> , 2012 , 15, 899-911	10	318
117	Bayesian calibration of the Unified budburst model in six temperate tree species. <i>International Journal of Biometeorology</i> , 2012 , 56, 153-64	3.7	16
116	The impact of winter and spring temperatures on temperate tree budburst dates: results from an experimental climate manipulation. <i>PLoS ONE</i> , 2012 , 7, e47324	3.7	66
115	The human-induced imbalance between C, N and P in Earth's life system. <i>Global Change Biology</i> , 2012 , 18, 3-6	11.4	348
114	Insights into ozone deposition patterns from decade-long ozone flux measurements over a mixed temperate forest. <i>Journal of Environmental Monitoring</i> , 2012 , 14, 1684-95		22
113	Chemical characterisation of atmospheric aerosols during a 2007 summer field campaign at Brasschaat, Belgium: sources and source processes of biogenic secondary organic aerosol. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 125-138	6.8	83

112	The importance of dissolved organic carbon fluxes for the carbon balance of a temperate Scots pine forest. <i>Agricultural and Forest Meteorology</i> , 2011 , 151, 270-278	5.8	46
111	Persistence of soil organic matter as an ecosystem property. <i>Nature</i> , 2011 , 478, 49-56	50.4	3282
110	Thermal adaptation of net ecosystem exchange. <i>Biogeosciences</i> , 2011 , 8, 1453-1463	4.6	23
109	Forest annual carbon cost: reply. <i>Ecology</i> , 2011 , 92, 1998-2002	4.6	2
108	Soil water repellency and its implications for organic matter decomposition [Is there a link to extreme climatic events?]. <i>Global Change Biology</i> , 2011 , 17, 2640-2656	11.4	145
107	Seasonal hysteresis of net ecosystem exchange in response to temperature change: patterns and causes. <i>Global Change Biology</i> , 2011 , 17, 3102-3114	11.4	49
106	Can publication bias affect ecological research? A case study on soil respiration under elevated CO ₂ . <i>New Phytologist</i> , 2011 , 190, 517-21	9.8	26
105	Whole-system responses of experimental plant communities to climate extremes imposed in different seasons. <i>New Phytologist</i> , 2011 , 189, 806-817	9.8	182
104	Does an extreme drought event alter the response of grassland communities to a changing climate?. <i>Environmental and Experimental Botany</i> , 2011 , 70, 151-157	5.9	27
103	Does the stress tolerance of mixed grassland communities change in a future climate? A test with heavy metal stress (zinc pollution). <i>Environmental Pollution</i> , 2011 , 159, 3294-301	9.3	6
102	Radiocarbon based assessment of soil organic matter contribution to soil respiration in a pine stand of the Campine region, Belgium. <i>Plant and Soil</i> , 2011 , 344, 273-282	4.2	6
101	Altered response to nitrogen supply of mixed grassland communities in a future climate: a controlled environment microcosm study. <i>Plant and Soil</i> , 2011 , 345, 375-385	4.2	6
100	Response to Comment on "Global Convergence in the Temperature Sensitivity of Respiration at Ecosystem Level". <i>Science</i> , 2011 , 331, 1265-1265	33.3	8
99	Ecosystem CO ₂ fluxes of arbuscular and ectomycorrhizal dominated vegetation types are differentially influenced by precipitation and temperature. <i>New Phytologist</i> , 2010 , 185, 226-36	9.8	38
98	Soil [N] modulates soil C cycling in CO ₂ -fumigated tree stands: a meta-analysis. <i>Plant, Cell and Environment</i> , 2010 , 33, 2001-11	8.4	41
97	Climatic characteristics of heat waves and their simulation in plant experiments. <i>Global Change Biology</i> , 2010 , 16, 1992-2000	11.4	117
96	The European carbon balance. Part 2: croplands. <i>Global Change Biology</i> , 2010 , 16, 1409-1428	11.4	165
95	The European carbon balance. Part 3: forests. <i>Global Change Biology</i> , 2010 , 16, 1429-1450	11.4	206

94	The European carbon balance. Part 4: integration of carbon and other trace-gas fluxes. <i>Global Change Biology</i> , 2010 , 16, 1451-1469	11.4	138
93	Reduction of forest soil respiration in response to nitrogen deposition. <i>Nature Geoscience</i> , 2010 , 3, 315-323	12.3	988
92	Belowground carbon pools and dynamics in China's warm temperate and sub-tropical deciduous forests. <i>Biogeosciences</i> , 2010 , 7, 275-287	4.6	5
91	Needle age-related and seasonal photosynthetic capacity variation is negligible for modelling yearly gas exchange of a sparse temperate Scots pine forest. <i>Biogeosciences</i> , 2010 , 7, 199-215	4.6	28
90	Forest annual carbon cost: a global-scale analysis of autotrophic respiration. <i>Ecology</i> , 2010 , 91, 652-61	4.6	137
89	Global convergence in the temperature sensitivity of respiration at ecosystem level. <i>Science</i> , 2010 , 329, 838-40	33.3	358
88	Hidden, abiotic CO ₂ flows and gaseous reservoirs in the terrestrial carbon cycle: Review and perspectives. <i>Agricultural and Forest Meteorology</i> , 2010 , 150, 321-329	5.8	129
87	Soil respiration at mean annual temperature predicts annual total across vegetation types and biomes. <i>Biogeosciences</i> , 2010 , 7, 2147-2157	4.6	87
86	Are ecological gradients in seasonal Q ₁₀ of soil respiration explained by climate or by vegetation seasonality?. <i>Soil Biology and Biochemistry</i> , 2010 , 42, 1728-1734	7.5	87
85	Zea mays rhizosphere respiration, but not soil organic matter decomposition was stable across a temperature gradient. <i>Soil Biology and Biochemistry</i> , 2010 , 42, 2030-2033	7.5	10
84	Bio-energy retains its mitigation potential under elevated CO ₂ . <i>PLoS ONE</i> , 2010 , 5, e11648	3.7	16
83	Decadal water balance of a temperate Scots pine forest (&i>Pinus sylvestris&i>; L.) based on measurements and modelling. <i>Biogeosciences</i> , 2010 , 7, 1247-1261	4.6	28
82	Arbuscular Mycorrhizal Fungi May Mitigate the Influence of a Joint Rise of Temperature and Atmospheric CO ₂ on Soil Respiration in Grasslands. <i>International Journal of Ecology</i> , 2009 , 2009, 1-10	1.9	9
81	The inhibitory effect of difluoromethane on CH ₄ oxidation in reconstructed peat columns and side-effects on CO ₂ and N ₂ O emissions at two water levels. <i>Soil Biology and Biochemistry</i> , 2009 , 41, 1117-1123	7.5	1237
80	No signs of thermal acclimation of heterotrophic respiration from peat soils exposed to different water levels. <i>Soil Biology and Biochemistry</i> , 2009 , 41, 2014-2016	7.5	24
79	Latitudinal patterns of magnitude and interannual variability in net ecosystem exchange regulated by biological and environmental variables. <i>Global Change Biology</i> , 2009 , 15, 2905-2920	11.4	84
78	The European carbon balance. Part 4: integration of carbon and other trace-gas fluxes. <i>Global Change Biology</i> , 2009 , 16, 2399-2399	11.4	5
77	Importance of methane and nitrous oxide for Europe's terrestrial greenhouse-gas balance. <i>Nature Geoscience</i> , 2009 , 2, 842-850	18.3	272

76	Temperature dependence of greenhouse gas emissions from three hydromorphic soils at different groundwater levels. <i>Geobiology</i> , 2009 , 7, 465-76	4.3	19
75	Radiocarbon dating reveals different past managements of adjacent forest soils in the Campine region, Belgium. <i>Geoderma</i> , 2009 , 149, 137-142	6.7	12
74	Temporal and among-site variability of inherent water use efficiency at the ecosystem level. <i>Global Biogeochemical Cycles</i> , 2009 , 23, n/a-n/a	5.9	304
73	Toward a consistency cross-check of eddy covariance flux-based and biometric estimates of ecosystem carbon balance. <i>Global Biogeochemical Cycles</i> , 2009 , 23, n/a-n/a	5.9	51
72	Can flux tower research neglect geochemical CO ₂ exchange?. <i>Agricultural and Forest Meteorology</i> , 2008 , 148, 1045-1054	5.8	87
71	Quality control of CarboEurope flux data [Part 1: Coupling footprint analyses with flux data quality assessment to evaluate sites in forest ecosystems. <i>Biogeosciences</i> , 2008 , 5, 433-450	4.6	164
70	The impact of lateral carbon fluxes on the European carbon balance. <i>Biogeosciences</i> , 2008 , 5, 1259-1271	4.6	104
69	Nitrogen biogeochemistry of a mature Scots pine forest subjected to high nitrogen loads. <i>Biogeochemistry</i> , 2008 , 91, 201-222	3.8	22
68	Sectoral approaches to improve regional carbon budgets. <i>Climatic Change</i> , 2008 , 88, 209-249	4.5	15
67	The Lateral Carbon Pump, and the European Carbon Balance. <i>Ecological Studies</i> , 2008 , 341-360	1.1	4
66	Stored water use and transpiration in Scots pine: a modeling analysis with ANAFORE. <i>Tree Physiology</i> , 2007 , 27, 1671-85	4.2	45
65	Modeling the effects of varying data quality on trend detection in environmental monitoring. <i>Ecological Informatics</i> , 2007 , 2, 167-176	4.2	15
64	Effects of climate warming and declining species richness in grassland model ecosystems: acclimation of CO ₂ fluxes. <i>Biogeosciences</i> , 2007 , 4, 27-36	4.6	13
63	Model analysis of the effects of atmospheric drivers on storage water use in Scots pine. <i>Biogeosciences</i> , 2007 , 4, 657-671	4.6	20
62	Basal rates of soil respiration are correlated with photosynthesis in a mixed temperate forest. <i>Global Change Biology</i> , 2007 , 13, 2008-2017	11.4	99
61	Photosynthesis drives anomalies in net carbon-exchange of pine forests at different latitudes. <i>Global Change Biology</i> , 2007 , 13, 2110-2127	11.4	59
60	CO ₂ balance of boreal, temperate, and tropical forests derived from a global database. <i>Global Change Biology</i> , 2007 , 13, 2509-2537	11.4	744
59	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. <i>New Phytologist</i> , 2007 , 173, 463-480	9.8	498

58	Irrigation and enhanced soil carbon input effects on below-ground carbon cycling in semiarid temperate grasslands. <i>New Phytologist</i> , 2007 , 174, 835-846	9.8	67
57	How do climate warming and species richness affect CO ₂ fluxes in experimental grasslands?. <i>New Phytologist</i> , 2007 , 175, 512-522	9.8	57
56	Evidence for soil water control on carbon and water dynamics in European forests during the extremely dry year: 2003. <i>Agricultural and Forest Meteorology</i> , 2007 , 143, 123-145	5.8	427
55	Under-story contributions to stand level GPP using the process model SECRETS. <i>Agricultural and Forest Meteorology</i> , 2006 , 139, 94-104	5.8	24
54	Footprint-adjusted net ecosystem CO ₂ exchange and carbon balance components of a temperate forest. <i>Agricultural and Forest Meteorology</i> , 2006 , 139, 344-360	5.8	32
53	On the variability of respiration in terrestrial ecosystems: moving beyond Q ₁₀ . <i>Global Change Biology</i> , 2006 , 12, 154-164	11.4	889
52	Temperature sensitivity of soil carbon decomposition and feedbacks to climate change. <i>Nature</i> , 2006 , 440, 165-73	50.4	4106
51	Mycorrhizal Hyphal Turnover as a Dominant Process for Carbon Input into Soil Organic Matter. <i>Plant and Soil</i> , 2006 , 281, 15-24	4.2	283
50	Variation of specific leaf area and upscaling to leaf area index in mature Scots pine. <i>Trees - Structure and Function</i> , 2006 , 20, 304-310	2.6	34
49	Pan-European $\delta^{13}C$ values of air and organic matter from forest ecosystems. <i>Global Change Biology</i> , 2005 , 11, 1065-1093	11.4	54
48	Calibration and validation of an empirical approach to model soil CO ₂ efflux in a deciduous forest. <i>Biogeochemistry</i> , 2005 , 73, 209-230	3.8	35
47	Comparison of Fine Root Dynamics in Scots Pine and Pedunculate Oak in Sandy Soil. <i>Plant and Soil</i> , 2005 , 276, 33-45	4.2	76
46	The carbon budget of terrestrial ecosystems at country-scale in a European case study. <i>Biogeosciences</i> , 2005 , 2, 15-26	4.6	159
45	Net carbon storage in a poplar plantation (POPFACE) after three years of free-air CO ₂ enrichment. <i>Tree Physiology</i> , 2005 , 25, 1399-408	4.2	66
44	Contrasting net primary productivity and carbon distribution between neighboring stands of <i>Quercus robur</i> and <i>Pinus sylvestris</i> . <i>Tree Physiology</i> , 2005 , 25, 701-12	4.2	63
43	Soil respiration in a mixed temperate forest and its contribution to total ecosystem respiration. <i>Tree Physiology</i> , 2005 , 25, 609-19	4.2	94
42	Carbon budget of <i>Pinus sylvestris</i> saplings after four years of exposure to elevated atmospheric carbon dioxide concentration. <i>Tree Physiology</i> , 2005 , 25, 325-37	4.2	19
41	Annual Q ₁₀ of soil respiration reflects plant phenological patterns as well as temperature sensitivity. <i>Global Change Biology</i> , 2004 , 10, 161-169	11.4	345

40	Replies to the comments by F. Hupet, M. Vanclooster on Water flux estimates from a Belgian Scots pine stand: a comparison of different approaches <i>Journal of Hydrology</i> , 2004 , 291, 154-157	6	0
39	Comparison of different chamber techniques for measuring soil CO ₂ efflux. <i>Agricultural and Forest Meteorology</i> , 2004 , 123, 159-176	5.8	355
38	Seasonal changes in photosynthesis, respiration and NEE of a mixed temperate forest. <i>Agricultural and Forest Meteorology</i> , 2004 , 126, 15-31	5.8	82
37	Interactive effects of temperature and precipitation on soil respiration in a temperate maritime pine forest. <i>Tree Physiology</i> , 2003 , 23, 1263-70	4.2	210
36	Above- and belowground biomass and net primary production in a 73-year-old Scots pine forest. <i>Tree Physiology</i> , 2003 , 23, 505-16	4.2	101
35	Large seasonal changes in Q ₁₀ of soil respiration in a beech forest. <i>Global Change Biology</i> , 2003 , 9, 911-914	11.4	319
34	Water flux estimates from a Belgian Scots pine stand: a comparison of different approaches. <i>Journal of Hydrology</i> , 2003 , 270, 230-252	6	59
33	Net ecosystem CO ₂ exchange of mixed forest in Belgium over 5 years. <i>Agricultural and Forest Meteorology</i> , 2003 , 119, 209-227	5.8	156
32	Europe's terrestrial biosphere absorbs 7 to 12% of European anthropogenic CO ₂ emissions. <i>Science</i> , 2003 , 300, 1538-42	33.3	497
31	Climatic Influences on Seasonal and Spatial Differences in Soil CO ₂ Efflux. <i>Ecological Studies</i> , 2003 , 233-253	25.3	33
30	Measurement of Soil Respiration. <i>Ecological Studies</i> , 2003 , 37-54	1.1	11
29	Coniferous Forests (Scots and Maritime Pine): Carbon and Water Fluxes, Balances, Ecological and Ecophysiological Determinants. <i>Ecological Studies</i> , 2003 , 71-97	1.1	6
28	Phase and amplitude of ecosystem carbon release and uptake potentials as derived from FLUXNET measurements. <i>Agricultural and Forest Meteorology</i> , 2002 , 113, 75-95	5.8	136
27	Environmental controls over carbon dioxide and water vapor exchange of terrestrial vegetation. <i>Agricultural and Forest Meteorology</i> , 2002 , 113, 97-120	5.8	965
26	The carbon cost of fine root turnover in a Scots pine forest. <i>Forest Ecology and Management</i> , 2002 , 168, 231-240	3.9	102
25	Simulated soil CO ₂ efflux and net ecosystem exchange in a 70-year-old Belgian Scots pine stand using the process model SECRETS. <i>Annals of Forest Science</i> , 2001 , 58, 31-46	3.1	31
24	Productivity overshadows temperature in determining soil and ecosystem respiration across European forests. <i>Global Change Biology</i> , 2001 , 7, 269-278	11.4	735
23	Forest floor CO ₂ fluxes estimated by eddy covariance and chamber-based model. <i>Agricultural and Forest Meteorology</i> , 2001 , 106, 61-69	5.8	78

22	Assessing forest soil CO ₂ efflux: an in situ comparison of four techniques. <i>Tree Physiology</i> , 2000 , 20, 23-32	4.2	142
21	Effects of CO ₂ Enrichment on Trees and Forests: Lessons to be Learned in View of Future Ecosystem Studies. <i>Annals of Botany</i> , 1999 , 84, 577-590	4.1	101
20	Above- and belowground phytomass and carbon storage in a Belgian Scots pine stand. <i>Annales Des Sciences Forestières</i> , 1999 , 56, 81-90		81
19	Elevated atmospheric CO ₂ increases fine root production, respiration, rhizosphere respiration and soil CO ₂ efflux in Scots pine seedlings. <i>Global Change Biology</i> , 1998 , 4, 871-878	11.4	87
18	Soil CO ₂ efflux rates in different tropical vegetation types in French Guiana. <i>Annales Des Sciences Forestières</i> , 1998 , 55, 671-680		22
17	Fine Root and Rhizosphere Respiration of Young Scots Pine Seedlings under Elevated and Ambient CO ₂ . <i>Forestry Sciences</i> , 1997 , 187-192		3
16	Semi-empirical modelling of the response of soil respiration to environmental factors in laboratory and field conditions 207-220		1
15	Appendix: Towards a standardized protocol for the measurement of soil CO ₂ efflux 272-280		
14	Chemical characterisation of atmospheric aerosols during a 2007 summer field campaign at Brasschaat, Belgium: sources and source processes, time series, diel variations, and temperature dependencies ¹		
13	Atmospheric turbulence triggers pronounced diel pattern in karst carbonate geochemistry		6
12	Do successive climate extremes weaken the resistance of plant communities? An experimental study using plant assemblages		2
11	Strong stoichiometric resilience after litter manipulation experiments; a case study in a Chinese grassland		2
10	Effects of seabird nitrogen input on biomass and carbon accumulation after 50 years of primary succession on a young volcanic island, Surtsey		6
9	Can current moisture responses predict soil CO ₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments		2
8	Quality control of CarboEurope flux data [Part I: Footprint analyses to evaluate sites in forest ecosystems		8
7	Atmospheric drivers of storage water use in Scots pine		1
6	Characterisation of ecosystem water-use efficiency of european forests from eddy covariance measurements		66
5	Decadal water balance of a temperate Scots pine forest (<i>Pinus sylvestris</i> L.) based on measurements and modelling		1

4	Soil respiration at mean annual temperature predicts annual total across vegetation types and biomes	1
3	The greenhouse gas balance of European grasslands	39
2	Carbon allocation to biomass production of leaves, fruits and woody organs at seasonal and annual scale in a deciduous- and evergreen temperate forest	4
1	Impact of extreme precipitation and water table change on N ₂ O fluxes in a bio-energy poplar plantation	14