

Reinhart J Ceulemans

List of Publications by Year in descending order

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Version: 2024-02-01

310
papers

25,497
citations

11608

70
h-index

8370

147
g-index

312
all docs

312
docs citations

312
times ranked

18368
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy balance closure at FLUXNET sites. <i>Agricultural and Forest Meteorology</i> , 2002, 113, 223-243.	1.9	1,877
2	Gap filling strategies for defensible annual sums of net ecosystem exchange. <i>Agricultural and Forest Meteorology</i> , 2001, 107, 43-69.	1.9	1,579
3	Respiration as the main determinant of carbon balance in European forests. <i>Nature</i> , 2000, 404, 861-865.	13.7	1,438
4	Reduction of forest soil respiration in response to nitrogen deposition. <i>Nature Geoscience</i> , 2010, 3, 315-322.	5.4	1,254
5	Forest response to elevated CO ₂ is conserved across a broad range of productivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 18052-18056.	3.3	880
6	Productivity overshadows temperature in determining soil and ecosystem respiration across European forests. <i>Global Change Biology</i> , 2001, 7, 269-278.	4.2	843
7	Tansley Review No. 71 Effects of elevated atmospheric CO ₂ on woody plants. <i>New Phytologist</i> , 1994, 127, 425-446.	3.5	715
8	Tree responses to rising CO ₂ in field experiments: implications for the future forest. <i>Plant, Cell and Environment</i> , 1999, 22, 683-714.	2.8	691
9	Stomatal conductance of forest species after long-term exposure to elevated CO ₂ concentration: a synthesis. <i>New Phytologist</i> , 2001, 149, 247-264.	3.5	621
10	Europe's Terrestrial Biosphere Absorbs 7 to 12% of European Anthropogenic CO ₂ Emissions. <i>Science</i> , 2003, 300, 1538-1542.	6.0	551
11	Gap filling strategies for long term energy flux data sets. <i>Agricultural and Forest Meteorology</i> , 2001, 107, 71-77.	1.9	493
12	Effects of elevated [CO ₂] on photosynthesis in European forest species: a meta-analysis of model parameters. <i>Plant, Cell and Environment</i> , 1999, 22, 1475-1495.	2.8	415
13	Annual Q ₁₀ of soil respiration reflects plant phenological patterns as well as temperature sensitivity. <i>Global Change Biology</i> , 2004, 10, 161-169.	4.2	392
14	Emerging Model Systems in Plant Biology: Poplar (<i>Populus</i>) as A Model Forest Tree. <i>Journal of Plant Growth Regulation</i> , 2000, 19, 306-313.	2.8	372
15	Increases in nitrogen uptake rather than nitrogen-use efficiency support higher rates of temperate forest productivity under elevated CO ₂ . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 14014-14019.	3.3	353
16	Mycorrhizal Hyphal Turnover as a Dominant Process for Carbon Input into Soil Organic Matter. <i>Plant and Soil</i> , 2006, 281, 15-24.	1.8	345
17	Interactive effects of temperature and precipitation on soil respiration in a temperate maritime pine forest. <i>Tree Physiology</i> , 2003, 23, 1263-1270.	1.4	239
18	Radial patterns of sap flow in woody stems of dominant and understory species: scaling errors associated with positioning of sensors. <i>Tree Physiology</i> , 2002, 22, 907-918.	1.4	185

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19	Quality analysis applied on eddy covariance measurements at complex forest sites using footprint modelling. <i>Theoretical and Applied Climatology</i> , 2005, 80, 121-141.	1.3	173
20	Net ecosystem CO ₂ exchange of mixed forest in Belgium over 5 years. <i>Agricultural and Forest Meteorology</i> , 2003, 119, 209-227.	1.9	166
21	Energy and greenhouse gas balance of bioenergy production from poplar and willow: a review. <i>GCB Bioenergy</i> , 2011, 3, 181-197.	2.5	159
22	Assessing forest soil CO ₂ efflux: an in situ comparison of four techniques. <i>Tree Physiology</i> , 2000, 20, 23-32.	1.4	158
23	Clonal variation in heavy metal accumulation and biomass production in a poplar coppice culture: I. Seasonal variation in leaf, wood and bark concentrations. <i>Environmental Pollution</i> , 2004, 131, 485-494.	3.7	158
24	Next generation of elevated [CO ₂] experiments with crops: a critical investment for feeding the future world. <i>Plant, Cell and Environment</i> , 2008, 31, 1317-1324.	2.8	154
25	Enhanced ozone strongly reduces carbon sink strength of adult beech (<i>Fagus sylvatica</i>) – Resume from the free-air fumigation study at Kranzberg Forest. <i>Environmental Pollution</i> , 2010, 158, 2527-2532.	3.7	140
26	Basal rates of soil respiration are correlated with photosynthesis in a mixed temperate forest. <i>Global Change Biology</i> , 2007, 13, 2008-2017.	4.2	133
27	Seasonal variations in leaf area index, leaf chlorophyll, and water content; scaling-up to estimate fAPAR and carbon balance in a multilayer, multispecies temperate forest. <i>Tree Physiology</i> , 1999, 19, 673-679.	1.4	132
28	Production physiology and growth potential of poplars under short-rotation forestry culture. <i>Forest Ecology and Management</i> , 1999, 121, 9-23.	1.4	124
29	Biomass production in experimental grasslands of different species richness during three years of climate warming. <i>Biogeosciences</i> , 2008, 5, 585-594.	1.3	124
30	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.	1.4	122
31	Leaf-level phenotypic variability and plasticity of invasive <i>Rhododendron ponticum</i> and non-invasive <i>Ilex aquifolium</i> co-occurring at two contrasting European sites. <i>Plant, Cell and Environment</i> , 2003, 26, 941-956.	2.8	119
32	Above- and belowground biomass and net primary production in a 73-year-old Scots pine forest. <i>Tree Physiology</i> , 2003, 23, 505-516.	1.4	119
33	The carbon cost of fine root turnover in a Scots pine forest. <i>Forest Ecology and Management</i> , 2002, 168, 231-240.	1.4	118
34	Biomass production of 17 poplar clones in a short-rotation coppice culture on a waste disposal site and its relation to soil characteristics. <i>Forest Ecology and Management</i> , 2004, 187, 295-309.	1.4	117
35	Woody biomass production during the second rotation of a bio-energy <i>Populus</i> plantation increases in a future high CO ₂ world. <i>Global Change Biology</i> , 2006, 12, 1094-1106.	4.2	115
36	How do climate warming and plant species richness affect water use in experimental grasslands?. <i>Plant and Soil</i> , 2006, 288, 249-261.	1.8	113

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37	Biomass yield and energy balance of a short-rotation poplar coppice with multiple clones on degraded land during 16 years. <i>Biomass and Bioenergy</i> , 2013, 56, 157-165.	2.9	110
38	Effects of elevated atmospheric CO ₂ on phenology, growth and crown structure of Scots pine (<i>Pinus</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tt	1.4	106
39	Above- and belowground phytomass and carbon storage in a Belgian Scots pine stand. <i>Annales Des Sciences ForestiÃ</i> res, 1999, 56, 81-90.	1.1	104
40	Free-air CO ₂ enrichment (FACE) enhances biomass production in a short-rotation poplar plantation. <i>Tree Physiology</i> , 2003, 23, 805-814.	1.4	103
41	A comparison among eucalypt, poplar and willow characteristics with particular reference to a coppice, growth-modelling approach. <i>Biomass and Bioenergy</i> , 1996, 11, 215-231.	2.9	102
42	Crown architecture of <i>Populus</i> clones as determined by branch orientation and branch characteristics. <i>Tree Physiology</i> , 1990, 7, 157-167.	1.4	100
43	Plasticity in hydraulic architecture of Scots pine across Eurasia. <i>Oecologia</i> , 2007, 153, 245-259.	0.9	98
44	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.	4.2	96
45	Evidence for a persistent and extensive greening trend in Eurasia inferred from satellite vegetation index data. <i>Journal of Geophysical Research</i> , 2002, 107, ACL 4-1-ACL 4-14.	3.3	95
46	Energy performances of intensive and extensive short rotation cropping systems for woody biomass production in the EU. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 41, 845-854.	8.2	95
47	Forest floor CO ₂ fluxes estimated by eddy covariance and chamber-based model. <i>Agricultural and Forest Meteorology</i> , 2001, 106, 61-69.	1.9	94
48	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.	4.2	94
49	Seasonal changes in photosynthesis, respiration and NEE of a mixed temperate forest. <i>Agricultural and Forest Meteorology</i> , 2004, 126, 15-31.	1.9	93
50	Clonal variation in heavy metal accumulation and biomass production in a poplar coppice culture. II. Vertical distribution and phytoextraction potential. <i>Environmental Pollution</i> , 2005, 133, 541-551.	3.7	90
51	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.	1.9	90
52	Ecotones in vegetation ecology: methodologies and definitions revisited. <i>Ecological Research</i> , 2009, 24, 977-986.	0.7	89
53	Effects of CO ₂ enrichment, leaf position and clone on stomatal index and epidermal cell density in poplar (<i>Populus</i>). <i>New Phytologist</i> , 1995, 131, 99-107.	3.5	88
54	Apparent responses of stomata to transpiration and humidity in a hybrid poplar canopy. <i>Plant, Cell and Environment</i> , 1997, 20, 1301-1308.	2.8	88

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55	Stomatal density and needle anatomy of Scots pine (<i>Pinus sylvestris</i>) are affected by elevated CO ₂ . <i>New Phytologist</i> , 2001, 150, 665-674.	3.5	88
56	Dynamics of biomass production in a poplar coppice culture over three rotations (11 years). <i>Forest Ecology and Management</i> , 2008, 255, 1883-1891.	1.4	86
57	Establishment and two-year growth of a bio-energy plantation with fast-growing <i>Populus</i> trees in Flanders (Belgium): Effects of genotype and former land use. <i>Biomass and Bioenergy</i> , 2012, 42, 151-163.	2.9	85
58	Decision Tree Algorithm for Detection of Spatial Processes in Landscape Transformation. <i>Environmental Management</i> , 2004, 33, 62-73.	1.2	84
59	Synopsis of the CASIROZ Case Study: Carbon Sink Strength of <i>Fagus sylvatica</i> L. in a Changing Environment - Experimental Risk Assessment of Mitigation by Chronic Ozone Impact. <i>Plant Biology</i> , 2007, 9, 163-180.	1.8	84
60	Comparative study of biomass determinants of 12 poplar (<i>Populus</i>) genotypes in a high-density short-rotation culture. <i>Forest Ecology and Management</i> , 2013, 307, 101-111.	1.4	81
61	Comparison of Fine Root Dynamics in Scots Pine and Pedunculate Oak in Sandy Soil. <i>Plant and Soil</i> , 2005, 276, 33-45.	1.8	80
62	Consensus, uncertainties and challenges for perennial bioenergy crops and land use. <i>GCB Bioenergy</i> , 2018, 10, 150-164.	2.5	80
63	First vs. second rotation of a poplar short rotation coppice: Above-ground biomass productivity and shoot dynamics. <i>Biomass and Bioenergy</i> , 2015, 73, 174-185.	2.9	79
64	Poplar growth and yield in short rotation coppice: model simulations using the process model SECRETS. <i>Biomass and Bioenergy</i> , 2004, 26, 221-227.	2.9	78
65	The likely impact of rising atmospheric CO ₂ on natural and managed <i>Populus</i> : a literature review. <i>Environmental Pollution</i> , 2001, 115, 335-358.	3.7	77
66	Growth and production of a short rotation coppice culture of poplar I. Clonal differences in leaf characteristics in relation to biomass production. <i>Biomass and Bioenergy</i> , 2004, 27, 9-19.	2.9	77
67	Population dynamics in a 6-year old coppice culture of poplar. I. Clonal differences in stool mortality, shoot dynamics and shoot diameter distribution in relation to biomass production. <i>Biomass and Bioenergy</i> , 2003, 24, 81-95.	2.9	76
68	Petiole length and biomass investment in support modify light interception efficiency in dense poplar plantations. <i>Tree Physiology</i> , 2004, 24, 141-154.	1.4	76
69	Genetic Variation of Stomatal Traits and Carbon Isotope Discrimination in Two Hybrid Poplar Families (<i>Populus deltoides</i> × <i>P. nigra</i> and <i>P. deltoides</i> × <i>P. trichocarpa</i>). <i>Annals of Botany</i> , 2008, 102, 399-407.	3.0	76
70	Net carbon storage in a poplar plantation (POPFACE) after three years of free-air CO ₂ enrichment. <i>Tree Physiology</i> , 2005, 25, 1399-1408.	1.4	74
71	Financial analysis of the cultivation of poplar and willow for bioenergy. <i>Biomass and Bioenergy</i> , 2012, 43, 52-64.	2.9	73
72	The Challenge of Lignocellulosic Bioenergy in a Water-Limited World. <i>BioScience</i> , 2013, 63, 102-117.	2.2	73

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73	Photosynthetic stimulation under long-term CO ₂ enrichment and fertilization is sustained across a closed Populus canopy profile (EUROFACE). <i>New Phytologist</i> , 2007, 173, 537-549.	3.5	71
74	Response and potential of agroforestry crops under global change. <i>Environmental Pollution</i> , 2010, 158, 1095-1104.	3.7	71
75	Scaling up from the individual tree to the stand level in Scots pine. I. Needle distribution, overall crown and root geometry. <i>Annales Des Sciences Forestières</i> , 1998, 55, 63-88.	1.1	70
76	Measured sap flow and simulated transpiration from a poplar stand in Flanders (Belgium). <i>Agricultural and Forest Meteorology</i> , 1999, 96, 165-179.	1.9	70
77	Allometric relationships for below- and aboveground biomass of young Scots pines. <i>Forest Ecology and Management</i> , 2004, 203, 177-186.	1.4	69
78	Chronic ozone exposure affects leaf senescence of adult beech trees: a chlorophyll fluorescence approach. <i>Journal of Experimental Botany</i> , 2006, 58, 785-795.	2.4	69
79	Seasonal variations in photosynthesis, intrinsic water-use efficiency and stable isotope composition of poplar leaves in a short-rotation plantation. <i>Tree Physiology</i> , 2014, 34, 701-715.	1.4	68
80	Photosynthesis, leaf area and productivity of 5 poplar clones during their establishment year. <i>Annales Des Sciences Forestières</i> , 1994, 51, 613-625.	1.1	67
81	Modelling the effects of elevated atmospheric CO ₂ on crown development, light interception and photosynthesis of poplar in open top chambers. <i>Global Change Biology</i> , 1997, 3, 97-106.	4.2	67
82	Lignification and lignin heterogeneity for various age classes of bamboo (<i>Phyllostachys pubescens</i>) stems. <i>Physiologia Plantarum</i> , 2002, 114, 296-302.	2.6	67
83	Combined effects of climate warming and plant diversity loss on above- and below-ground grassland productivity. <i>Environmental and Experimental Botany</i> , 2007, 60, 95-104.	2.0	66
84	Soil [N] modulates soil C cycling in CO ₂ -enriched tree stands: a meta-analysis. <i>Plant, Cell and Environment</i> , 2010, 33, 2001-2011.	2.8	65
85	Effects of ozone exposure in open-top chambers on poplar (<i>Populus nigra</i>) and beech (<i>Fagus</i>) Tj ETQq1 1 0.784314.rgBT /Overlock 64	3.7	64
86	How do climate warming and species richness affect CO ₂ fluxes in experimental grasslands?. <i>New Phytologist</i> , 2007, 175, 512-522.	3.5	63
87	Water flux estimates from a Belgian Scots pine stand: a comparison of different approaches. <i>Journal of Hydrology</i> , 2003, 270, 230-252.	2.3	62
88	Growth and Physiology of One-year old Poplar (<i>Populus</i>) Under Elevated Atmospheric CO ₂ Levels. <i>Annals of Botany</i> , 1995, 75, 609-617.	1.4	61
89	Energy budget and greenhouse gas balance evaluation of sustainable coppice systems for electricity production. <i>Biomass and Bioenergy</i> , 2003, 24, 179-197.	2.9	61
90	Growth and production of a short rotation coppice culture of poplar. III. Second rotation results. <i>Biomass and Bioenergy</i> , 2005, 29, 10-21.	2.9	59

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91	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.	1.9	59
92	Elevated atmospheric CO ₂ alters wood production, wood quality and wood strength of Scots pine (<i>Pinus sylvestris</i> L) after three years of enrichment. <i>Global Change Biology</i> , 2002, 8, 153-162.	4.2	58
93	Evaluation of leaf traits for indirect selection of high yielding poplar hybrids. <i>Environmental and Experimental Botany</i> , 2007, 61, 103-116.	2.0	58
94	Fluxes of oxidised and reduced nitrogen above a mixed coniferous forest exposed to various nitrogen emission sources. <i>Environmental Pollution</i> , 2007, 149, 31-43.	3.7	57
95	Linear and non-linear functions of volume index to estimate woody biomass in high density young poplar stands. <i>Annales Des Sciences Foresti</i> res, 1997, 54, 335-345.	1.1	54
96	Do climate warming and plant species richness affect potential nitrification, basal respiration and ammonia-oxidizing bacteria in experimental grasslands?. <i>Soil Biology and Biochemistry</i> , 2010, 42, 1944-1951.	4.2	54
97	Clonal variation in stomatal characteristics related to biomass production of 12 poplar (<i>Populus</i>) clones in a short rotation coppice culture. <i>Environmental and Experimental Botany</i> , 2006, 58, 279-286.	2.0	53
98	ANAFORÉ: A stand-scale process-based forest model that includes wood tissue development and labile carbon storage in trees. <i>Ecological Modelling</i> , 2008, 215, 345-368.	1.2	52
99	Potential of willow and its genetically engineered associated bacteria to remediate mixed Cd and toluene contamination. <i>Journal of Soils and Sediments</i> , 2013, 13, 176-188.	1.5	52
100	A fractal-based <i>Populus</i> canopy structure model for the calculation of light interception. <i>Forest Ecology and Management</i> , 1994, 69, 97-110.	1.4	51
101	Genetic variation of leaf traits related to productivity in a <i>Populus deltoides</i> – <i>Populus nigra</i> family. <i>Canadian Journal of Forest Research</i> , 2006, 36, 390-400.	0.8	51
102	Stored water use and transpiration in Scots pine: a modeling analysis with ANAFORÉ. <i>Tree Physiology</i> , 2007, 27, 1671-1685.	1.4	51
103	Exposure to warming and CO ₂ enrichment promotes greater above-ground biomass, nitrogen, phosphorus and arbuscular mycorrhizal colonization in newly established grasslands. <i>Plant and Soil</i> , 2012, 359, 121-136.	1.8	51
104	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.	5.1	51
105	Net ecosystem production and carbon balance of an SRC poplar plantation during its first rotation. <i>Biomass and Bioenergy</i> , 2013, 56, 412-422.	2.9	51
106	Increased nitrogen-use efficiency of a short-rotation poplar plantation in elevated CO ₂ concentration. <i>Tree Physiology</i> , 2007, 27, 1153-1163.	1.4	50
107	Bidirectional ammonia exchange above a mixed coniferous forest. <i>Environmental Pollution</i> , 2008, 154, 424-438.	3.7	50
108	Comparative analysis of harvesting machines on an operational high-density short rotation woody crop (SRWC) culture: One-process versus two-process harvest operation. <i>Biomass and Bioenergy</i> , 2013, 58, 333-342.	2.9	50

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109	Effects of environment and progeny on biomass estimations of five hybrid poplar families grown at three contrasting sites across Europe. <i>Forest Ecology and Management</i> , 2007, 252, 12-23.	1.4	49
110	Entropy increase of fragmented habitats: A sign of human impact?. <i>Ecological Indicators</i> , 2005, 5, 207-212.	2.6	48
111	Stem-mediated hydraulic redistribution in large roots on opposing sides of a Douglas-fir tree following localized irrigation. <i>New Phytologist</i> , 2009, 184, 932-943.	3.5	48
112	The Potential of the Ni-Resistant TCE-Degrading <i>Pseudomonas putida</i> W619-TCE to Reduce Phytotoxicity and Improve Phytoremediation Efficiency of Poplar Cuttings on A Ni-TCE Co-Contamination. <i>International Journal of Phytoremediation</i> , 2015, 17, 40-48.	1.7	48
113	Variations in photosynthetic, anatomical, and enzymatic leaf traits and correlations with growth in recently selected <i>Populus</i> hybrids. <i>Canadian Journal of Forest Research</i> , 1987, 17, 273-283.	0.8	47
114	Carbon sequestration following afforestation of agricultural soils: comparing oak/beece forest to short-rotation poplar coppice combining a process and a carbon accounting model. <i>Global Change Biology</i> , 2004, 10, 1482-1491.	4.2	46
115	Challenges in elevated CO ₂ experiments on forests. <i>Trends in Plant Science</i> , 2010, 15, 5-10.	4.3	46
116	Leaf allometry in young poplar stands: Reliability of leaf area index estimation, site and clone effects. <i>Biomass and Bioenergy</i> , 1993, 4, 315-321.	2.9	45
117	Do above-ground growth dynamics of poplar change with time under CO ₂ enrichment?. <i>New Phytologist</i> , 2003, 160, 305-318.	3.5	45
118	Gross primary production is stimulated for three <i>Populus</i> species grown under free-air CO ₂ enrichment from planting through canopy closure. <i>Global Change Biology</i> , 2005, 11, 644-656.	4.2	45
119	Coppicing shifts CO ₂ stimulation of poplar productivity to above-ground pools: a synthesis of leaf to stand level results from the POP/EUROFACE experiment. <i>New Phytologist</i> , 2009, 182, 331-346.	3.5	45
120	Future climate alleviates stress impact on grassland productivity through altered antioxidant capacity. <i>Environmental and Experimental Botany</i> , 2014, 99, 150-158.	2.0	45
121	Short-rotation coppiced vs non-coppiced poplar: A comparative study at two different field sites. <i>Biomass and Bioenergy</i> , 1996, 11, 139-150.	2.9	44
122	Spatial distribution of leaf morphological and physiological characteristics in relation to local radiation regime within the canopies of 3-year-old <i>Populus</i> clones in coppice culture. <i>Tree Physiology</i> , 2002, 22, 1277-1288.	1.4	44
123	Three years of free-air CO ₂ enrichment (POPFACE) only slightly affect profiles of light and leaf characteristics in closed canopies of <i>Populus</i> . <i>Global Change Biology</i> , 2003, 9, 1022-1037.	4.2	44
124	N ₂ O fluxes of a bio-energy poplar plantation during a two years rotation period. <i>GCB Bioenergy</i> , 2013, 5, 536-547.	2.5	44
125	Vulnerability to drought-induced cavitation in poplars: synthesis and future opportunities. <i>Plant, Cell and Environment</i> , 2015, 38, 1233-1251.	2.8	44
126	An integrated decision support framework for the prediction and evaluation of efficiency, environmental impact and total social cost of domestic and international forestry projects for greenhouse gas mitigation: description and case studies. <i>Forest Ecology and Management</i> , 2005, 207, 245-262.	1.4	43

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127	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.	0.9	43
128	Impact of feedstock, land use change, and soil organic carbon on energy and greenhouse gas performance of biomass cogeneration technologies. <i>Applied Energy</i> , 2015, 154, 122-130.	5.1	43
129	Biodiversity in short-rotation coppice. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 111, 34-43.	8.2	43
130	Increased leaf area expansion of hybrid poplar in elevated CO ₂ . From controlled environments to open-top chambers and to FACE. <i>Environmental Pollution</i> , 2001, 115, 463-472.	3.7	42
131	Elevated CO ₂ concentration, fertilization and their interaction: growth stimulation in a short-rotation poplar coppice (EUROFACE). <i>Tree Physiology</i> , 2005, 25, 179-189.	1.4	42
132	Plasticity of growth and sylleptic branchiness in two poplar families grown at three sites across Europe. <i>Tree Physiology</i> , 2006, 26, 935-946.	1.4	41
133	Impacts and uncertainties of upscaling of remote-sensing data validation for a semi-arid woodland. <i>Journal of Arid Environments</i> , 2008, 72, 1490-1505.	1.2	41
134	Leaf area index development in temperate oak and beech forests is driven by stand characteristics and weather conditions. <i>Trees - Structure and Function</i> , 2011, 25, 935-946.	0.9	41
135	Calibration and validation of an empirical approach to model soil CO ₂ efflux in a deciduous forest. <i>Biogeochemistry</i> , 2005, 73, 209-230.	1.7	40
136	Scots pine root distribution derived from radial sap flow patterns in stems of large leaning trees. <i>Plant and Soil</i> , 2008, 305, 61-75.	1.8	40
137	Does a warmer climate with frequent mild water shortages protect grassland communities against a prolonged drought?. <i>Plant and Soil</i> , 2008, 308, 119-130.	1.8	40
138	Evapotranspiration of a high-density poplar stand in comparison with a reference grass cover in the Czechâ€“Moravian Highlands. <i>Agricultural and Forest Meteorology</i> , 2013, 181, 43-60.	1.9	40
139	Financial Analysis of the Cultivation of Short Rotation Woody Crops for Bioenergy in Belgium: Barriers and Opportunities. <i>Bioenergy Research</i> , 2013, 6, 336-350.	2.2	40
140	Plantâ€“associated bacteria and their role in the success or failure of metal phytoextraction projects: first observations of a fieldâ€“related experiment. <i>Microbial Biotechnology</i> , 2013, 6, 288-299.	2.0	40
141	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.	1.8	40
142	Genetic Variation of the Bud and Leaf Phenology of Seventeen Poplar Clones in a Short Rotation Coppice Culture. <i>Plant Biology</i> , 2004, 6, 38-46.	1.8	39
143	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.	1.8	39
144	Operational short rotation woody crop plantations: Manual or mechanised harvesting?. <i>Biomass and Bioenergy</i> , 2015, 72, 8-18.	2.9	39

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146	Effects of ozone exposure on growth and photosynthesis of beech seedlings (<i>Fagus sylvatica</i>). <i>New Phytologist</i> , 2000, 146, 271-280.	3.5	38
147	End-of-season effects of elevated temperature on ecophysiological processes of grassland species at different species richness levels. <i>Environmental and Experimental Botany</i> , 2006, 56, 245-254.	2.0	38
148	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.	1.9	38
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151	TRAP: a modelling approach to below-ground carbon allocation in temperate forests. <i>Plant and Soil</i> , 2001, 229, 281-293.	1.8	37
152	Elevated atmospheric CO ₂ in open top chambers increases net nitrification and potential denitrification. <i>Global Change Biology</i> , 2002, 8, 590-598.	4.2	37
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155	Clonal variability in biomass production and conversion efficiency of poplar during the establishment year of a short rotation coppice plantation. <i>Biomass and Bioenergy</i> , 1998, 15, 391-398.	2.9	36
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157	A comparative analysis of the carbon intensity of biofuels caused by land use changes. <i>GCB Bioenergy</i> , 2012, 4, 392-407.	2.5	36
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160	Genomic regions involved in productivity of two interspecific poplar families in Europe. 1. Stem height, circumference and volume. <i>Tree Genetics and Genomes</i> , 2009, 5, 147-164.	0.6	35
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164	Effects of elevated CO ₂ concentration on photosynthesis, respiration and carbohydrate status of coppice <i>Populus</i> hybrids. <i>Physiologia Plantarum</i> , 1997, 100, 933-939.	2.6	33
165	Driving forces for ammonia fluxes over mixed forest subjected to high deposition loads. <i>Atmospheric Environment</i> , 2005, 39, 5013-5024.	1.9	33
166	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.	1.9	33
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170	The effect of a dry spring on seasonal carbon allocation and vegetation dynamics in a poplar bioenergy plantation. <i>GCB Bioenergy</i> , 2014, 6, 473-487.	2.5	31
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172	Environmental controls on ozone fluxes in a poplar plantation in Western Europe. <i>Environmental Pollution</i> , 2014, 184, 201-210.	3.7	31
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