

Ram Oren

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

191
papers

20,750
citations

80
h-index

142
g-index

202
ext. papers

22,738
ext. citations

7.8
avg, IF

6.45
L-index

#	Paper	IF	Citations
191	Progressive Nitrogen Limitation of Ecosystem Responses to Rising Atmospheric Carbon Dioxide. <i>BioScience</i> , 2004 , 54, 731	5.7	909
190	Soil fertility limits carbon sequestration by forest ecosystems in a CO ₂ -enriched atmosphere. <i>Nature</i> , 2001 , 411, 469-72	50.4	843
189	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, 18052-6	11.5	773
188	Survey and synthesis of intra- and interspecific variation in stomatal sensitivity to vapour pressure deficit. <i>Plant, Cell and Environment</i> , 1999 , 22, 1515-1526	8.4	773
187	Water deficits and hydraulic limits to leaf water supply. <i>Plant, Cell and Environment</i> , 2002 , 25, 251-263	8.4	559
186	Differential responses to changes in growth temperature between trees from different functional groups and biomes: a review and synthesis of data. <i>Tree Physiology</i> , 2010 , 30, 669-88	4.2	539
185	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
184	Mechanisms of long-distance dispersal of seeds by wind. <i>Nature</i> , 2002 , 418, 409-13	50.4	476
183	Observed increase in local cooling effect of deforestation at higher latitudes. <i>Nature</i> , 2011 , 479, 384-7	50.4	403
182	Increases in the flux of carbon belowground stimulate nitrogen uptake and sustain the long-term enhancement of forest productivity under elevated CO ₂ . <i>Ecology Letters</i> , 2011 , 14, 349-57	10	323
181	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, 14014-9	11.5	303
180	Evaluation of 11 terrestrial carbon-nitrogen cycle models against observations from two temperate Free-Air CO ₂ Enrichment studies. <i>New Phytologist</i> , 2014 , 202, 803-822	9.8	300
179	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
178	Canopy nitrogen, carbon assimilation, and albedo in temperate and boreal forests: Functional relations and potential climate feedbacks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 19336-41	11.5	275
177	Application of the pipe model theory to predict canopy leaf area. <i>Canadian Journal of Forest Research</i> , 1982 , 12, 556-560	1.9	275
176	Forest water use and water use efficiency at elevated CO ₂ : a model-data intercomparison at two contrasting temperate forest FACE sites. <i>Global Change Biology</i> , 2013 , 19, 1759-79	11.4	271
175	Radial patterns of xylem sap flow in non-, diffuse- and ring-porous tree species. <i>Plant, Cell and Environment</i> , 1996 , 19, 983-990	8.4	259

174	The effect of tree height on crown level stomatal conductance. <i>Plant, Cell and Environment</i> , 2000 , 23, 365-375	8.4	258
173	Evapotranspiration: A process driving mass transport and energy exchange in the soil-plant-atmosphere-climate system. <i>Reviews of Geophysics</i> , 2012 , 50,	23.1	247
172	A stomatal optimization theory to describe the effects of atmospheric CO ₂ on leaf photosynthesis and transpiration. <i>Annals of Botany</i> , 2010 , 105, 431-42	4.1	228
171	Influence of nutrient versus water supply on hydraulic architecture and water balance in <i>Pinus taeda</i> . <i>Plant, Cell and Environment</i> , 2000 , 23, 1055-1066	8.4	227
170	Analyses of assumptions and errors in the calculation of stomatal conductance from sap flux measurements. <i>Tree Physiology</i> , 2000 , 20, 579-589	4.2	224
169	Influence of soil porosity on water use in <i>Pinus taeda</i> . <i>Oecologia</i> , 2000 , 124, 495-505	2.9	223
168	Estimating components of forest evapotranspiration: A footprint approach for scaling sap flux measurements. <i>Agricultural and Forest Meteorology</i> , 2008 , 148, 1719-1732	5.8	210
167	Transpiration in response to variation in microclimate and soil moisture in southeastern deciduous forests. <i>Oecologia</i> , 2001 , 127, 549-559	2.9	208
166	Carbon dioxide and water vapor exchange in a warm temperate grassland. <i>Oecologia</i> , 2004 , 138, 259-74	2.9	202
165	Leaf stomatal responses to vapour pressure deficit under current and CO ₂ -enriched atmosphere explained by the economics of gas exchange. <i>Plant, Cell and Environment</i> , 2009 , 32, 968-79	8.4	200
164	Re-assessment of plant carbon dynamics at the Duke free-air CO ₂ enrichment site: interactions of atmospheric [CO ₂] with nitrogen and water availability over stand development. <i>New Phytologist</i> , 2010 , 185, 514-28	9.8	197
163	Photoperiodic regulation of the seasonal pattern of photosynthetic capacity and the implications for carbon cycling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 8612-7	11.5	197
162	Where does the carbon go? A model-data intercomparison of vegetation carbon allocation and turnover processes at two temperate forest free-air CO ₂ enrichment sites. <i>New Phytologist</i> , 2014 , 203, 883-99	9.8	194
161	Using ecosystem experiments to improve vegetation models. <i>Nature Climate Change</i> , 2015 , 5, 528-534	21.4	191
160	Estimation of net ecosystem carbon exchange for the conterminous United States by combining MODIS and AmeriFlux data. <i>Agricultural and Forest Meteorology</i> , 2008 , 148, 1827-1847	5.8	191
159	Separating the effects of climate and vegetation on evapotranspiration along a successional chronosequence in the southeastern US. <i>Global Change Biology</i> , 2006 , 12, 2115-2135	11.4	190
158	Progressive nitrogen limitation of ecosystem processes under elevated CO ₂ in a warm-temperate forest. <i>Ecology</i> , 2006 , 87, 15-25	4.6	185
157	A continuous measure of gross primary production for the conterminous United States derived from MODIS and AmeriFlux data. <i>Remote Sensing of Environment</i> , 2010 , 114, 576-591	13.2	183

156	Species differences in stomatal control of water loss at the canopy scale in a mature bottomland deciduous forest. <i>Advances in Water Resources</i> , 2003 , 26, 1267-1278	4.7	174
155	Irreconcilable differences: fine-root life spans and soil carbon persistence. <i>Science</i> , 2008 , 319, 456-8	33.3	171
154	Relationship between plant hydraulic and biochemical properties derived from a steady-state coupled water and carbon transport model. <i>Plant, Cell and Environment</i> , 2003 , 26, 339-350	8.4	170
153	An evaluation of models for partitioning eddy covariance-measured net ecosystem exchange into photosynthesis and respiration. <i>Agricultural and Forest Meteorology</i> , 2006 , 141, 2-18	5.8	168
152	Scaling xylem sap flux and soil water balance and calculating variance: a method for partitioning water flux in forests. <i>Annales Des Sciences Forestières</i> , 1998 , 55, 191-216		167
151	Water transport in maize roots : measurement of hydraulic conductivity, solute permeability, and of reflection coefficients of excised roots using the root pressure probe. <i>Plant Physiology</i> , 1987 , 84, 1220-32	6.6	164
150	Estimating photosynthetic rate and annual carbon gain in conifers from specific leaf weight and leaf biomass. <i>Oecologia</i> , 1986 , 70, 187-193	2.9	159
149	Leaf and canopy responses to elevated CO ₂ in a pine forest under free-air CO ₂ enrichment. <i>Oecologia</i> , 1995 , 104, 139-146	2.9	157
148	Assessing net ecosystem carbon exchange of U.S. terrestrial ecosystems by integrating eddy covariance flux measurements and satellite observations. <i>Agricultural and Forest Meteorology</i> , 2011 , 151, 60-69	5.8	145
147	Hydrologic balance in an intact temperate forest ecosystem under ambient and elevated atmospheric CO ₂ concentration. <i>Global Change Biology</i> , 2002 , 8, 895-911	11.4	141
146	Role of aquaporins in determining transpiration and photosynthesis in water-stressed plants: crop water-use efficiency, growth and yield. <i>Plant, Cell and Environment</i> , 2015 , 38, 1785-93	8.4	138
145	Sensitivity of mean canopy stomatal conductance to vapor pressure deficit in a flooded <i>Taxodium distichum</i> L. forest: hydraulic and non-hydraulic effects. <i>Oecologia</i> , 2001 , 126, 21-29	2.9	131
144	Adjustments in hydraulic architecture of <i>Pinus palustris</i> maintain similar stomatal conductance in xeric and mesic habitats. <i>Plant, Cell and Environment</i> , 2006 , 29, 535-45	8.4	130
143	A comparison of daily representations of canopy conductance based on two conditional time-averaging methods and the dependence of daily conductance on environmental factors. <i>Annales Des Sciences Forestières</i> , 1998 , 55, 217-235		129
142	Time constant for water transport in loblolly pine trees estimated from time series of evaporative demand and stem sapflow. <i>Trees - Structure and Function</i> , 1997 , 11, 412	2.6	128
141	SAP FLUX OF CO-OCCURRING SPECIES IN A WESTERN SUBALPINE FOREST DURING SEASONAL SOIL DROUGHT. <i>Ecology</i> , 2000 , 81, 2557-2566	4.6	123
140	Estimating the uncertainty in annual net ecosystem carbon exchange: spatial variation in turbulent fluxes and sampling errors in eddy-covariance measurements. <i>Global Change Biology</i> , 2006 , 12, 883-896	11.4	122
139	Multiscale analysis of vegetation surface fluxes: from seconds to years. <i>Advances in Water Resources</i> , 2001 , 24, 1119-1132	4.7	121

138	Elevated CO ₂ affects photosynthetic responses in canopy pine and subcanopy deciduous trees over 10 years: a synthesis from Duke FACE. <i>Global Change Biology</i> , 2012 , 18, 223-242	11.4	118
137	Acclimation of leaf hydraulic conductance and stomatal conductance of <i>Pinus taeda</i> (loblolly pine) to long-term growth in elevated CO ₂ (free-air CO ₂ enrichment) and N-fertilization. <i>Plant, Cell and Environment</i> , 2009 , 32, 1500-12	8.4	117
136	Variability in net ecosystem exchange from hourly to inter-annual time scales at adjacent pine and hardwood forests: a wavelet analysis. <i>Tree Physiology</i> , 2005 , 25, 887-902	4.2	117
135	Climate control of terrestrial carbon exchange across biomes and continents. <i>Environmental Research Letters</i> , 2010 , 5, 034007	6.2	116
134	Fine root dynamics in a loblolly pine forest are influenced by free-air-CO ₂ -enrichment: a six-year-minirhizotron study. <i>Global Change Biology</i> , 2008 , 14, 588-602	11.4	115
133	Exposure to an enriched CO ₂ atmosphere alters carbon assimilation and allocation in a pine forest ecosystem. <i>Global Change Biology</i> , 2003 , 9, 1378-1400	11.4	114
132	Interannual Invariability of Forest Evapotranspiration and Its Consequence to Water Flow Downstream. <i>Ecosystems</i> , 2010 , 13, 421-436	3.9	113
131	WATER BALANCE DELINEATES THE SOIL LAYER IN WHICH MOISTURE AFFECTS CANOPY CONDUCTANCE 1998 , 8, 990-1002		111
130	Finite element tree crown hydrodynamics model (FETCH) using porous media flow within branching elements: A new representation of tree hydrodynamics. <i>Water Resources Research</i> , 2005 , 41,	5.4	110
129	Reduction of forest floor respiration by fertilization on both carbon dioxide-enriched and reference 17-year-old loblolly pine stands. <i>Global Change Biology</i> , 2003 , 9, 849-861	11.4	101
128	Stomatal sensitivity to vapor pressure deficit and its relationship to hydraulic conductance in <i>Pinus palustris</i> . <i>Tree Physiology</i> , 2004 , 24, 561-9	4.2	100
127	Imaging Radar for Ecosystem Studies. <i>BioScience</i> , 1995 , 45, 715-723	5.7	99
126	Mean canopy stomatal conductance responses to water and nutrient availabilities in <i>Picea abies</i> and <i>Pinus taeda</i> . <i>Tree Physiology</i> , 2001 , 21, 841-50	4.2	98
125	Aboveground sink strength in forests controls the allocation of carbon below ground and its [CO ₂]-induced enhancement. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 19362-7	11.5	95
124	Spatial Variability of Turbulent Fluxes in the Roughness Sublayer of an Even-Aged Pine Forest. <i>Boundary-Layer Meteorology</i> , 1999 , 93, 1-28	3.4	95
123	Temporal dynamics and spatial variability in the enhancement of canopy leaf area under elevated atmospheric CO ₂ . <i>Global Change Biology</i> , 2007 , 13, 2479-2497	11.4	94
122	Growth and physiological responses of isohydric and anisohydric poplars to drought. <i>Journal of Experimental Botany</i> , 2015 , 66, 4373-81	7	93
121	Net ecosystem exchange of grassland in contrasting wet and dry years. <i>Agricultural and Forest Meteorology</i> , 2006 , 139, 323-334	5.8	91

120	Contrasting responses to drought of forest floor CO ₂ efflux in a Loblolly pine plantation and a nearby Oak-Hickory forest. <i>Global Change Biology</i> , 2005 , 11, 421-434	11.4	91
119	Nocturnal evapotranspiration in eddy-covariance records from three co-located ecosystems in the Southeastern U.S.: Implications for annual fluxes. <i>Agricultural and Forest Meteorology</i> , 2009 , 149, 1491-1504	5.8	86
118	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
117	Latent and sensible heat flux predictions from a uniform pine forest using surface renewal and flux variance methods. <i>Boundary-Layer Meteorology</i> , 1996 , 80, 249-282	3.4	84
116	Comprehensive ecosystem model-data synthesis using multiple data sets at two temperate forest free-air CO ₂ enrichment experiments: Model performance at ambient CO ₂ concentration. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014 , 119, 937-964	3.7	83
115	Canopy leaf area constrains [CO ₂]-induced enhancement of productivity and partitioning among aboveground carbon pools. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 19356-61	11.5	82
114	Are ecosystem carbon inputs and outputs coupled at short time scales? A case study from adjacent pine and hardwood forests using impulse-response analysis. <i>Plant, Cell and Environment</i> , 2007 , 30, 700-1084	8.4	81
113	Modeling CO ₂ and water vapor turbulent flux distributions within a forest canopy. <i>Journal of Geophysical Research</i> , 2000 , 105, 26333-26351		81
112	Performance of two <i>Picea abies</i> (L.) Karst. stands at different stages of decline : II. Photosynthesis and leaf conductance. <i>Oecologia</i> , 1988 , 76, 513-518	2.9	81
111	Temporal variability in (13)C of respired CO ₂ in a pine and a hardwood forest subject to similar climatic conditions. <i>Oecologia</i> , 2005 , 142, 57-69	2.9	80
110	A Lagrangian dispersion model for predicting CO ₂ sources, sinks, and fluxes in a uniform loblolly pine (<i>Pinus taeda</i> L.) stand. <i>Journal of Geophysical Research</i> , 1997 , 102, 9309-9321		77
109	Multiscale model intercomparisons of CO ₂ and H ₂ O exchange rates in a maturing southeastern US pine forest. <i>Global Change Biology</i> , 2006 , 12, 1189-1207	11.4	77
108	The space-time continuum: the effects of elevated CO ₂ and temperature on trees and the importance of scaling. <i>Plant, Cell and Environment</i> , 2015 , 38, 991-1007	8.4	76
107	Variable conductivity and embolism in roots and branches of four contrasting tree species and their impacts on whole-plant hydraulic performance under future atmospheric CO ₂ concentration. <i>Tree Physiology</i> , 2010 , 30, 1001-15	4.2	76
106	Role of vegetation in determining carbon sequestration along ecological succession in the southeastern United States. <i>Global Change Biology</i> , 2008 , 14, 1409-1427	11.4	76
105	Performance of two <i>Picea abies</i> (L.) Karst. stands at different stages of decline : I. Carbon relations and stand growth. <i>Oecologia</i> , 1988 , 75, 25-37	2.9	75
104	CARRY-OVER EFFECTS OF WATER AND NUTRIENT SUPPLY ON WATER USE OF PINUS TAEDA 1999 , 9, 513-525		69
103	Performance of two <i>Picea abies</i> (L.) Karst. stands at different stages of decline : V. Root tip and ectomycorrhiza development and their relations to above ground and soil nutrients. <i>Oecologia</i> , 1988 , 77, 7-13	2.9	68

102	Actual and potential transpiration and carbon assimilation in an irrigated poplar plantation. <i>Tree Physiology</i> , 2008 , 28, 559-77	4.2	67
101	Stochastic Dynamics of Plant-Water Interactions. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2007 , 38, 767-791	13.5	67
100	Abundance and community structure of ammonia-oxidizing bacteria and archaea in a temperate forest ecosystem under ten-years elevated CO ₂ . <i>Soil Biology and Biochemistry</i> , 2012 , 46, 163-171	7.5	65
99	A comparison of sap flow and eddy fluxes of water vapor from a boreal deciduous forest. <i>Journal of Geophysical Research</i> , 1997 , 102, 28929-28937		65
98	Uptake of water and solutes through twigs of <i>Picea abies</i> (L.) Karst. <i>Trees - Structure and Function</i> , 1989 , 3, 33	2.6	65
97	Forest fine-root production and nitrogen use under elevated CO ₂ : contrasting responses in evergreen and deciduous trees explained by a common principle. <i>Global Change Biology</i> , 2009 , 15, 132-144	11.4	64
96	The relationship between reference canopy conductance and simplified hydraulic architecture. <i>Advances in Water Resources</i> , 2009 , 32, 809-819	4.7	63
95	Modelling the limits on the response of net carbon exchange to fertilization in a south-eastern pine forest. <i>Plant, Cell and Environment</i> , 2002 , 25, 1095-1120	8.4	63
94	INTRA- AND INTER-ANNUAL VARIATION IN TRANSPIRATION OF A PINE FOREST 2001 , 11, 385-396		62
93	Inter-annual variability of precipitation constrains the production response of boreal <i>Pinus sylvestris</i> to nitrogen fertilization. <i>Forest Ecology and Management</i> , 2015 , 348, 31-45	3.9	60
92	The porous media model for the hydraulic system of a conifer tree: Linking sap flux data to transpiration rate. <i>Ecological Modelling</i> , 2006 , 191, 447-468	3	60
91	Temporal patterns of water flux in trees and lianas in a Panamanian moist forest. <i>Trees - Structure and Function</i> , 1999 , 14, 0116	2.6	59
90	Performance of two <i>Picea abies</i> (L.) Karst. stands at different stages of decline : IV. Xylem sap concentrations of magnesium, calcium, potassium and nitrogen. <i>Oecologia</i> , 1988 , 77, 1-6	2.9	57
89	Soil water depletion by oak trees and the influence of root water uptake on the moisture content spatial statistics. <i>Water Resources Research</i> , 1997 , 33, 611-623	5.4	56
88	Mycorrhizal and rhizomorph dynamics in a loblolly pine forest during 5 years of free-air-CO ₂ -enrichment. <i>Global Change Biology</i> , 2008 , 14, 1252-1264	11.4	54
87	EVALUATING THE TYPE AND STATE OF ALASKA TAIGA FORESTS WITH IMAGING RADAR FOR USE IN ECOSYSTEM MODELS. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 1994 , 32, 353-370	8.1	54
86	Modelling Vegetation-Atmosphere Co ₂ Exchange By A Coupled Eulerian-Lagrangian Approach. <i>Boundary-Layer Meteorology</i> , 2000 , 95, 91-122	3.4	53
85	Transpiration in Upper Amazonia Floodplain and Upland Forests in Response to Drought-Breaking Rains. <i>Ecology</i> , 1996 , 77, 968-973	4.6	53

84	The carbon bonus of organic nitrogen enhances nitrogen use efficiency of plants. <i>Plant, Cell and Environment</i> , 2017 , 40, 25-35	8.4	52
83	Baseliner: An open-source, interactive tool for processing sap flux data from thermal dissipation probes. <i>SoftwareX</i> , 2016 , 5, 139-143	2.7	52
82	Estimation of long-term basin scale evapotranspiration from streamflow time series. <i>Water Resources Research</i> , 2010 , 46,	5.4	52
81	Increases in atmospheric CO ₂ have little influence on transpiration of a temperate forest canopy. <i>New Phytologist</i> , 2015 , 205, 518-25	9.8	49
80	Time series diagnosis of tree hydraulic characteristics. <i>Tree Physiology</i> , 2004 , 24, 879-90	4.2	49
79	Elevated carbon dioxide does not affect average canopy stomatal conductance of <i>Pinus taeda</i> L. <i>Oecologia</i> , 1998 , 117, 47-52	2.9	48
78	Winter and spring thaw as observed with imaging radar at BOREAS. <i>Journal of Geophysical Research</i> , 1997 , 102, 29673-29684		47
77	The effects of elevated CO ₂ and nitrogen fertilization on stomatal conductance estimated from 11 years of scaled sap flux measurements at Duke FACE. <i>Tree Physiology</i> , 2013 , 33, 135-51	4.2	46
76	Alu exonization events reveal features required for precise recognition of exons by the splicing machinery. <i>PLoS Computational Biology</i> , 2009 , 5, e1000300	5	46
75	Modelling night-time ecosystem respiration by a constrained source optimization method. <i>Global Change Biology</i> , 2002 , 8, 124-141	11.4	45
74	Spatiotemporal variation of crown-scale stomatal conductance in an arid <i>Vitis vinifera</i> L. cv. Merlot vineyard: direct effects of hydraulic properties and indirect effects of canopy leaf area. <i>Tree Physiology</i> , 2012 , 32, 262-79	4.2	44
73	The hysteresis response of soil CO ₂ concentration and soil respiration to soil temperature. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015 , 120, 1605-1618	3.7	43
72	Estimation of light interception properties of conifer shoots by an improved photographic method and a 3D model of shoot structure. <i>Tree Physiology</i> , 2007 , 27, 1375-87	4.2	43
71	Greater carbon allocation to mycorrhizal fungi reduces tree nitrogen uptake in a boreal forest. <i>Ecology</i> , 2016 , 97, 1012-22	4.6	41
70	Greater seed production in elevated CO ₂ is not accompanied by reduced seed quality in <i>Pinus taeda</i> L.. <i>Global Change Biology</i> , 2010 , 16, 1046-1056	11.4	41
69	Interaction of ice storms and management practices on current carbon sequestration in forests with potential mitigation under future CO ₂ atmosphere. <i>Journal of Geophysical Research</i> , 2006 , 111,		41
68	Fertilization effects on mean stomatal conductance are mediated through changes in the hydraulic attributes of mature Norway spruce trees. <i>Tree Physiology</i> , 2008 , 28, 579-96	4.2	40
67	Challenges in elevated CO ₂ experiments on forests. <i>Trends in Plant Science</i> , 2010 , 15, 5-10	13.1	39

66	Quantification of insect nitrogen utilization by the venus fly trap <i>Dionaea muscipula</i> catching prey with highly variable isotope signatures. <i>Journal of Experimental Botany</i> , 2001 , 52, 1041-9	7	39
65	Performance of two <i>Picea abies</i> (L.) Karst. stands at different stages of decline : III. Canopy transpiration of green trees. <i>Oecologia</i> , 1988 , 76, 519-524	2.9	39
64	Eco-hydrological controls on summertime convective rainfall triggers. <i>Global Change Biology</i> , 2007 , 13, 887-896	11.4	38
63	Leaf Area Dynamics of Conifer Forests 1995 , 181-223		38
62	Decadal biomass increment in early secondary succession woody ecosystems is increased by CO ₂ enrichment. <i>Nature Communications</i> , 2019 , 10, 454	17.4	37
61	Effects of hydraulic architecture and spatial variation in light on mean stomatal conductance of tree branches and crowns. <i>Plant, Cell and Environment</i> , 2007 , 30, 483-96	8.4	37
60	Chlorophyll and nutrient relationships identify nutritionally caused decline in <i>Picea abies</i> stands. <i>Canadian Journal of Forest Research</i> , 1993 , 23, 1187-1195	1.9	36
59	Modeling seed dispersal distances: implications for transgenic <i>Pinus taeda</i> 2006 , 16, 117-24		35
58	Relationships between foliage and conducting xylem in <i>Picea abies</i> (L.) Karst.. <i>Trees - Structure and Function</i> , 1986 , 1, 61	2.6	34
57	Analysis of the sensitivity of absorbed light and incident light profile to various canopy architecture and stand conditions. <i>Tree Physiology</i> , 2011 , 31, 30-47	4.2	31
56	Estimating maximum mean canopy stomatal conductance for use in models. <i>Canadian Journal of Forest Research</i> , 2001 , 31, 198-207	1.9	31
55	Spatial and temporal variability of soil CO ₂ efflux in three proximate temperate forest ecosystems. <i>Agricultural and Forest Meteorology</i> , 2013 , 171-172, 256-269	5.8	30
54	Modeling nighttime ecosystem respiration from measured CO ₂ concentration and air temperature profiles using inverse methods. <i>Journal of Geophysical Research</i> , 2006 , 111,		30
53	The spatial factor, rather than elevated CO ₂ controls the soil bacterial community in a temperate Forest Ecosystem. <i>Applied and Environmental Microbiology</i> , 2010 , 76, 7429-36	4.8	28
52	Impact of elevated atmospheric CO ₂ on forest floor respiration in a temperate pine forest. <i>Global Biogeochemical Cycles</i> , 2004 , 18, n/a-n/a	5.9	28
51	Ecophysiological variation of transpiration of pine forests: synthesis of new and published results 2017 , 27, 118-133		27
50	Trenching reduces soil heterotrophic activity in a loblolly pine (<i>Pinus taeda</i>) forest exposed to elevated atmospheric [CO ₂] and N fertilization. <i>Agricultural and Forest Meteorology</i> , 2012 , 165, 43-52	5.8	25
49	How well do stomatal conductance models perform on closing plant carbon budgets? A test using seedlings grown under current and elevated air temperatures. <i>Journal of Geophysical Research</i> , 2011 , 116,		25

48	Response Mechanisms of Conifers to Air Pollutants 1995 , 255-308		25
47	The effects of elevated atmospheric CO ₂ and nitrogen amendments on subsurface CO ₂ production and concentration dynamics in a maturing pine forest. <i>Biogeochemistry</i> , 2009 , 94, 271-287	3.8	24
46	Response to CO ₂ enrichment of understory vegetation in the shade of forests. <i>Global Change Biology</i> , 2016 , 22, 944-56	11.4	23
45	Boreal forest biomass accumulation is not increased by two decades of soil warming. <i>Nature Climate Change</i> , 2019 , 9, 49-52	21.4	23
44	Sustained effects of atmospheric [CO ₂] and nitrogen availability on forest soil CO ₂ efflux. <i>Global Change Biology</i> , 2014 , 20, 1146-60	11.4	19
43	Energy, water, and carbon fluxes in a loblolly pine stand: Results from uniform and gappy canopy models with comparisons to eddy flux data. <i>Journal of Geophysical Research</i> , 2009 , 114,		19
42	Photosynthetic refixation varies along the stem and reduces CO ₂ efflux in mature boreal <i>Pinus sylvestris</i> trees. <i>Tree Physiology</i> , 2018 , 38, 558-569	4.2	17
41	Sensitivity of stand transpiration to wind velocity in a mixed broadleaved deciduous forest. <i>Agricultural and Forest Meteorology</i> , 2014 , 187, 62-71	5.8	17
40	Hydraulic time constants for transpiration of loblolly pine at a free-air carbon dioxide enrichment site. <i>Tree Physiology</i> , 2013 , 33, 123-34	4.2	17
39	A state-space modeling approach to estimating canopy conductance and associated uncertainties from sap flux density data. <i>Tree Physiology</i> , 2015 , 35, 792-802	4.2	16
38	Effects of <i>Pinus taeda</i> leaf anatomy on vascular and extravascular leaf hydraulic conductance as influenced by N-fertilization and elevated CO ₂ . <i>The Journal of Plant Hydraulics</i> , 3, e007		16
37	Changing Seasonal Rainfall Distribution With Climate Directs Contrasting Impacts at Evapotranspiration and Water Yield in the Western Mediterranean Region. <i>Earth's Future</i> , 2018 , 6, 841-858	7.9	15
36	Modelling understory light for seedling regeneration in continuous cover forestry canopies. <i>Forestry</i> , 2011 , 84, 397-409	2.2	14
35	The way the wind blows matters to ecosystem water use efficiency. <i>Agricultural and Forest Meteorology</i> , 2016 , 217, 1-9	5.8	14
34	How well do growing season dynamics of photosynthetic capacity correlate with leaf biochemistry and climate fluctuations?. <i>Tree Physiology</i> , 2017 , 37, 879-888	4.2	13
33	Global transpiration data from sap flow measurements: the SAPFLUXNET database. <i>Earth System Science Data</i> , 2021 , 13, 2607-2649	10.5	13
32	Annual climate variation modifies nitrogen induced carbon accumulation of <i>Pinus sylvestris</i> forests. <i>Ecological Applications</i> , 2017 , 27, 1838-1851	4.9	12
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29	Anatomical changes with needle length are correlated with leaf structural and physiological traits across five Pinus species. <i>Plant, Cell and Environment</i> , 2019 , 42, 1690-1704	8.4	10
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20	Informing climate models with rapid chamber measurements of forest carbon uptake. <i>Global Change Biology</i> , 2017 , 23, 2130-2139	11.4	7
19	Stem compression reversibly reduces phloem transport in Pinus sylvestris trees. <i>Tree Physiology</i> , 2015 , 35, 1075-85	4.2	7
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16	Global transpiration data from sap flow measurements: the SAPFLUXNET database		6
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