

Walter C Oechel

List of Publications by Citations

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251
papers

24,720
citations

75
h-index

154
g-index

262
ext. papers

26,955
ext. citations

6.9
avg, IF

6.14
L-index

#	Paper	IF	Citations
251	FLUXNET: A New Tool to Study the Temporal and Spatial Variability of Ecosystem Scale Carbon Dioxide, Water Vapor, and Energy Flux Densities. <i>Bulletin of the American Meteorological Society</i> , 2001 , 82, 2415-2434	6.1	2615
250	Energy balance closure at FLUXNET sites. <i>Agricultural and Forest Meteorology</i> , 2002 , 113, 223-243	5.8	1633
249	Observational Evidence of Recent Change in the Northern High-Latitude Environment. <i>Climatic Change</i> , 2000 , 46, 159-207	4.5	1452
248	Evidence and Implications of Recent Climate Change in Northern Alaska and Other Arctic Regions. <i>Climatic Change</i> , 2005 , 72, 251-298	4.5	1074
247	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
246	Recent change of Arctic tundra ecosystems from a net carbon dioxide sink to a source. <i>Nature</i> , 1993 , 361, 520-523	50.4	759
245	Seasonality of ecosystem respiration and gross primary production as derived from FLUXNET measurements. <i>Agricultural and Forest Meteorology</i> , 2002 , 113, 53-74	5.8	540
244	Acclimation of ecosystem CO ₂ exchange in the Alaskan Arctic in response to decadal climate warming. <i>Nature</i> , 2000 , 406, 978-81	50.4	492
243	Evaluation of remote sensing based terrestrial productivity from MODIS using regional tower eddy flux network observations. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2006 , 44, 1908-1925	8.1	475
242	Modeling temporal and large-scale spatial variability of soil respiration from soil water availability, temperature and vegetation productivity indices. <i>Global Biogeochemical Cycles</i> , 2003 , 17, n/a-n/a	5.9	431
241	Global Change and the Carbon Balance of Arctic Ecosystems. <i>BioScience</i> , 1992 , 42, 433-441	5.7	366
240	Strategies for measuring and modelling carbon dioxide and water vapour fluxes over terrestrial ecosystems. <i>Global Change Biology</i> , 1996 , 2, 159-168	11.4	345
239	Predicting Ecosystem Responses to Elevated CO ₂ Concentrations. <i>BioScience</i> , 1991 , 41, 96-104	5.7	303
238	A new model of gross primary productivity for North American ecosystems based solely on the enhanced vegetation index and land surface temperature from MODIS. <i>Remote Sensing of Environment</i> , 2008 , 112, 1633-1646	13.2	302
237	Site-level evaluation of satellite-based global terrestrial gross primary production and net primary production monitoring. <i>Global Change Biology</i> , 2005 , 11, 666-684	11.4	264
236	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. <i>Scientific Data</i> , 2020 , 7, 225	8.2	256
235	Response of <i>Eriophorum vaginatum</i> to Elevated CO ₂ and Temperature in the Alaskan Tussock Tundra. <i>Ecology</i> , 1987 , 68, 401-410	4.6	246

234	A model-data comparison of gross primary productivity: Results from the North American Carbon Program site synthesis. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		239
233	Seasonal patterns of reflectance indices, carotenoid pigments and photosynthesis of evergreen chaparral species. <i>Oecologia</i> , 2002 , 131, 366-374	2.9	237
232	An assessment of the carbon balance of Arctic tundra: comparisons among observations, process models, and atmospheric inversions. <i>Biogeosciences</i> , 2012 , 9, 3185-3204	4.6	221
231	Cold season emissions dominate the Arctic tundra methane budget. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 40-5	11.5	217
230	A model-data intercomparison of CO ₂ exchange across North America: Results from the North American Carbon Program site synthesis. <i>Journal of Geophysical Research</i> , 2010 , 115,		216
229	Reduction in carbon uptake during turn of the century drought in western North America. <i>Nature Geoscience</i> , 2012 , 5, 551-556	18.3	216
228	On the use of MODIS EVI to assess gross primary productivity of North American ecosystems. <i>Journal of Geophysical Research</i> , 2006 , 111,		215
227	Transient nature of CO ₂ fertilization in Arctic tundra. <i>Nature</i> , 1994 , 371, 500-503	50.4	204
226	Cold season CO ₂ emission from Arctic soils. <i>Global Biogeochemical Cycles</i> , 1997 , 11, 163-172	5.9	200
225	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
224	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
223	Microbial activity in soils frozen to below 0°C. <i>Soil Biology and Biochemistry</i> , 2006 , 38, 785-794	7.5	179
222	Carbon balance in tussock tundra under ambient and elevated atmospheric CO ₂ . <i>Oecologia</i> , 1990 , 83, 485-494	2.9	176
221	Change in Arctic CO ₂ Flux Over Two Decades: Effects of Climate Change at Barrow, Alaska 1995 , 5, 846-855		171
220	Taiga Ecosystems in Interior Alaska. <i>BioScience</i> , 1983 , 33, 39-44	5.7	170
219	Response of black spruce (<i>Picea mariana</i>) ecosystems to soil temperature modification in interior Alaska. <i>Canadian Journal of Forest Research</i> , 1990 , 20, 1530-1535	1.9	169
218	Parallel adjustments in vegetation greenness and ecosystem CO ₂ exchange in response to drought in a Southern California chaparral ecosystem. <i>Remote Sensing of Environment</i> , 2006 , 103, 289-303	13.2	166
217	Biodiversity, distributions and adaptations of Arctic species in the context of environmental change. <i>Ambio</i> , 2004 , 33, 404-17	6.5	162

216	A new low-power, open-path instrument for measuring methane flux by eddy covariance. <i>Applied Physics B: Lasers and Optics</i> , 2011 , 102, 391-405	1.9	148
215	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
214	Direct observations of the effects of aerosol loading on net ecosystem CO ₂ exchanges over different landscapes. <i>Geophysical Research Letters</i> , 2004 , 31,	4.9	140
213	Effect of CO ₂ enrichment and nitrogen availability on resource acquisition and resource allocation in a grass, <i>Bromus mollis</i> . <i>Oecologia</i> , 1988 , 77, 544-549	2.9	140
212	Energy partitioning between latent and sensible heat flux during the warm season at FLUXNET sites. <i>Water Resources Research</i> , 2002 , 38, 30-1-30-11	5.4	139
211	The uncertain climate footprint of wetlands under human pressure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 4594-9	11.5	138
210	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
209	Diurnal, seasonal and annual variation in the net ecosystem CO ₂ exchange of a desert shrub community (<i>Sarcocaulis</i>) in Baja California, Mexico. <i>Global Change Biology</i> , 2005 , 11, 927-939	11.4	134
208	The effects of water table manipulation and elevated temperature on the net CO ₂ flux of wet sedge tundra ecosystems. <i>Global Change Biology</i> , 1998 , 4, 77-90	11.4	131
207	Energy and trace-gas fluxes across a soil pH boundary in the Arctic. <i>Nature</i> , 1998 , 394, 469-472	50.4	128
206	Moss functioning in different taiga ecosystems in interior Alaska : I. Seasonal, phenotypic, and drought effects on photosynthesis and response patterns. <i>Oecologia</i> , 1981 , 48, 50-59	2.9	123
205	The effects of climate change on land-atmosphere feedbacks in arctic tundra regions. <i>Trends in Ecology and Evolution</i> , 1994 , 9, 324-9	10.9	121
204	Climate control of terrestrial carbon exchange across biomes and continents. <i>Environmental Research Letters</i> , 2010 , 5, 034007	6.2	116
203	Large loss of CO ₂ in winter observed across the northern permafrost region.. <i>Nature Climate Change</i> , 2019 , 9, 852-857	21.4	112
202	Terrestrial carbon balance in a drier world: the effects of water availability in southwestern North America. <i>Global Change Biology</i> , 2016 , 22, 1867-79	11.4	111
201	Fire Intensity Effects on Germination of Shrubs and Herbs in Southern California Chaparral. <i>Ecology</i> , 1991 , 72, 1993-2004	4.6	105
200	CO ₂ exchange and evapotranspiration across dryland ecosystems of southwestern North America. <i>Global Change Biology</i> , 2017 , 23, 4204-4221	11.4	103
199	Global estimation of evapotranspiration using a leaf area index-based surface energy and water balance model. <i>Remote Sensing of Environment</i> , 2012 , 124, 581-595	13.2	100

198	Effects of elevated atmospheric CO ₂ on soil microbial biomass, activity, and diversity in a chaparral ecosystem. <i>Applied and Environmental Microbiology</i> , 2005 , 71, 8573-80	4.8	99
197	Landscape-Scale CO ₂ , H ₂ O Vapour and Energy Flux of Moist-Wet Coastal Tundra Ecosystems over Two Growing Seasons. <i>Journal of Ecology</i> , 1997 , 85, 575	6	97
196	Fire intensity and herbivory effects on postfire resprouting of <i>Adenostoma fasciculatum</i> in southern California chaparral. <i>Oecologia</i> , 1991 , 85, 429-433	2.9	96
195	Effects of CO ₂ enrichment and nutrition on growth, photosynthesis, and nutrient concentration of Alaskan tundra plant species. <i>Canadian Journal of Botany</i> , 1986 , 64, 2993-2998		95
194	Effects of Global Change on the Carbon Balance of Arctic Plants and Ecosystems 1992 , 139-168		95
193	EDDY COVARIANCE MEASUREMENTS OF CO ₂ AND ENERGY FLUXES OF AN ALASKAN TUSSOCK TUNDRA ECOSYSTEM. <i>Ecology</i> , 1999 , 80, 686-701	4.6	92
192	Mature semiarid chaparral ecosystems can be a significant sink for atmospheric carbon dioxide. <i>Global Change Biology</i> , 2007 , 13, 386-396	11.4	91
191	The role of mosses in the phosphorus cycling of an Alaskan black spruce forest. <i>Oecologia</i> , 1987 , 74, 310-315	3.5	90
190	Reduction of iron (III) and humic substances plays a major role in anaerobic respiration in an Arctic peat soil. <i>Journal of Geophysical Research</i> , 2010 , 115,		89
189	Satellite-based model detection of recent climate-driven changes in northern high-latitude vegetation productivity. <i>Journal of Geophysical Research</i> , 2008 , 113,		89
188	Monitoring drought effects on vegetation water content and fluxes in chaparral with the 970nm water band index. <i>Remote Sensing of Environment</i> , 2006 , 103, 304-311	13.2	88
187	The photosynthetic capacity, nutrient content, and nutrient use efficiency of different needle age-classes of black spruce (<i>Picea mariana</i>) found in interior Alaska. <i>Canadian Journal of Forest Research</i> , 1983 , 13, 834-839	1.9	87
186	Annual patterns and budget of CO ₂ flux in an Arctic tussock tundra ecosystem. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014 , 119, 323-339	3.7	85
185	Variability in exchange of CO ₂ across 12 northern peatland and tundra sites. <i>Global Change Biology</i> , 2009 , 16, no-no	11.4	85
184	Thermal optimality of net ecosystem exchange of carbon dioxide and underlying mechanisms. <i>New Phytologist</i> , 2012 , 194, 775-783	9.8	81
183	Tissue Water Potential, Photosynthesis, C-Labeled Photosynthate Utilization, and Growth in the Desert Shrub <i>Larrea divaricata</i> Cav.. <i>Ecological Monographs</i> , 1972 , 42, 127-141	9	81
182	Impacts of droughts and extreme-temperature events on gross primary production and ecosystem respiration: a systematic assessment across ecosystems and climate zones. <i>Biogeosciences</i> , 2018 , 15, 1293-1318	4.6	79
181	FLUXNET-CH ₄ Synthesis Activity: Objectives, Observations, and Future Directions. <i>Bulletin of the American Meteorological Society</i> , 2019 , 100, 2607-2632	6.1	77

180	Nonlinear controls on evapotranspiration in arctic coastal wetlands. <i>Biogeosciences</i> , 2011 , 8, 3375-3389	4.6	77
179	Factors controlling postfire seedling establishment in southern California chaparral. <i>Oecologia</i> , 1992 , 90, 50-60	2.9	76
178	Microtopographic controls on ecosystem functioning in the Arctic Coastal Plain. <i>Journal of Geophysical Research</i> , 2011 , 116,		75
177	Fire Severity, Ash Deposition, and Clipping Effects on Soil Nutrients in Chaparral. <i>Soil Science Society of America Journal</i> , 1991 , 55, 235-240	2.5	75
176	Effects of climate variability on carbon sequestration among adjacent wet sedge tundra and moist tussock tundra ecosystems. <i>Journal of Geophysical Research</i> , 2006 , 111,		72
175	Photosynthesis, Respiration, and Phosphate Absorption by <i>Carex Aquatilis</i> Ecotypes along Latitudinal and Local Environmental Gradients. <i>Ecology</i> , 1983 , 64, 743-751	4.6	72
174	Simulating carbon accumulation in northern ecosystems. <i>Simulation</i> , 1983 , 40, 119-131	1.2	71
173	Spatial variation in landscape-level CO ₂ and CH ₄ fluxes from arctic coastal tundra: influence from vegetation, wetness, and the thaw lake cycle. <i>Global Change Biology</i> , 2013 , 19, 2853-66	11.4	70
172	Water-table height and microtopography control biogeochemical cycling in an Arctic coastal tundra ecosystem. <i>Biogeosciences</i> , 2012 , 9, 577-591	4.6	70
171	Effects of long-term elevated [CO ₂] from natural CO ₂ springs on <i>Nardus stricta</i> : photosynthesis, biochemistry, growth and phenology. <i>Plant, Cell and Environment</i> , 1998 , 21, 417-425	8.4	70
170	Carbon cycle uncertainty in the Alaskan Arctic. <i>Biogeosciences</i> , 2014 , 11, 4271-4288	4.6	69
169	Remote sensing of tundra gross ecosystem productivity and light use efficiency under varying temperature and moisture conditions. <i>Remote Sensing of Environment</i> , 2010 , 114, 481-489	13.2	68
168	Inter-annual carbon dioxide uptake of a wet sedge tundra ecosystem in the Arctic		67
167	Testing the applicability of neural networks as a gap-filling method using CH ₄ flux data from high latitude wetlands. <i>Biogeosciences</i> , 2013 , 10, 8185-8200	4.6	66
166	The impact of permafrost thawing on the carbon dynamics of tundra. <i>Geophysical Research Letters</i> , 1997 , 24, 229-232	4.9	66
165	Responses to projected changes in climate and UV-B at the species level. <i>Ambio</i> , 2004 , 33, 418-35	6.5	65
164	The Effect of Decreasing Water Potential on Net CO ₂ Exchange of Intact Desert Shrubs. <i>Ecology</i> , 1974 , 55, 1086-1095	4.6	65
163	Effects of lifelong [CO ₂] enrichment on carboxylation and light utilization of <i>Quercus pubescens</i> Willd. examined with gas exchange, biochemistry and optical techniques. <i>Plant, Cell and Environment</i> , 2000 , 23, 1353-1362	8.4	64

162	Plant-Soil Processes in Eriophorum Vaginatum Tussock Tundra in Alaska: A Systems Modeling Approach. <i>Ecological Monographs</i> , 1984 , 54, 361-405	9	64
161	Competition for nitrogen in a tussock tundra ecosystem. <i>Plant and Soil</i> , 1982 , 66, 317-327	4.2	64
160	Soil moisture control over autumn season methane flux, Arctic Coastal Plain of Alaska. <i>Biogeosciences</i> , 2012 , 9, 1423-1440	4.6	63
159	Growing season and spatial variations of carbon fluxes of Arctic and boreal ecosystems in Alaska (USA) 2013 , 23, 1798-816		63
158	Intercomparison among chamber, tower, and aircraft net CO ₂ and energy fluxes measured during the Arctic System Science Land-Atmosphere-Ice Interactions (ARCSS-LAI) Flux Study. <i>Journal of Geophysical Research</i> , 1998 , 103, 28993-29003		62
157	A scaling approach for quantifying the net CO flux of the Kuparuk River Basin, Alaska.. <i>Global Change Biology</i> , 2000 , 6, 160-173	11.4	60
156	Comparative CO ₂ exchange patterns in mosses from two tundra habitats at Barrow, Alaska. <i>Canadian Journal of Botany</i> , 1976 , 54, 1355-1369		59
155	Satellite Microwave Remote Sensing of Boreal and Arctic Soil Temperatures From AMSR-E. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007 , 45, 2004-2018	8.1	53
154	The effect of climate on the photosynthesis of Picea mariana at the subarctic tree line. 1. Field measurements. <i>Canadian Journal of Botany</i> , 1975 , 53, 604-620		51
153	Effects on the structure of Arctic ecosystems in the short- and long-term perspectives. <i>Ambio</i> , 2004 , 33, 436-47	6.5	50
152	Alteration of Soil Carbon Pools and Communities of Mycorrhizal Fungi in Chaparral Exposed to Elevated Carbon Dioxide. <i>Ecosystems</i> , 2003 , 6, 786-796	3.9	48
151	Mid- to late-Holocene carbon balance in Arctic Alaska and its implications for future global warming. <i>Holocene</i> , 1993 , 3, 193-200	2.6	48
150	Seasonal variation in leaf chemistry of the coast live oak Quercus agrifolia and implications for the California oak moth Phryganidia californica. <i>Oecologia</i> , 1989 , 79, 439-445	2.9	48
149	Response of tussock tundra to elevated carbon dioxide regimes: analysis of ecosystem CO flux through nonlinear modeling. <i>Oecologia</i> , 1987 , 72, 466-472	2.9	48
148	Effects of soil temperature on the carbon exchange of taiga seedlings.: I. Root respiration. <i>Canadian Journal of Forest Research</i> , 1983 , 13, 840-849	1.9	48
147	Tundra photosynthesis captured by satellite-observed solar-induced chlorophyll fluorescence. <i>Geophysical Research Letters</i> , 2017 , 44, 1564-1573	4.9	47
146	Upscaling terrestrial carbon dioxide fluxes in Alaska with satellite remote sensing and support vector regression. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2013 , 118, 1266-1281	3.7	47
145	Widespread foliage ¹⁵ N depletion under elevated CO ₂ : inferences for the nitrogen cycle. <i>Global Change Biology</i> , 2003 , 9, 1582-1590	11.4	47

144	The pattern of growth and translocation of photosynthate in a tundra moss, <i>Polytrichum alpinum</i> . <i>Canadian Journal of Botany</i> , 1974 , 52, 355-363		46
143	Characterization of the carbon fluxes of a vegetated drained lake basin chronosequence on the Alaskan Arctic Coastal Plain. <i>Global Change Biology</i> , 2009 , 16, 1870-1882	11.4	45
142	Mapping carbon and water vapor fluxes in a chaparral ecosystem using vegetation indices derived from AVIRIS. <i>Remote Sensing of Environment</i> , 2006 , 103, 312-323	13.2	45
141	Monthly gridded data product of northern wetland methane emissions based on upscaling eddy covariance observations. <i>Earth System Science Data</i> , 2019 , 11, 1263-1289	10.5	45
140	COMPARATIVE PATTERNS OF NET PHOTOSYNTHESIS IN AN ASSEMBLAGE OF MOSSES WITH CONTRASTING MICRODISTRIBUTIONS. <i>American Journal of Botany</i> , 1987 , 74, 1787-1796	2.7	44
139	Latent heat exchange in the boreal and arctic biomes. <i>Global Change Biology</i> , 2014 , 20, 3439-56	11.4	43
138	Representativeness of Eddy-Covariance flux footprints for areas surrounding AmeriFlux sites. <i>Agricultural and Forest Meteorology</i> , 2021 , 301-302, 108350	5.8	43
137	Effects of changes in climate on landscape and regional processes, and feedbacks to the climate system. <i>Ambio</i> , 2004 , 33, 459-68	6.5	42
136	Interactions Among the Effects of Herbivory, Competition, and Resource Limitation on Chaparral Herbs. <i>Ecology</i> , 1991 , 72, 104-115	4.6	42
135	Moss leaf water content and solar radiation at the moss surface in a mature black spruce forest in central Alaska. <i>Canadian Journal of Forest Research</i> , 1983 , 13, 860-868	1.9	42
134	Responses of CO ₂ flux components of Alaskan Coastal Plain tundra to shifts in water table. <i>Journal of Geophysical Research</i> , 2010 , 115,		41
133	Carbon Balance Limits the Microdistribution of <i>Grimmia laevigata</i> , a Desiccation-Tolerant Plant. <i>Ecology</i> , 1985 , 66, 660-669	4.6	41
132	Vegetation Type Dominates the Spatial Variability in CH ₄ Emissions Across Multiple Arctic Tundra Landscapes. <i>Ecosystems</i> , 2016 , 19, 1116-1132	3.9	41
131	Physiological aspects of the ecology of <i>Dicranum fuscescens</i> in the subarctic. I. Acclimation and acclimation potential of CO ₂ exchange in relation to habitat, light, and temperature. <i>Canadian Journal of Botany</i> , 1976 , 54, 1104-1119		40
130	Demography of <i>Adenostoma fasciculatum</i> after fires of different intensities in southern California chaparral. <i>Oecologia</i> , 1993 , 96, 95-101	2.9	39
129	Latitudinal gradient of spruce forest understory and tundra phenology in Alaska as observed from satellite and ground-based data. <i>Remote Sensing of Environment</i> , 2016 , 177, 160-170	13.2	38
128	Improved global simulations of gross primary product based on a new definition of water stress factor and a separate treatment of C ₃ and C ₄ plants. <i>Ecological Modelling</i> , 2015 , 297, 42-59	3	37
127	Increased CO ₂ loss from vegetated drained lake tundra ecosystems due to flooding. <i>Global Biogeochemical Cycles</i> , 2012 , 26, n/a-n/a	5.9	37

126	Effects on the function of Arctic ecosystems in the short- and long-term perspectives. <i>Ambio</i> , 2004 , 33, 448-58	6.5	37
125	Biotic and climatic controls on interannual variability in carbon fluxes across terrestrial ecosystems. <i>Agricultural and Forest Meteorology</i> , 2015 , 205, 11-22	5.8	36
124	Spatial and temporal variations in hectare-scale net CO ₂ flux, respiration and gross primary production of Arctic tundra ecosystems. <i>Functional Ecology</i> , 2000 , 14, 203-214	5.6	36
123	Mapping Arctic Tundra Vegetation Communities Using Field Spectroscopy and Multispectral Satellite Data in North Alaska, USA. <i>Remote Sensing</i> , 2016 , 8, 978	5	36
122	Modelling carbon balances of coastal arctic tundra under changing climate. <i>Global Change Biology</i> , 2003 , 9, 16-36	11.4	34
121	Net ecosystem exchange, evapotranspiration and canopy conductance in a riparian forest. <i>Agricultural and Forest Meteorology</i> , 2011 , 151, 544-553	5.8	33
120	RESPONSES OF SOIL BIOTA TO ELEVATED CO ₂ IN A CHAPARRAL ECOSYSTEM 2005 , 15, 1701-1711		33
119	Energy and Carbon Acquisition. <i>Ecological Studies</i> , 1981 , 151-183	1.1	33
118	Light-stress avoidance mechanisms in a Sphagnum-dominated wet coastal Arctic tundra ecosystem in Alaska. <i>Ecology</i> , 2011 , 92, 633-44	4.6	32
117	Top-down control of microbial activity and biomass in an Arctic soil ecosystem. <i>Environmental Microbiology</i> , 2010 , 12, 642-8	5.2	32
116	Soil respiration of Alaskan tundra at elevated atmospheric carbon dioxide concentrations. <i>Plant and Soil</i> , 1986 , 96, 145-148	4.2	32
115	ORCHIDEE-PEAT (revision 4596), a model for northern peatland CO ₂ , water, and energy fluxes on daily to annual scales. <i>Geoscientific Model Development</i> , 2018 , 11, 497-519	6.3	32
114	Endogenous circadian regulation of carbon dioxide exchange in terrestrial ecosystems. <i>Global Change Biology</i> , 2012 , 18, 1956-1970	11.4	30
113	Modeling evapotranspiration in Arctic coastal plain ecosystems using a modified BIOME-BGC model. <i>Journal of Geophysical Research</i> , 2006 , 111, n/a-n/a		30
112	COMPARATIVE PATTERNS OF NET PHOTOSYNTHESIS IN AN ASSEMBLAGE OF MOSSES WITH CONTRASTING MICRODISTRIBUTIONS 1987 , 74, 1787		30
111	Empirical estimation of daytime net radiation from shortwave radiation and ancillary information. <i>Agricultural and Forest Meteorology</i> , 2015 , 211-212, 23-36	5.8	29
110	Characterizing permafrost active layer dynamics and sensitivity to landscape spatial heterogeneity in Alaska. <i>Cryosphere</i> , 2018 , 12, 145-161	5.5	29
109	Effects of Fine-Scale Topography on CO ₂ Flux Components of Alaskan Coastal Plain Tundra: Response to Contrasting Growing Seasons. <i>Arctic, Antarctic, and Alpine Research</i> , 2011 , 43, 256-266	1.8	28

108	Spatial variation in regional CO ₂ exchange for the Kuparuk River Basin, Alaska over the summer growing season. <i>Global Change Biology</i> , 2003 , 9, 930-941	11.4	27
107	The Effects of Topography and Nutrient Status on the Biomass, Vegetative Characteristics, and Gas Exchange of Two Deciduous Shrubs on an Arctic Tundra Slope. <i>Arctic and Alpine Research</i> , 1988 , 20, 342		27
106	Effects of soil temperature on the carbon exchange of taiga seedlings.: II. Photosynthesis, respiration, and conductance. <i>Canadian Journal of Forest Research</i> , 1983 , 13, 850-859	1.9	27
105	Spring photosynthetic onset and net CO uptake in Alaska triggered by landscape thawing. <i>Global Change Biology</i> , 2018 , 24, 3416-3435	11.4	26
104	Mangrove wetland productivity and carbon stocks in an arid zone of the Gulf of California (La Paz Bay, Mexico). <i>Forest Ecology and Management</i> , 2019 , 442, 135-147	3.9	25
103	Carbon dioxide exchange over multiple temporal scales in an arid shrub ecosystem near La Paz, Baja California Sur, Mexico. <i>Global Change Biology</i> , 2012 , 18, 2570-2582	11.4	25
102	Statistical upscaling of ecosystem CO fluxes across the terrestrial tundra and boreal domain: Regional patterns and uncertainties. <i>Global Change Biology</i> , 2021 , 27, 4040-4059	11.4	25
101	Using imaging spectroscopy to detect variation in terrestrial ecosystem productivity across a water-stressed landscape 2018 , 28, 1313-1324		24
100	Monoterpene emission responses to elevated CO ₂ in a Mediterranean-type ecosystem. <i>New Phytologist</i> , 2004 , 161, 17-21	9.8	24
99	Patterns of translocation of carbon in four common moss species in a black spruce (<i>Picea mariana</i>) dominated forest in interior Alaska. <i>Canadian Journal of Forest Research</i> , 1983 , 13, 869-878	1.9	24
98	Energy utilization and carbon metabolism in mediterranean scrub vegetation of Chile and California : I. Methods: A transportable cuvette field photosynthesis and data acquisition system and representative results for <i>Ceanothus greggii</i> . <i>Oecologia</i> , 1979 , 39, 321-335	2.9	24
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