Walter C Oechel

List of Publications by Year
in descending order

243 papers	30,031 citations	7069 78 h-index	5364 164 g-index
262 all docs	262 docs citations	262 times ranked	18186 citing authors

#	Article	IF	Citations
1	FLUXNET: A New Tool to Study the Temporal and Spatial Variability of Ecosystemâ€"Scale Carbon Dioxide, Water Vapor, and Energy Flux Densities. Bulletin of the American Meteorological Society, 2001, 82, 2415-2434.	1.7	3,018
2	Energy balance closure at FLUXNET sites. Agricultural and Forest Meteorology, 2002, 113, 223-243.	1.9	1,877
3	Observational Evidence of Recent Change in the Northern High-Latitude Environment. Climatic Change, 2000, 46, 159-207.	1.7	1,690
4	Evidence and Implications of Recent Climate Change in Northern Alaska and Other Arctic Regions. Climatic Change, 2005, 72, 251-298.	1.7	1,219
5	Environmental controls over carbon dioxide and water vapor exchange of terrestrial vegetation. Agricultural and Forest Meteorology, 2002, 113, 97-120.	1.9	1,133
6	Recent change of Arctic tundra ecosystems from a net carbon dioxide sink to a source. Nature, 1993, 361, 520-523.	13.7	831
7	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. Scientific Data, 2020, 7, 225.	2.4	646
8	Seasonality of ecosystem respiration and gross primary production as derived from FLUXNET measurements. Agricultural and Forest Meteorology, 2002, 113, 53-74.	1.9	606
9	Evaluation of remote sensing based terrestrial productivity from MODIS using regional tower eddy flux network observations. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 1908-1925.	2.7	562
10	Acclimation of ecosystem CO2 exchange in the Alaskan Arctic in response to decadal climate warming. Nature, 2000, 406, 978-981.	13.7	551
11	Modeling temporal and large-scale spatial variability of soil respiration from soil water availability, temperature and vegetation productivity indices. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	1.9	501
12	Global Change and the Carbon Balance of Arctic Ecosystems. BioScience, 1992, 42, 433-441.	2.2	416
13	Strategies for measuring and modelling carbon dioxide and water vapour fluxes over terrestrial ecosystems. Global Change Biology, 1996, 2, 159-168.	4.2	382
14	A new model of gross primary productivity for North American ecosystems based solely on the enhanced vegetation index and land surface temperature from MODIS. Remote Sensing of Environment, 2008, 112, 1633-1646.	4.6	364
15	Predicting Ecosystem Responses to Elevated CO2Concentrations. BioScience, 1991, 41, 96-104.	2.2	356
16	Response of Eriophorum Vaginatum to Elevated CO_2 and Temperature in the Alaskan Tussock Tundra. Ecology, 1987, 68, 401-410.	1.5	313
17	Site-level evaluation of satellite-based global terrestrial gross primary production and net primary production monitoring. Global Change Biology, 2005, 11, 666-684.	4.2	286
18	Cold season emissions dominate the Arctic tundra methane budget. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 40-45.	3.3	278

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19	A modelâ€data comparison of gross primary productivity: Results from the North American Carbon Program site synthesis. Journal of Geophysical Research, 2012, 117, .	3.3	274
20	On the use of MODIS EVI to assess gross primary productivity of North American ecosystems. Journal of Geophysical Research, 2006, 111, .	3.3	267
21	Reduction in carbon uptake during turn of the century drought in western North America. Nature Geoscience, 2012, 5, 551-556.	5.4	263
22	Seasonal patterns of reflectance indices, carotenoid pigments and photosynthesis of evergreen chaparral species. Oecologia, 2002, 131, 366-374.	0.9	261
23	An assessment of the carbon balance of Arctic tundra: comparisons among observations, process models, and atmospheric inversions. Biogeosciences, 2012, 9, 3185-3204.	1.3	258
24	A modelâ€data intercomparison of CO₂ exchange across North America: Results from the North American Carbon Program site synthesis. Journal of Geophysical Research, 2010, 115, .	3.3	247
25	Cold season CO2emission from Arctic soils. Global Biogeochemical Cycles, 1997, 11, 163-172.	1.9	231
26	Transient nature of CO2 fertilization in Arctic tundra. Nature, 1994, 371, 500-503.	13.7	227
27	Large loss of CO2 in winter observed across the northern permafrost region. Nature Climate Change, 2019, 9, 852-857.	8.1	225
28	Estimation of net ecosystem carbon exchange for the conterminous United States by combining MODIS and AmeriFlux data. Agricultural and Forest Meteorology, 2008, 148, 1827-1847.	1.9	221
29	Change in Arctic CO2Flux Over Two Decades: Effects of Climate Change at Barrow, Alaska. , 1995, 5, 846-855.		212
30	A continuous measure of gross primary production for the conterminous United States derived from MODIS and AmeriFlux data. Remote Sensing of Environment, 2010, 114, 576-591.	4.6	210
31	Biodiversity, Distributions and Adaptations of Arctic Species in the Context of Environmental Change. Ambio, 2004, 33, 404-417.	2.8	208
32	Taiga Ecosystems in Interior Alaska. BioScience, 1983, 33, 39-44.	2.2	203
33	Parallel adjustments in vegetation greenness and ecosystem CO2 exchange in response to drought in a Southern California chaparral ecosystem. Remote Sensing of Environment, 2006, 103, 289-303.	4.6	202
34	Microbial activity in soils frozen to below âˆ'39Â°C. Soil Biology and Biochemistry, 2006, 38, 785-794.	4.2	202
35	Response of black spruce (<i>Picea</i><i>mariana</i>) ecosystems to soil temperature modification in interior Alaska. Canadian Journal of Forest Research, 1990, 20, 1530-1535.	0.8	200
36	Carbon balance in tussock tundra under ambient and elevated atmospheric CO2. Oecologia, 1990, 83, 485-494.	0.9	195

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37	Direct observations of the effects of aerosol loading on net ecosystem CO2exchanges over different landscapes. Geophysical Research Letters, 2004, 31, .	1.5	179
38	A new low-power, open-path instrument for measuring methane flux by eddy covariance. Applied Physics B: Lasers and Optics, 2011, 102, 391-405.	1.1	175
39	The uncertain climate footprint of wetlands under human pressure. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4594-4599.	3.3	171
40	Energy partitioning between latent and sensible heat flux during the warm season at FLUXNET sites. Water Resources Research, 2002, 38, 30-1-30-11.	1.7	169
41	<scp>CO</scp>₂ exchange and evapotranspiration across dryland ecosystems of southwestern North America. Global Change Biology, 2017, 23, 4204-4221.	4.2	164
42	Effect of CO2 enrichment and nitrogen availability on resource acquisition and resource allocation in a grass, Bromus mollis. Oecologia, 1988, 77, 544-549.	0.9	163
43	Assessing net ecosystem carbon exchange of U.S. terrestrial ecosystems by integrating eddy covariance flux measurements and satellite observations. Agricultural and Forest Meteorology, 2011, 151, 60-69.	1.9	157
44	Diurnal, seasonal and annual variation in the net ecosystem CO2 exchange of a desert shrub community (Sarcocaulescent) in Baja California, Mexico. Global Change Biology, 2005, 11, 927-939.	4.2	148
45	Phase and amplitude of ecosystem carbon release and uptake potentials as derived from FLUXNET measurements. Agricultural and Forest Meteorology, 2002, 113, 75-95.	1.9	145
46	Variability in exchange of CO₂ across 12 northern peatland and tundra sites. Global Change Biology, 2010, 16, 2436-2448.	4.2	144
47	Terrestrial carbon balance in a drier world: the effects of water availability in southwestern North America. Global Change Biology, 2016, 22, 1867-1879.	4.2	142
48	Moss functioning in different taiga ecosystems in interior Alaska. Oecologia, 1981, 48, 50-59.	0.9	140
49	The effects of water table manipulation and elevated temperature on the net CO2flux of wet sedge tundra ecosystems. Global Change Biology, 1998, 4, 77-90.	4.2	138
50	Climate control of terrestrial carbon exchange across biomes and continents. Environmental Research Letters, 2010, 5, 034007.	2.2	137
51	Impacts of droughts and extreme-temperature events on gross primary production and ecosystem respiration: a systematic assessment across ecosystems and climate zones. Biogeosciences, 2018, 15, 1293-1318.	1.3	137
52	Global estimation of evapotranspiration using a leaf area index-based surface energy and water balance model. Remote Sensing of Environment, 2012, 124, 581-595.	4.6	136
53	Energy and trace-gas fluxes across a soil pH boundary in the Arctic. Nature, 1998, 394, 469-472.	13.7	135
54	The effects of climate charge on landâ€”atmosphere feedbacks in arctic tundra regions. Trends in Ecology and Evolution, 1994, 9, 324-329.	4.2	134

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55	Fire Intensity Effects on Germination of Shrubs and Herbs in Southern California Chaparral. Ecology, 1991, 72, 1993-2004.	1.5	133
56	Effects of Global Change on the Carbon Balance of Arctic Plants and Ecosystems. , 1992, , 139-168.		131
57	Representativeness of Eddy-Covariance flux footprints for areas surrounding AmeriFlux sites. Agricultural and Forest Meteorology, 2021, 301-302, 108350.	1.9	125
58	Reduction of iron (III) and humic substances plays a major role in anaerobic respiration in an Arctic peat soil. Journal of Geophysical Research, 2010, 115, .	3.3	119
59	Landscape-Scale CO 2 , H 2 O Vapour and Energy Flux of Moist-Wet Coastal Tundra Ecosystems over Two Growing Seasons. Journal of Ecology, 1997, 85, 575.	1.9	111
60	Thermal optimality of net ecosystem exchange of carbon dioxide and underlying mechanisms. New Phytologist, 2012, 194, 775-783.	3.5	111
61	Effects of Elevated Atmospheric CO 2 on Soil Microbial Biomass, Activity, and Diversity in a Chaparral Ecosystem. Applied and Environmental Microbiology, 2005, 71, 8573-8580.	1.4	110
62	Fire intensity and herbivory effects on postfire resprouting of Adenostoma fasciculatum in southern California chaparral. Oecologia, 1991, 85, 429-433.	0.9	105
63	Monitoring drought effects on vegetation water content and fluxes in chaparral with the 970Ânm water band index. Remote Sensing of Environment, 2006, 103, 304-311.	4.6	103
64	The photosynthetic capacity, nutrient content, and nutrient use efficiency of different needle age-classes of black spruce (<i>Picea</i><i>mariana</i>) found in interior Alaska. Canadian Journal of Forest Research, 1983, 13, 834-839.	0.8	100
65	The role of mosses in the phosphorus cycling of an Alaskan black spruce forest. Oecologia, 1987, 74, 310-315.	0.9	100
66	Mature semiarid chaparral ecosystems can be a significant sink for atmospheric carbon dioxide. Global Change Biology, 2007, 13, 386-396.	4.2	100
67	EDDY COVARIANCE MEASUREMENTS OF CO2AND ENERGY FLUXES OF AN ALASKAN TUSSOCK TUNDRA ECOSYSTEM. Ecology, 1999, 80, 686-701.	1.5	99
68	Satelliteâ€based model detection of recent climateâ€driven changes in northern highâ€latitude vegetation productivity. Journal of Geophysical Research, 2008, 113, .	3.3	99
69	Photosynthesis, Respiration, and Phosphate Absorption by Carex Aquatilis Ecotypes along Latitudinal and Local Environmental Gradients. Ecology, 1983, 64, 743-751.	1.5	96
70	Nonlinear controls on evapotranspiration in arctic coastal wetlands. Biogeosciences, 2011, 8, 3375-3389.	1.3	93
71	Annual patterns and budget of CO₂ flux in an Arctic tussock tundra ecosystem. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 323-339.	1.3	93
72	Carbon cycle uncertainty in the Alaskan Arctic. Biogeosciences, 2014, 11, 4271-4288.	1.3	92

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73	Fire Severity, Ash Deposition, and Clipping Effects on Soil Nutrients in Chaparral. Soil Science Society of America Journal, 1991, 55, 235-240.	1.2	91
74	The Effect of Decreasing Water Potential on Net CO2 Exchange of Intact Desert Shrubs. Ecology, 1974, 55, 1086-1095.	1.5	88
75	Tissue Water Potential, Photosynthesis, Câ€Labeled Photosynthate Utilization, and Growth in the Desert Shrub Larrea divaricata Cav.. Ecological Monographs, 1972, 42, 127-141.	2.4	87
76	Microtopographic controls on ecosystem functioning in the Arctic Coastal Plain. Journal of Geophysical Research, 2011, 116, .	3.3	85
77	Water-table height and microtopography control biogeochemical cycling in an Arctic coastal tundra ecosystem. Biogeosciences, 2012, 9, 577-591.	1.3	84
78	Statistical upscaling of ecosystem CO₂ fluxes across the terrestrial tundra and boreal domain: Regional patterns and uncertainties. Global Change Biology, 2021, 27, 4040-4059.	4.2	83
79	Responses to Projected Changes in Climate and UV-B at the Species Level. Ambio, 2004, 33, 418-435.	2.8	82
80	Factors controlling postfire seedling establishment in southern California chaparral. Oecologia, 1992, 90, 50-60.	0.9	81
81	Spatial variation in landscapeâ€level <scp><scp>CO₂</scp></scp> and <scp><scp>CH₄</scp></scp> fluxes from arctic coastal tundra: influence from vegetation, wetness, and the thaw lake cycle. Global Change Biology, 2013, 19, 2853-2866.	4.2	81
82	FLUXNET-CH₄: a global, multi-ecosystem dataset and analysis of methane seasonality from freshwater wetlands. Earth System Science Data, 2021, 13, 3607-3689.	3.7	79
83	Effects of long-term elevated [CO2] from natural CO2 springs on Nardus stricta: photosynthesis, biochemistry, growth and phenology. Plant, Cell and Environment, 1998, 21, 417-425.	2.8	78
84	Effects of climate variability on carbon sequestration among adjacent wet sedge tundra and moist tussock tundra ecosystems. Journal of Geophysical Research, 2006, 111, .	3.3	78
85	Remote sensing of tundra gross ecosystem productivity and light use efficiency under varying temperature and moisture conditions. Remote Sensing of Environment, 2010, 114, 481-489.	4.6	78
86	Testing the applicability of neural networks as a gap-filling method using CH₄ flux data from high latitude wetlands. Biogeosciences, 2013, 10, 8185-8200.	1.3	78
87	Simulating carbon accumulation in northern ecosystems. Simulation, 1983, 40, 119-131.	1.1	75
88	The impact of permafrost thawing on the carbon dynamics of tundra. Geophysical Research Letters, 1997, 24, 229-232.	1.5	75
89	Effects of lifelong [CO2] enrichment on carboxylation and light utilization of Quercus pubescens Willd. examined with gas exchange, biochemistry and optical techniques. Plant, Cell and Environment, 2000, 23, 1353-1362.	2.8	75
90	Growing season and spatial variations of carbon fluxes of Arctic and boreal ecosystems in Alaska (USA). Ecological Applications, 2013, 23, 1798-1816.	1.8	74

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91	A scaling approach for quantifying the net CO2 flux of the Kuparuk River Basin, Alaska. Global Change Biology, 2000, 6, 160-173.	4.2	72
92	Comparative CO2 exchange patterns in mosses from two tundra habitats at Barrow, Alaska. Canadian Journal of Botany, 1976, 54, 1355-1369.	1.2	71
93	Soil moisture control over autumn season methane flux, Arctic Coastal Plain of Alaska. Biogeosciences, 2012, 9, 1423-1440.	1.3	71
94	Plantâ€Soil Processes in Eriophorum Vaginatum Tussock Tundra in Alaska: A Systems Modeling Approach. Ecological Monographs, 1984, 54, 361-405.	2.4	70
95	Inter-annual carbon dioxide uptake of a wet sedge tundra ecosystem in the Arctic. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 215-231.	0.8	70
96	Monthly gridded data product of northern wetland methane emissions based on upscaling eddy covariance observations. Earth System Science Data, 2019, 11, 1263-1289.	3.7	69
97	Competition for nitrogen in a tussock tundra ecosystem. Plant and Soil, 1982, 66, 317-327.	1.8	68
98	Intercomparison among chamber, tower, and aircraft net CO2and energy fluxes measured during the Arctic System Science Land-Atmosphere-Ice Interactions (ARCSS-LAII) Flux Study. Journal of Geophysical Research, 1998, 103, 28993-29003.	3.3	67
99	Effects on the Structure of Arctic Ecosystems in the Short- and Long-term Perspectives. Ambio, 2004, 33, 436-447.	2.8	66
100	Satellite Microwave Remote Sensing of Boreal and Arctic Soil Temperatures From AMSR-E. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 2004-2018.	2.7	65
101	The effect of climate on the photosynthesis of Picea mariana at the subarctic tree line. 1. Field measurements. Canadian Journal of Botany, 1975, 53, 604-620.	1.2	64
102	Tundra photosynthesis captured by satelliteâ€observed solarâ€induced chlorophyll fluorescence. Geophysical Research Letters, 2017, 44, 1564-1573.	1.5	62
103	Interactions Among the Effects of Herbivory, Competition, and Resource Limitation on Chaparral Herbs. Ecology, 1991, 72, 104-115.	1.5	61
104	Upscaling terrestrial carbon dioxide fluxes in Alaska with satellite remote sensing and support vector regression. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 1266-1281.	1.3	60
105	Carbon Balance Limits the Microdistribution of Grimmia laevigata, a Desiccation-Tolerant Plant. Ecology, 1985, 66, 660-669.	1.5	58
106	Effects of soil temperature on the carbon exchange of taiga seedlings.: I. Root respiration. Canadian Journal of Forest Research, 1983, 13, 840-849.	0.8	57
107	Alteration of Soil Carbon Pools and Communities of Mycorrhizal Fungi in Chaparral Exposed to Elevated Carbon Dioxide. Ecosystems, 2003, 6, 786-796.	1.6	57
108	Seasonal variation in leaf chemistry of the coast live oak Quercus agrifolia and implications for the California oak moth Phryganidia californica. Oecologia, 1989, 79, 439-445.	0.9	56

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109	Effects of Changes in Climate on Landscape and Regional Processes, and Feedbacks to the Climate System. Ambio, 2004, 33, 459-468.	2.8	56
110	Mapping carbon and water vapor fluxes in a chaparral ecosystem using vegetation indices derived from AVIRIS. Remote Sensing of Environment, 2006, 103, 312-323.	4.6	56
111	Mid- to late-Holocene carbon balance in Arctic Alaska and its implications for future global warming. Holocene, 1993, 3, 193-200.	0.9	55
112	Characterization of the carbon fluxes of a vegetated drained lake basin chronosequence on the Alaskan Arctic Coastal Plain. Global Change Biology, 2010, 16, 1870-1882.	4.2	55
113	The pattern of growth and translocation of photosynthate in a tundra moss, Polytrichum alpinum. Canadian Journal of Botany, 1974, 52, 355-363.	1.2	54
114	COMPARATIVE PATTERNS OF NET PHOTOSYNTHESIS IN AN ASSEMBLAGE OF MOSSES WITH CONTRASTING MICRODISTRIBUTIONS. American Journal of Botany, 1987, 74, 1787-1796.	0.8	54
115	Response of tussock tundra to elevated carbon dioxide regimes: analysis of ecosystem CO2 flux through nonlinear modeling. Oecologia, 1987, 72, 466-472.	0.9	54
116	Moss leaf water content and solar radiation at the moss surface in a mature black spruce forest in central Alaska. Canadian Journal of Forest Research, 1983, 13, 860-868.	0.8	53
117	Improved global simulations of gross primary product based on a new definition of water stress factor and a separate treatment of C3 and C4 plants. Ecological Modelling, 2015, 297, 42-59.	1.2	53
118	Widespread foliage Î´ 15 N depletion under elevated CO2 : inferences for the nitrogen cycle. Global Change Biology, 2003, 9, 1582-1590.	4.2	52
119	Latent heat exchange in the boreal and arctic biomes. Global Change Biology, 2014, 20, 3439-3456.	4.2	52
120	Vegetation Type Dominates the Spatial Variability in CH4 Emissions Across Multiple Arctic Tundra Landscapes. Ecosystems, 2016, 19, 1116-1132.	1.6	52
121	Physiological aspects of the ecology of <i>Dicranum fuscescens</i> in the subarctic. I. Acclimation and acclimation potential of CO₂ exchange in relation to habitat, light, and temperature. Canadian Journal of Botany, 1976, 54, 1104-1119.	1.2	50
122	Characterizing permafrost active layer dynamics and sensitivity to landscape spatial heterogeneity in Alaska. Cryosphere, 2018, 12, 145-161.	1.5	49
123	Mapping Arctic Tundra Vegetation Communities Using Field Spectroscopy and Multispectral Satellite Data in North Alaska, USA. Remote Sensing, 2016, 8, 978.	1.8	48
124	Latitudinal gradient of spruce forest understory and tundra phenology in Alaska as observed from satellite and ground-based data. Remote Sensing of Environment, 2016, 177, 160-170.	4.6	48
125	Spring photosynthetic onset and net <scp>CO</scp>₂ uptake in Alaska triggered by landscape thawing. Global Change Biology, 2018, 24, 3416-3435.	4.2	48
126	Biotic and climatic controls on interannual variability in carbon fluxes across terrestrial ecosystems. Agricultural and Forest Meteorology, 2015, 205, 11-22.	1.9	47

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127	Demography of Adenostoma fasciculatum after fires of different intensities in southern California chaparral. Oecologia, 1993, 96, 95-101.	0.9	45
128	Arctic greening associated with lengthening growing seasons in Northern Alaska. Environmental Research Letters, 2019, 14, 125018.	2.2	45
129	Responses of CO₂ flux components of Alaskan Coastal Plain tundra to shifts in water table. Journal of Geophysical Research, 2010, 115, .	3.3	44
130	Topâ€down control of microbial activity and biomass in an Arctic soil ecosystem. Environmental Microbiology, 2010, 12, 642-648.	1.8	43
131	Increased CO₂ loss from vegetated drained lake tundra ecosystems due to flooding. Global Biogeochemical Cycles, 2012, 26, .	1.9	43
132	ORCHIDEE-PEAT (revision 4596), a model for northern peatland CO₂, water, and energy fluxes on daily to annual scales. Geoscientific Model Development, 2018, 11, 497-519.	1.3	43
133	Effects on the Function of Arctic Ecosystems in the Short- and Long-term Perspectives. Ambio, 2004, 33, 448-458.	2.8	41
134	Net ecosystem exchange, evapotranspiration and canopy conductance in a riparian forest. Agricultural and Forest Meteorology, 2011, 151, 544-553.	1.9	41
135	Mangrove wetland productivity and carbon stocks in an arid zone of the Gulf of California (La Paz) Tj ETQq1 1 0.784314 rgBT /Overlo	1.4	40
136	Effects of Several Microclimatic Factors and Nutrients on Net Carbon Dioxide Exchange in Cladonia alpestris (L.) Rabh. in the Subarctic. Arctic and Alpine Research, 1978, 10, 81.	1.3	39
137	RESPONSES OF SOIL BIOTA TO ELEVATED CO2IN A CHAPARRAL ECOSYSTEM. , 2005, 15, 1701-1711.		39
138	Empirical estimation of daytime net radiation from shortwave radiation and ancillary information. Agricultural and Forest Meteorology, 2015, 211-212, 23-36.	1.9	38
139	Spatial and temporal variations in hectare-scale net CO2 flux, respiration and gross primary production of Arctic tundra ecosystems. Functional Ecology, 2000, 14, 203-214.	1.7	37
140	Modelling carbon balances of coastal arctic tundra under changing climate. Global Change Biology, 2003, 9, 16-36.	4.2	36
141	Effects of soil temperature on the carbon exchange of taiga seedlings.: II. Photosynthesis, respiration, and conductance. Canadian Journal of Forest Research, 1983, 13, 850-859.	0.8	35
142	Soil respiration of Alaskan tundra at elevated atmospheric carbon dioxide concentrations. Plant and Soil, 1986, 96, 145-148.	1.8	35
143	Endogenous circadian regulation of carbon dioxide exchange in terrestrial ecosystems. Global Change Biology, 2012, 18, 1956-1970.	4.2	35
144	The Effects of Topography and Nutrient Status on the Biomass, Vegetative Characteristics, and Gas Exchange of Two Deciduous Shrubs on an Arctic Tundra Slope. Arctic and Alpine Research, 1988, 20, 342.	1.3	34

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145	Light-stress avoidance mechanisms in a<i>Sphagnum</i>-dominated wet coastal Arctic tundra ecosystem in Alaska. Ecology, 2011, 92, 633-644.	1.5	34
146	Substantial hysteresis in emergent temperature sensitivity of global wetland CH4 emissions. Nature Communications, 2021, 12, 2266.	5.8	34
147	Modeling evapotranspiration in Arctic coastal plain ecosystems using a modified BIOME-BGC model. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	33
148	Microbial community structure and soil p<scp>H</scp> correspond to methane production in <scp>A</scp>rctic <scp>A</scp>laska soils. Environmental Microbiology, 2017, 19, 3398-3410.	1.8	33
149	Gap-filling eddy covariance methane fluxes: Comparison of machine learning model predictions and uncertainties at FLUXNET-CH4 wetlands. Agricultural and Forest Meteorology, 2021, 308-309, 108528.	1.9	33
150	Effects of Fine-Scale Topography on CO₂ Flux Components of Alaskan Coastal Plain Tundra: Response to Contrasting Growing Seasons. Arctic, Antarctic, and Alpine Research, 2011, 43, 256-266.	0.4	32
151	Carbon dioxide exchange over multiple temporal scales in an arid shrub ecosystem near La Paz, Baja California Sur, Mexico. Global Change Biology, 2012, 18, 2570-2582.	4.2	32
152	Using imaging spectroscopy to detect variation in terrestrial ecosystem productivity across a waterâ€stressed landscape. Ecological Applications, 2018, 28, 1313-1324.	1.8	32
153	A semi-analytical snow-free vegetation index for improving estimation of plant phenology in tundra and grassland ecosystems. Remote Sensing of Environment, 2019, 228, 31-44.	4.6	32
154	Progress and opportunities for monitoring greenhouse gases fluxes in Mexican ecosystems: the MexFlux network. Atmosfera, 2013, 26, 325-336.	0.3	31
155	COMPARATIVE PATTERNS OF NET PHOTOSYNTHESIS IN AN ASSEMBLAGE OF MOSSES WITH CONTRASTING MICRODISTRIBUTIONS. , 1987, 74, 1787.		31
156	Fire Intensity as a Determinant Factor of Postfire Plant Recovery in Southern California Chaparral. Ecological Studies, 1994, , 26-45.	0.4	30
157	Patterns of translocation of carbon in four common moss species in a black spruce (<i>Picea</i><i>mariana</i>) dominated forest in interior Alaska. Canadian Journal of Forest Research, 1983, 13, 869-878.	0.8	29
158	New Estimates of Organic Matter Reserves and Net Primary Productivity of the North American Tundra Ecosystems. Journal of Biogeography, 1995, 22, 723.	1.4	29
159	Potential and limitations of inferring ecosystem photosynthetic capacity from leaf functional traits. Ecology and Evolution, 2016, 6, 7352-7366.	0.8	29
160	Spatial variation in regional CO2 exchange for the Kuparuk River Basin, Alaska over the summer growing season. Global Change Biology, 2003, 9, 930-941.	4.2	28
161	Elevated atmospheric CO 2 stimulates soil fungal diversity through increased fine root production in a semiarid shrubland ecosystem. Global Change Biology, 2014, 20, 2555-2565.	4.2	28
162	Energy utilization and carbon metabolism in mediterranean scurb vegetation of Chile and California. Oecologia, 1979, 39, 321-335.	0.9	27

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163	Temporal variations in airâ€sea <scp>CO</scp>₂ exchange near large kelp beds near <scp>S</scp>an <scp>D</scp>iego, <scp>C</scp>alifornia. Journal of Geophysical Research: Oceans, 2015, 120, 50-63.	1.0	26
164	Tundra water budget and implications of precipitation underestimation. Water Resources Research, 2017, 53, 6472-6486.	1.7	26
165	Upscaling CH4 Fluxes Using High-Resolution Imagery in Arctic Tundra Ecosystems. Remote Sensing, 2017, 9, 1227.	1.8	26
166	Sensitivity of Methane Emissions to Later Soil Freezing in Arctic Tundra Ecosystems. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 2595-2609.	1.3	26
167	Monoterpene emission responses to elevated CO 2 in a Mediterraneanâ€type ecosystem. New Phytologist, 2004, 161, 17-21.	3.5	24
168	Delayed responses of an Arctic ecosystem to an extreme summer: impacts on net ecosystem exchange and vegetation functioning. Biogeosciences, 2014, 11, 5877-5888.	1.3	24
169	A multi-scale comparison of modeled and observed seasonal methane emissions in northern wetlands. Biogeosciences, 2016, 13, 5043-5056.	1.3	24
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