Joe Berry

List of Publications by Year in descending order

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279	51,700	2098	1629
papers	citations	100 h-index	215 g-index

297	297	297	26423
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A biochemical model of photosynthetic CO2 assimilation in leaves of C3 species. Planta, 1980, 149, 78-90.	1.6	7,254
2	On the Relationship Between Carbon Isotope Discrimination and the Intercellular Carbon Dioxide Concentration in Leaves. Functional Plant Biology, 1982, 9, 121.	1.1	2,609
3	Photosynthetic Response and Adaptation to Temperature in Higher Plants. Annual Review of Plant Physiology, 1980, 31, 491-543.	11.1	2,544
4	Physiological and environmental regulation of stomatal conductance, photosynthesis and transpiration: a model that includes a laminar boundary layer. Agricultural and Forest Meteorology, 1991, 54, 107-136.	1.9	1,900
5	A Revised Land Surface Parameterization (SiB2) for Atmospheric GCMS. Part I: Model Formulation. Journal of Climate, 1996, 9, 676-705.	1.2	1,574
6	A Model Predicting Stomatal Conductance and its Contribution to the Control of Photosynthesis under Different Environmental Conditions. , 1987, , 221-224.		1,421
7	Modeling the Exchanges of Energy, Water, and Carbon Between Continents and the Atmosphere. Science, 1997, 275, 502-509.	6.0	1,280
8	Coupled Photosynthesis-Stomatal Conductance Model for Leaves of C4 Plants. Functional Plant Biology, 1992, 19, 519.	1.1	921
9	Canopy reflectance, photosynthesis, and transpiration. III. A reanalysis using improved leaf models and a new canopy integration scheme.. Remote Sensing of Environment, 1992, 42, 187-216.	4.6	857
10	Linking chlorophyll a fluorescence to photosynthesis for remote sensing applications: mechanisms and challenges. Journal of Experimental Botany, 2014, 65, 4065-4095.	2.4	770
11	Global and time-resolved monitoring of crop photosynthesis with chlorophyll fluorescence. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1327-33.	3.3	741
12	Global distribution of C3and C4vegetation: Carbon cycle implications. Global Biogeochemical Cycles, 2003, 17, 6-1-6-14.	1.9	677
13	The roles of hydraulic and carbon stress in a widespread climate-induced forest die-off. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 233-237.	3.3	539
14	The application and interpretation of Keeling plots in terrestrial carbon cycle research. Global Biogeochemical Cycles, 2003, 17, .	1.9	536
15	Quantum efficiency of Photosystem II in relation to â€˜energyâ€™-dependent quenching of chlorophyll fluorescence. Biochimica Et Biophysica Acta - Bioenergetics, 1987, 894, 198-208.	0.5	520
16	Comparison of Radiative and Physiological Effects of Doubled Atmospheric CO2 on Climate. Science, 1996, 271, 1402-1406.	6.0	516
17	Canopy near-infrared reflectance and terrestrial photosynthesis. Science Advances, 2017, 3, e1602244.	4.7	506
18	Internal Inorganic Carbon Pool of Chlamydomonas reinhardtii. Plant Physiology, 1980, 66, 407-413.	2.3	498

#	Article	IF	Citations
19	Carbon isotopes and water use efficiency: sense and sensitivity. Oecologia, 2008, 155, 441-454.	0.9	485
20	Carbon Isotope Discrimination measured Concurrently with Gas Exchange to Investigate CO2 Diffusion in Leaves of Higher Plants. Functional Plant Biology, 1986, 13, 281.	1.1	481
21	Effects of climate and atmospheric CO 2 partial pressure on the global distribution of C 4 grasses: present, past, and future. Oecologia, 1998, 114, 441-454.	0.9	468
22	BOREAS in 1997: Experiment overview, scientific results, and future directions. Journal of Geophysical Research, 1997, 102, 28731-28769.	3.3	436
23	Enzymatic Regulation of Photosynthetic CO2, Fixation in C3 Plants. Annual Review of Plant Biology, 1988, 39, 533-594.	14.2	415
24	Photosynthetic Fractionation of the Stable Isotopes of Oxygen and Carbon. Plant Physiology, 1993, 101, 37-47.	2.3	401
25	Heat-induced changes of chlorophyll fluorescence in intact leaves correlated with damage of the photosynthetic apparatus. Planta, 1977, 136, 233-238.	1.6	391
26	Remote sensing of solar-induced chlorophyll fluorescence (SIF) in vegetation: 50â€¯years of progress. Remote Sensing of Environment, 2019, 231, 111177.	4.6	372
27	Not all droughts are created equal: translating meteorological drought into woody plant mortality. Tree Physiology, 2013, 33, 672-683.	1.4	361
28	Prospects for chlorophyll fluorescence remote sensing from the Orbiting Carbon Observatory-2. Remote Sensing of Environment, 2014, 147, 1-12.	4.6	361
29	Photosynthesis and the intracellular inorganic carbon pool in the bluegreen alga Anabaena variabilis: Response to external CO2 concentration. Planta, 1980, 149, 219-226.	1.6	348
30	Photosynthetic seasonality of global tropical forests constrained by hydroclimate. Nature Geoscience, 2015, 8, 284-289.	5.4	337
31	Sensitivity of plants to changing atmospheric <scp>CO</scp>₂ concentration: from the geological past to the next century. New Phytologist, 2013, 197, 1077-1094.	3.5	336
32	Tree mortality predicted from drought-induced vascular damage. Nature Geoscience, 2015, 8, 367-371.	5.4	317
33	Recent global decline of CO ₂ fertilization effects on vegetation photosynthesis. Science, 2020, 370, 1295-1300.	6.0	317
34	Air temperature optima of vegetation productivity across global biomes. Nature Ecology and Evolution, 2019, 3, 772-779.	3.4	316
35	Photoinhibition of photosynthesis in intact bean leaves: role of light and temperature, and requirement for chloroplast-protein synthesis during recovery. Planta, 1986, 168, 253-260.	1.6	312
36	Drought's legacy: multiyear hydraulic deterioration underlies widespread aspen forest dieâ€•off and portends increased future risk. Global Change Biology, 2013, 19, 1188-1196.	4.2	307

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37	Models of fluorescence and photosynthesis for interpreting measurements of solarâ€induced chlorophyll fluorescence. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 2312-2327.	1.3	281
38	What is global photosynthesis? History, uncertainties and opportunities. Remote Sensing of Environment, 2019, 223, 95-114.	4.6	266
39	Stomata: key players in the earth system, past and present. Current Opinion in Plant Biology, 2010, 13, 232-239.	3.5	265
40	Estimation of vegetation photosynthetic capacity from spaceâ€based measurements of chlorophyll fluorescence for terrestrial biosphere models. Global Change Biology, 2014, 20, 3727-3742.	4.2	260
41	Models of Photosynthesis. Plant Physiology, 2001, 125, 42-45.	2.3	251
42	Effects of Water Stress on Respiration in Soybean Leaves. Plant Physiology, 2005, 139, 466-473.	2.3	245
43	Forest productivity and water stress in Amazonia: observations from GOSAT chlorophyll fluorescence. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130171.	1.2	245
44	Improving the monitoring of crop productivity using spaceborne solarâ€induced fluorescence. Global Change Biology, 2016, 22, 716-726.	4.2	240
45	Oceanic ¹³C/¹²C observations: A new window on ocean CO₂ uptake. Global Biogeochemical Cycles, 1993, 7, 353-368.	1.9	233
46	Analysis of leakage in IRGA's leaf chambers of open gas exchange systems: quantification and its effects in photosynthesis parameterization. Journal of Experimental Botany, 2007, 58, 1533-1543.	2.4	226
47	Commentary: Carbon Metabolism of the Terrestrial Biosphere: A Multitechnique Approach for Improved Understanding. Ecosystems, 2000, 3, 115-130.	1.6	225
48	Large historical growth in global terrestrial gross primary production. Nature, 2017, 544, 84-87.	13.7	219
49	A practical approach for estimating the escape ratio of near-infrared solar-induced chlorophyll fluorescence. Remote Sensing of Environment, 2019, 232, 111209.	4.6	213
50	Carbon 13 exchanges between the atmosphere and biosphere. Global Biogeochemical Cycles, 1997, 11, 507-533.	1.9	206
51	Ion antiport accelerates photosynthetic acclimation in fluctuating light environments. Nature Communications, 2014, 5, 5439.	5.8	205
52	Stress Physiology and the Distribution of Plants. BioScience, 1987, 37, 38-48.	2.2	201
53	Topography of Photosynthetic Activity of Leaves Obtained from Video Images of Chlorophyll Fluorescence. Plant Physiology, 1989, 90, 1233-1238.	2.3	201
54	A three-dimensional synthesis study of Î´18O in atmospheric CO2: 1. Surface fluxes. Journal of Geophysical Research, 1997, 102, 5857-5872.	3.3	200

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55	Differential fractionation of oxygen isotopes by cyanide-resistant and cyanide-sensitive respiration in plants. Planta, 1989, 177, 483-491.	1.6	198
56	Mobile MUTE specifies subsidiary cells to build physiologically improved grass stomata. Science, 2017, 355, 1215-1218.	6.0	198
57	Regionally strong feedbacks between the atmosphere and terrestrial biosphere. Nature Geoscience, 2017, 10, 410-414.	5.4	197
58	Photosynthetic Control of Atmospheric Carbonyl Sulfide During the Growing Season. Science, 2008, 322, 1085-1088.	6.0	196
59	Terrestrial gross primary production: Using NIR_V to scale from site to globe. Global Change Biology, 2019, 25, 3731-3740.	4.2	196
60	Optical vegetation indices for monitoring terrestrial ecosystems globally. Nature Reviews Earth & Environment, 2022, 3, 477-493.	12.2	191
61	New constraints on atmospheric CO₂ concentration for the Phanerozoic. Geophysical Research Letters, 2014, 41, 4685-4694.	1.5	189
62	Control of transpiration by radiation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13372-13377.	3.3	187
63	Linking definitions, mechanisms, and modeling of drought-induced tree death. Trends in Plant Science, 2012, 17, 693-700.	4.3	186
64	The 2010 Russian drought impact on satellite measurements of solar-induced chlorophyll fluorescence: Insights from modeling and comparisons with parameters derived from satellite reflectances. Remote Sensing of Environment, 2015, 166, 163-177.	4.6	186
65	Model-based analysis of the relationship between sun-induced chlorophyll fluorescence and gross primary production for remote sensing applications. Remote Sensing of Environment, 2016, 187, 145-155.	4.6	185
66	Canopy structure explains the relationship between photosynthesis and sun-induced chlorophyll fluorescence in crops. Remote Sensing of Environment, 2020, 241, 111733.	4.6	183
67	Application of satellite solar-induced chlorophyll fluorescence to understanding large-scale variations in vegetation phenology and function over northern high latitude forests. Remote Sensing of Environment, 2017, 190, 178-187.	4.6	175
68	Oxygen Exchange in Leaves in the Light. Plant Physiology, 1980, 66, 302-307.	2.3	173
69	Interaction between light and chilling temperature on the inhibition of photosynthesis in chilling-sensitive plants*. Plant, Cell and Environment, 1983, 6, 117-123.	2.8	172
70	The physiological importance of developmental mechanisms that enforce proper stomatal spacing in <scp>A</scp>rabidopsis thaliana. New Phytologist, 2014, 201, 1205-1217.	3.5	165
71	Regulation of ribulose bisphosphate carboxylase activity in vivo by a light-modulated inhibitor of catalysis. Proceedings of the National Academy of Sciences of the United States of America, 1985, 82, 8024-8028.	3.3	160
72	Correlations between the thermal stability of chloroplast (thylakoid) membranes and the composition and fluidity of their polar lipids upon acclimation of the higher plant, Nerium oleander, to growth temperature. Biochimica Et Biophysica Acta - Biomembranes, 1982, 688, 218-228.	1.4	158

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73	Does elevated atmospheric CO2concentration inhibit mitochondrial respiration in green plants?. Plant, Cell and Environment, 1999, 22, 649-657.	2.8	153
74	Cyclic electron flow around Photosystem II in vivo. Photosynthesis Research, 1996, 48, 395-410.	1.6	150
75	Responses of Macrophytes to Temperature. , 1981, , 277-338.		149
76	A coupled model of the global cycles of carbonyl sulfide and CO₂: A possible new window on the carbon cycle. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 842-852.	1.3	149
77	Sun-induced chlorophyll fluorescence is more strongly related to absorbed light than to photosynthesis at half-hourly resolution in a rice paddy. Remote Sensing of Environment, 2018, 216, 658-673.	4.6	149
78	Variations in the Specific Activity of Ribulose-1,5-bisphosphate Carboxylase between Species Utilizing Differing Photosynthetic Pathways. Plant Physiology, 1984, 74, 791-794.	2.3	148
79	Africa and the global carbon cycle. Carbon Balance and Management, 2007, 2, 3.	1.4	144
80	Simulation of carbon isotope discrimination of the terrestrial biosphere. Global Biogeochemical Cycles, 2005, 19, .	1.9	143
81	An integrated model of stomatal development and leaf physiology. New Phytologist, 2014, 201, 1218-1226.	3.5	142
82	Electron Partitioning between the Cytochrome and Alternative Pathways in Plant Mitochondria. Plant Physiology, 1995, 109, 829-837.	2.3	141
83	Combined Simple Biosphere/Carnegieâ€Amesâ€Stanford Approach terrestrial carbon cycle model. Journal of Geophysical Research, 2008, 113, .	3.3	138
84	Sunâ€Induced Chlorophyll Fluorescence, Photosynthesis, and Light Use Efficiency of a Soybean Field from Seasonally Continuous Measurements. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 610-623.	1.3	138
85	Spatiotemporal Variations in Growing Season Exchanges of CO2, H2O, and Sensible Heat in Agricultural Fields of the Southern Great Plains. Earth Interactions, 2007, 11, 1-21.	0.7	135
86	The stable carbon and nitrogen isotopic composition of vegetation in tropical forests of the Amazon Basin, Brazil. Biogeochemistry, 2006, 79, 251-274.	1.7	134
87	Facultative and constitutive pigment effects on the Photochemical Reflectance Index (PRI) in sun and shade conifer needles. Israel Journal of Plant Sciences, 2012, 60, 85-95.	0.3	134
88	Isolation, identification, and synthesis of 2-carboxyarabinitol 1-phosphate, a diurnal regulator of ribulose-bisphosphate carboxylase activity. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 734-738.	3.3	126
89	Changing the way we think about global change research: scaling up in experimental ecosystem science. Global Change Biology, 2004, 10, 393-407.	4.2	126
90	A mechanistic model of H218O and C18OO fluxes between ecosystems and the atmosphere: Model description and sensitivity analyses. Global Biogeochemical Cycles, 2002, 16, 42-1-42-14.	1.9	125

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91	Oxygen-18 kinetic isotope effects in the dopamine .beta.-monooxygenase reaction: Evidence for a new chemical mechanism in non-heme, metallomonooxygenase. Biochemistry, 1994, 33, 226-234.	1.2	123
92	Identification of Extracellular Carbonic Anhydrase of Chlamydomonas reinhardtii. Plant Physiology, 1984, 76, 472-477.	2.3	121
93	Regulation of Ribulose-1,5-Bisphosphate Carboxylase Activity in Response to Changing Partial Pressure of O₂ and Light in Phaseolus vulgaris. Plant Physiology, 1986, 81, 788-791.	2.3	121
94	Stomatal Function across Temporal and Spatial Scales: Deep-Time Trends, Land-Atmosphere Coupling and Global Models. Plant Physiology, 2017, 174, 583-602.	2.3	119
95	High Photosynthetic Capacity of a Winter Annual in Death Valley. Science, 1976, 194, 322-324.	6.0	118
96	Photosynthesis and Ribulose 1,5-Bisphosphate Concentrations in Intact Leaves of Xanthium strumarium L.. Plant Physiology, 1984, 76, 968-971.	2.3	117
97	Regulation of photosynthetic electron-transport in Phaseolus vulgaris L., as determined by room-temperature chlorophyll a fluorescence. Planta, 1988, 176, 415-424.	1.6	114
98	Parameterization of Canopy Structure and Leaf-Level Gas Exchange for an Eastern Amazonian Tropical Rain Forest (TapajÃ³s National Forest, ParÃ¡, Brazil). Earth Interactions, 2005, 9, 1-23.	0.7	110
99	Relationships between carbonyl sulfide (COS) and CO₂ during leaf gas exchange. New Phytologist, 2010, 186, 869-878.	3.5	110
100	Fixation of ¹⁸O₂ during Photorespiration. Plant Physiology, 1978, 62, 954-967.	2.3	108
101	Measuring photosynthetic parameters at a distance: laser induced fluorescence transient (LIFT) method for remote measurements of photosynthesis in terrestrial vegetation. Photosynthesis Research, 2005, 84, 121-129.	1.6	107
102	Mangrove Biodiversity and Ecosystem Function. Global Ecology and Biogeography Letters, 1998, 7, 3.	0.6	106
103	A portable system for measuring carbon dioxide and water vapour exchange of leaves. Plant, Cell and Environment, 1982, 5, 179-186.	2.8	105
104	Effects of Growth Temperature on the Thermal Stability of the Photosynthetic Apparatus of Atriplex lentiformis (Torr.) Wats.. Plant Physiology, 1977, 59, 873-878.	2.3	101
105	Measurements of the Engagement of Cyanide-Resistant Respiration in the Crassulacean Acid Metabolism Plant KalanchoÃ« daigremontiana with the Use of On-Line Oxygen Isotope Discrimination. Plant Physiology, 1992, 100, 1087-1091.	2.3	100
106	The photosynthetic carbon metabolism of Zea mays and Gomphrena globosa: the location of the CO₂ fixation and the carboxyl transfer reactions. Canadian Journal of Botany, 1970, 48, 777-786.	1.2	99
107	Simulations of terrestrial carbon metabolism and atmospheric CO₂ in a general circulation model: Part 1: Surface carbon fluxes. Tellus, Series B: Chemical and Physical Meteorology, 2022, 48, 521.	0.8	99
108	Nitrogen Controls on Climate Model Evapotranspiration. Journal of Climate, 2002, 15, 278-295.	1.2	99

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109	Drought characteristics' role in widespread aspen forest mortality across Colorado, <scp>USA</scp>. Global Change Biology, 2013, 19, 1526-1537.	4.2	98
110	Reviews and syntheses: Carbonyl sulfide as aÂmulti-scale tracer for carbon and water cycles. Biogeosciences, 2018, 15, 3625-3657.	1.3	98
111	Amazon rainforest photosynthesis increases in response to atmospheric dryness. Science Advances, 2020, 6, .	4.7	98
112	Photosynthetic metabolism in bundle sheath cells of the C4 species Zea mays: Sources of ATP and NADPH and the contribution of photosystem II. Archives of Biochemistry and Biophysics, 1980, 202, 330-341.	1.4	97
113	Involvement of a Primary Electrogenic Pump in the Mechanism for HCO₃^{â^'} Uptake by the Cyanobacterium Anabaena variabilis. Plant Physiology, 1982, 69, 978-982.	2.3	95
114	Dynamics of patchy stomatal movements, and their contribution to steady-state and oscillating stomatal conductance calculated using gas-exchange techniques. Plant, Cell and Environment, 1994, 17, 995-1007.	2.8	95
115	Simulations of chlorophyll fluorescence incorporated into the <scp>C</scp>ommunity <scp>L</scp>and <scp>M</scp>odel version 4. Global Change Biology, 2015, 21, 3469-3477.	4.2	95
116	The relationship between the Rubisco reaction mechanism and models of photosynthesis*. Plant, Cell and Environment, 1990, 13, 219-225.	2.8	94
117	Carbon isotope ratio measurements of succulent plants in southern Africa. Oecologia, 1977, 30, 295-305.	0.9	93
118	Environmental Regulation of Photosynthesis. , 1982, , 263-343.		93
119	Starch and Sucrose Synthesis in Phaseolus vulgaris as Affected by Light, CO₂, and Abscisic Acid. Plant Physiology, 1985, 77, 617-620.	2.3	93
120	Interactions between Vegetation and Climate: Radiative and Physiological Effects of Doubled Atmospheric CO2. Journal of Climate, 1999, 12, 309-324.	1.2	91
121	Interpreting seasonal changes in the carbon balance of southern Amazonia using measurements of XCO₂ and chlorophyll fluorescence from GOSAT. Geophysical Research Letters, 2013, 40, 2829-2833.	1.5	89
122	Sources and sinks of carbonyl sulfide in an agricultural field in the Southern Great Plains. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9064-9069.	3.3	88
123	Adaptation of Photosynthetic Processes to Stress. Science, 1975, 188, 644-650.	6.0	87
124	Asymmetric patchy stomatal closure for the two surfaces of Xanthium strumarium L. leaves at low humidity. Plant, Cell and Environment, 1993, 16, 25-34.	2.8	86
125	Photosynthetic Response and Adaptation to High Temperature in Desert Plants. Plant Physiology, 1984, 75, 364-368.	2.3	84
126	The Regulation of Electron Partitioning between the Cytochrome and Alternative Pathways in Soybean Cotyledon and Root Mitochondria. Plant Physiology, 1997, 113, 903-911.	2.3	84

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127	Atmospheric carbonyl sulfide sources from anthropogenic activity: Implications for carbon cycle constraints. Geophysical Research Letters, 2015, 42, 3004-3010.	1.5	83
128	Tolerance of Photosynthesis to High Temperature in Desert Plants. Plant Physiology, 1984, 74, 786-790.	2.3	80
129	Effects of light on respiration and oxygen isotope fractionation in soybean cotyledons. Plant, Cell and Environment, 2000, 23, 983-989.	2.8	80
130	Isotopic heterogeneity of water in transpiring leaves: identification of the component that controls the delta18O of atmospheric O2 and CO2. Plant, Cell and Environment, 1994, 17, 73-80.	2.8	79
131	A kinetic analysis of leaf uptake of COS and its relation to transpiration, photosynthesis and carbon isotope fractionation. Biogeosciences, 2010, 7, 333-341.	1.3	78
132	Photosynthesis: principles and field techniques. , 1989, , 209-253.		77
133	NIRVP: A robust structural proxy for sun-induced chlorophyll fluorescence and photosynthesis across scales. Remote Sensing of Environment, 2022, 268, 112763.	4.6	77
134	Temperature and Leaf Osmotic Potential as Factors in the Acclimation of Photosynthesis to High Temperature in Desert Plants. Plant Physiology, 1986, 80, 926-930.	2.3	76
135	Simulations of terrestrial carbon metabolism and atmospheric CO2 in a general circulation model. Part 1: Surface carbon fluxes. Tellus, Series B: Chemical and Physical Meteorology, 1996, 48, 521-542.	0.8	76
136	A three-dimensional synthesis study of Î´18O in atmospheric CO2: 2. Simulations with the TM2 transport model. Journal of Geophysical Research, 1997, 102, 5873-5883.	3.3	75
137	Inversion of net ecosystem CO2 flux measurements for estimation of canopy PAR absorption. Global Change Biology, 2002, 8, 563-574.	4.2	75
138	Comparing optimal and empirical stomatal conductance models for application in Earth system models. Global Change Biology, 2018, 24, 5708-5723.	4.2	75
139	Biochemical Model of C3 Photosynthesis. Advances in Photosynthesis and Respiration, 2009, , 209-230.	1.0	75
140	Outgoing Nearâ€Infrared Radiation From Vegetation Scales With Canopy Photosynthesis Across a Spectrum of Function, Structure, Physiological Capacity, and Weather. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005534.	1.3	73
141	Materials and methods for carbon dioxide and water exchange analysis^{Â§}. Plant, Cell and Environment, 1980, 3, 371-376.	2.8	71
142	Influence of clouds and diffuse radiation on ecosystemâ€atmosphere CO₂ and CO¹⁸O exchanges. Journal of Geophysical Research, 2009, 114, .	3.3	71
143	Recovery of photosynthesis after exposure of intertidal algae to osmotic and temperature stresses: comparative studies of species with differing distributional limits. Oecologia, 1986, 70, 6-12.	0.9	69
144	Loss of whole-tree hydraulic conductance during severe drought and multi-year forest die-off. Oecologia, 2014, 175, 11-23.	0.9	69

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145	Seasonal fluxes of carbonyl sulfide in a midlatitude forest. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14162-14167.	3.3	69
146	Modeling of Energy, Water, and CO2Flux in a Temperate Grassland Ecosystem with SiB2: Mayâ€“October 1987. Journals of the Atmospheric Sciences, 1998, 55, 1141-1169.	0.6	68
147	Real-time on-line blend uniformity monitoring using near-infrared reflectance spectrometry: A noninvasive off-line calibration approach. Journal of Pharmaceutical and Biomedical Analysis, 2009, 49, 48-54.	1.4	68
148	The contribution of C 3 and C 4 plants to the carbon cycle of a tallgrass prairie: an isotopic approach. Oecologia, 2003, 136, 347-359.	0.9	67
149	A possible global covariance between terrestrial gross primary production and13C discrimination: Consequences for the atmospheric13C budget and its response to ENSO. Global Biogeochemical Cycles, 2002, 16, 83-1-83-16.	1.9	65
150	Estimates of net CO2flux by application of equilibrium boundary layer concepts to CO2and water vapor measurements from a tall tower. Journal of Geophysical Research, 2004, 109, .	3.3	64
151	Radiance-based NIR_v as a proxy for GPP of corn and soybean. Environmental Research Letters, 2020, 15, 034009.	2.2	63
152	Solar-induced chlorophyll fluorescence is non-linearly related to canopy photosynthesis in a temperate evergreen needleleaf forest during the fall transition. Remote Sensing of Environment, 2021, 258, 112362.	4.6	61
153	High-Efficiency Photosynthesis. Scientific American, 1973, 229, 80-93.	1.0	60
154	Low and High Temperature Limits to PSII. Plant Physiology, 1989, 91, 1494-1500.	2.3	60
155	Photosynthetic Control of Electron Transport in Leaves of Phaseolus Vulgaris: Evidence for Regulation of Photosystem 2 by the Proton Gradient. , 1987, , 553-556.		59
156	Changes in Mitochondrial Electron Partitioning in Response to Herbicides Inhibiting Branched-Chain Amino Acid Biosynthesis in Soybean. Plant Physiology, 2003, 133, 1351-1359.	2.3	58
157	Solar Induced Chlorophyll Fluorescence: Origins, Relation to Photosynthesis and Retrieval. , 2018, , 143-162.		58
158	Functional diversity of photosynthesis during drought in a model tropical rainforest - the contributions of leaf area, photosynthetic electron transport and stomatal conductance to reduction in net ecosystem carbon exchange. Plant, Cell and Environment, 2004, 27, 1239-1256.	2.8	57
159	Membrane Phospholipid Phase Separations in Plants Adapted to or Acclimated to Different Thermal Regimes. Plant Physiology, 1980, 66, 238-241.	2.3	56
160	Inorganic carbon transport in aquatic photosynthetic organisms. Physiologia Plantarum, 1985, 65, 539-543.	2.6	55
161	Effects of pH on Activity and Activation of Ribulose 1,5-Bisphosphate Carboxylase at Air Level CO₂. Plant Physiology, 1986, 82, 77-82.	2.3	55
162	18 O composition of CO2 and H2 O ecosystem pools and fluxes in a tallgrass prairie: Simulations and comparisons to measurements. Global Change Biology, 2003, 9, 1567-1581.	4.2	54

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163	Carbonyl sulfide exchange in soils for better estimates of ecosystem carbon uptake. Atmospheric Chemistry and Physics, 2016, 16, 3711-3726.	1.9	54
164	Testing a model of CO2, water and energy exchange in Great Plains tallgrass prairie and wheat ecosystems. Agricultural and Forest Meteorology, 2005, 131, 162-179.	1.9	53
165	Forest biomass allometry in global land surface models. Global Biogeochemical Cycles, 2011, 25, n/a-n/a.	1.9	52
166	Combining meteorology, eddy fluxes, isotope measurements, and modeling to understand environmental controls of carbon isotope discrimination at the canopy scale. Global Change Biology, 2006, 12, 710-730.	4.2	51
167	Association between Carbonyl Sulfide Uptake and ¹⁸Î" during Gas Exchange in C₃ and C₄ Leaves. Plant Physiology, 2011, 157, 509-517.	2.3	49
168	Plants and high temperature stress. Symposia of the Society for Experimental Biology, 1988, 42, 329-46.	0.0	48
169	Growth Temperature-Induced Alterations in the Thermotropic Properties of Nerium oleander Membrane Lipids. Plant Physiology, 1982, 70, 215-218.	2.3	47
170	Remote sensing of heterogeneity in photosynthetic efficiency, electron transport and dissipation of excess light in Populus deltoides stands under ambient and elevated CO2 concentrations, and in a tropical forest canopy, using a new laser-induced fluorescence transient device. Global Change Biology, 2005, 11, 1195-1206.	4.2	47
171	Photosynthesis and photorespiration in a mutant of the cyanobacterium Synechocystis PCC 6803 lacking carboxysomes. Planta, 1992, 187, 511-6.	1.6	46
172	Allometric growth and allocation in forests: a perspective from FLUXNET. , 2011, 21, 1546-1556.		46
173	Interannual variability of photosynthesis across Africa and its attribution. Journal of Geophysical Research, 2008, 113, .	3.3	45
174	Effects of Carbonyl Sulfide and Carbonic Anhydrase on Stomatal Conductance. Plant Physiology, 2012, 158, 524-530.	2.3	44
175	Tropical sources and sinks of carbonyl sulfide observed from space. Geophysical Research Letters, 2015, 42, 10,082.	1.5	44
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