

Andrew D Richardson

List of Publications by Year in descending order

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247
papers

37,470
citations

2538

96
h-index

3257

185
g-index

263
all docs

263
docs citations

263
times ranked

23733
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent decline in the global land evapotranspiration trend due to limited moisture supply. <i>Nature</i> , 2010, 467, 951-954.	13.7	1,771
2	Climate change, phenology, and phenological control of vegetation feedbacks to the climate system. <i>Agricultural and Forest Meteorology</i> , 2013, 169, 156-173.	1.9	1,526
3	Increase in forest water-use efficiency as atmospheric carbon dioxide concentrations rise. <i>Nature</i> , 2013, 499, 324-327.	13.7	966
4	Global patterns of land-atmosphere fluxes of carbon dioxide, latent heat, and sensible heat derived from eddy covariance, satellite, and meteorological observations. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	933
5	Net carbon dioxide losses of northern ecosystems in response to autumn warming. <i>Nature</i> , 2008, 451, 49-52.	13.7	930
6	An evaluation of noninvasive methods to estimate foliar chlorophyll content. <i>New Phytologist</i> , 2002, 153, 185-194.	3.5	909
7	Intercomparison, interpretation, and assessment of spring phenology in North America estimated from remote sensing for 1982–2006. <i>Global Change Biology</i> , 2009, 15, 2335-2359.	4.2	871
8	CO ₂ balance of boreal, temperate, and tropical forests derived from a global database. <i>Global Change Biology</i> , 2007, 13, 2509-2537.	4.2	863
9	Separation of net ecosystem exchange into assimilation and respiration using a light response curve approach: critical issues and global evaluation. <i>Global Change Biology</i> , 2010, 16, 187-208.	4.2	752
10	Influence of spring and autumn phenological transitions on forest ecosystem productivity. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2010, 365, 3227-3246.	1.8	751
11	Comprehensive comparison of gap-filling techniques for eddy covariance net carbon fluxes. <i>Agricultural and Forest Meteorology</i> , 2007, 147, 209-232.	1.9	744
12	Net carbon uptake has increased through warming-induced changes in temperate forest phenology. <i>Nature Climate Change</i> , 2014, 4, 598-604.	8.1	671
13	Terrestrial biosphere models need better representation of vegetation phenology: results from the North American Carbon Program Synthesis. <i>Global Change Biology</i> , 2012, 18, 566-584.	4.2	583
14	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.	2.7	562
15	Observed increase in local cooling effect of deforestation at higher latitudes. <i>Nature</i> , 2011, 479, 384-387.	13.7	543
16	Nonstructural Carbon in Woody Plants. <i>Annual Review of Plant Biology</i> , 2014, 65, 667-687.	8.6	533
17	Use of digital webcam images to track spring green-up in a deciduous broadleaf forest. <i>Oecologia</i> , 2007, 152, 323-334.	0.9	489
18	Uncertainty in eddy covariance measurements and its application to physiological models. <i>Tree Physiology</i> , 2005, 25, 873-885.	1.4	478

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19	Global Convergence in the Temperature Sensitivity of Respiration at Ecosystem Level. <i>Science</i> , 2010, 329, 838-840.	6.0	446
20	Digital repeat photography for phenological research in forest ecosystems. <i>Agricultural and Forest Meteorology</i> , 2012, 152, 159-177.	1.9	446
21	Tracking the rhythm of the seasons in the face of global change: phenological research in the 21st century. <i>Frontiers in Ecology and the Environment</i> , 2009, 7, 253-260.	1.9	429
22	Near-surface remote sensing of spatial and temporal variation in canopy phenology. <i>Ecological Applications</i> , 2009, 19, 1417-1428.	1.8	400
23	A multi-site analysis of random error in tower-based measurements of carbon and energy fluxes. <i>Agricultural and Forest Meteorology</i> , 2006, 136, 1-18.	1.9	398
24	Solar-induced chlorophyll fluorescence that correlates with canopy photosynthesis on diurnal and seasonal scales in a temperate deciduous forest. <i>Geophysical Research Letters</i> , 2015, 42, 2977-2987.	1.5	397
25	Phenology of a northern hardwood forest canopy. <i>Global Change Biology</i> , 2006, 12, 1174-1188.	4.2	368
26	Warm spring reduced carbon cycle impact of the 2012 US summer drought. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5880-5885.	3.3	340
27	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, 19336-19341.	3.3	326
28	Seasonal dynamics and age of stemwood nonstructural carbohydrates in temperate forest trees. <i>New Phytologist</i> , 2013, 197, 850-861.	3.5	324
29	Spatial and temporal variability in forest-atmosphere CO ₂ exchange. <i>Global Change Biology</i> , 2004, 10, 1689-1706.	4.2	318
30	Influence of spring phenology on seasonal and annual carbon balance in two contrasting New England forests. <i>Tree Physiology</i> , 2009, 29, 321-331.	1.4	313
31	Improving land surface models with FLUXNET data. <i>Biogeosciences</i> , 2009, 6, 1341-1359.	1.3	308
32	Tracking vegetation phenology across diverse North American biomes using PhenoCam imagery. <i>Scientific Data</i> , 2018, 5, 180028.	2.4	304
33	Macrosystems ecology: understanding ecological patterns and processes at continental scales. <i>Frontiers in Ecology and the Environment</i> , 2014, 12, 5-14.	1.9	285
34	Optimizing spectral indices and chemometric analysis of leaf chemical properties using radiative transfer modeling. <i>Remote Sensing of Environment</i> , 2011, 115, 2742-2750.	4.6	274
35	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, .	3.3	274
36	A regional perspective on trends in continental evaporation. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	273

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37	The MODIS (Collection V005) BRDF/albedo product: Assessment of spatial representativeness over forested landscapes. <i>Remote Sensing of Environment</i> , 2009, 113, 2476-2498.	4.6	272
38	Intercomparison of MODIS albedo retrievals and in situ measurements across the global FLUXNET network. <i>Remote Sensing of Environment</i> , 2012, 121, 323-334.	4.6	259
39	The timing of autumn senescence is affected by the timing of spring phenology: implications for predictive models. <i>Global Change Biology</i> , 2015, 21, 2634-2641.	4.2	256
40	Evaluating remote sensing of deciduous forest phenology at multiple spatial scales using PhenoCam imagery. <i>Biogeosciences</i> , 2014, 11, 4305-4320.	1.3	251
41	Ecosystem warming extends vegetation activity but heightens vulnerability to cold temperatures. <i>Nature</i> , 2018, 560, 368-371.	13.7	249
42	Cross-site evaluation of eddy covariance GPP and RE decomposition techniques. <i>Agricultural and Forest Meteorology</i> , 2008, 148, 821-838.	1.9	248
43	Widespread seasonal compensation effects of spring warming on northern plant productivity. <i>Nature</i> , 2018, 562, 110-114.	13.7	240
44	Assimilation exceeds respiration sensitivity to drought: A FLUXNET synthesis. <i>Global Change Biology</i> , 2010, 16, 657-670.	4.2	238
45	Terrestrial biosphere model performance for interannual variability of land-atmosphere CO ₂ exchange. <i>Global Change Biology</i> , 2012, 18, 1971-1987.	4.2	232
46	Linking near-surface and satellite remote sensing measurements of deciduous broadleaf forest phenology. <i>Remote Sensing of Environment</i> , 2012, 117, 307-321.	4.6	230
47	Refining light-use efficiency calculations for a deciduous forest canopy using simultaneous tower-based carbon flux and radiometric measurements. <i>Agricultural and Forest Meteorology</i> , 2007, 143, 64-79.	1.9	226
48	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.	1.9	221
49	ECOSTRESS: NASA's Next Generation Mission to Measure Evapotranspiration From the International Space Station. <i>Water Resources Research</i> , 2020, 56, e2019WR026058.	1.7	220
50	Environmental variation is directly responsible for short-term but not long-term variation in forest-atmosphere carbon exchange. <i>Global Change Biology</i> , 2007, 13, 788-803.	4.2	219
51	Landscape controls on the timing of spring, autumn, and growing season length in mid-Atlantic forests. <i>Global Change Biology</i> , 2012, 18, 656-674.	4.2	211
52	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.	4.6	210
53	Ecological impacts of a widespread frost event following early spring leaf-out. <i>Global Change Biology</i> , 2012, 18, 2365-2377.	4.2	210
54	RESPONSE OF SUGAR MAPLE TO CALCIUM ADDITION TO NORTHERN HARDWOOD FOREST. <i>Ecology</i> , 2006, 87, 1267-1280.	1.5	209

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55	Patterns and controls of the variability of radiation use efficiency and primary productivity across terrestrial ecosystems. <i>Global Ecology and Biogeography</i> , 2010, 19, 253-267.	2.7	201
56	Using digital repeat photography and eddy covariance data to model grassland phenology and photosynthetic CO ₂ uptake. <i>Agricultural and Forest Meteorology</i> , 2011, 151, 1325-1337.	1.9	197
57	Using phenocams to monitor our changing Earth: toward a global phenocam network. <i>Frontiers in Ecology and the Environment</i> , 2016, 14, 84-93.	1.9	197
58	Tracking forest phenology and seasonal physiology using digital repeat photography: a critical assessment. <i>Ecological Applications</i> , 2014, 24, 1478-1489.	1.8	189
59	Age, allocation and availability of nonstructural carbon in mature red maple trees. <i>New Phytologist</i> , 2013, 200, 1145-1155.	3.5	179
60	Standardized protocols and procedures can precisely and accurately quantify non-structural carbohydrates. <i>Tree Physiology</i> , 2018, 38, 1764-1778.	1.4	171
61	A distinct seasonal pattern of the ratio of soil respiration to total ecosystem respiration in a spruce-dominated forest. <i>Global Change Biology</i> , 2006, 12, 230-239.	4.2	170
62	A Dynamic Landsat Derived Normalized Difference Vegetation Index (NDVI) Product for the Conterminous United States. <i>Remote Sensing</i> , 2017, 9, 863.	1.8	167
63	Statistical modeling of ecosystem respiration using eddy covariance data: Maximum likelihood parameter estimation, and Monte Carlo simulation of model and parameter uncertainty, applied to three simple models. <i>Agricultural and Forest Meteorology</i> , 2005, 131, 191-208.	1.9	166
64	Disentangling the role of photosynthesis and stomatal conductance on rising forest water-use efficiency. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 16909-16914.	3.3	166
65	Using model-data fusion to interpret past trends, and quantify uncertainties in future projections, of terrestrial ecosystem carbon cycling. <i>Global Change Biology</i> , 2012, 18, 2555-2569.	4.2	161
66	A method to estimate the additional uncertainty in gap-filled NEE resulting from long gaps in the CO ₂ flux record. <i>Agricultural and Forest Meteorology</i> , 2007, 147, 199-208.	1.9	159
67	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.	1.9	157
68	On the uncertainty of phenological responses to climate change, and implications for a terrestrial biosphere model. <i>Biogeosciences</i> , 2012, 9, 2063-2083.	1.3	154
69	Climate and hydrological changes in the northeastern United States: recent trends and implications for forested and aquatic ecosystems This article is one of a selection of papers from NE Forests 2100: A Synthesis of Climate Change Impacts on Forests of the Northeastern US and Eastern Canada.. <i>Canadian Journal of Forest Research</i> , 2009, 39, 199-212.	0.8	153
70	Assessing foliar chlorophyll contents with the SPAD-502 chlorophyll meter: a calibration test with thirteen tree species of tropical rainforest in French Guiana. <i>Annals of Forest Science</i> , 2010, 67, 607-607.	0.8	153
71	Estimating parameters of a forest ecosystem C model with measurements of stocks and fluxes as joint constraints. <i>Oecologia</i> , 2010, 164, 25-40.	0.9	153
72	Productivity of North American grasslands is increased under future climate scenarios despite rising aridity. <i>Nature Climate Change</i> , 2016, 6, 710-714.	8.1	153

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73	Whole-tree nonstructural carbohydrate storage and seasonal dynamics in five temperate species. <i>New Phytologist</i> , 2019, 221, 1466-1477.	3.5	153
74	Is the spherical leaf inclination angle distribution a valid assumption for temperate and boreal broadleaf tree species?. <i>Agricultural and Forest Meteorology</i> , 2013, 169, 186-194.	1.9	149
75	Albedo estimates for land surface models and support for a new paradigm based on foliage nitrogen concentration. <i>Global Change Biology</i> , 2010, 16, 696-710.	4.2	144
76	The REFLEX project: Comparing different algorithms and implementations for the inversion of a terrestrial ecosystem model against eddy covariance data. <i>Agricultural and Forest Meteorology</i> , 2009, 149, 1597-1615.	1.9	138
77	Phenopix: A R package for image-based vegetation phenology. <i>Agricultural and Forest Meteorology</i> , 2016, 220, 141-150.	1.9	136
78	Assessing parameter variability in a photosynthesis model within and between plant functional types using global Fluxnet eddy covariance data. <i>Agricultural and Forest Meteorology</i> , 2011, 151, 22-38.	1.9	135
79	Biosphere-atmosphere exchange of CO ₂ in relation to climate: a cross-biome analysis across multiple time scales. <i>Biogeosciences</i> , 2009, 6, 2297-2312.	1.3	132
80	Measuring effective leaf area index, foliage profile, and stand height in New England forest stands using a full-waveform ground-based lidar. <i>Remote Sensing of Environment</i> , 2011, 115, 2954-2964.	4.6	131
81	Using data from Landsat, MODIS, VIIRS and PhenoCams to monitor the phenology of California oak/grass savanna and open grassland across spatial scales. <i>Agricultural and Forest Meteorology</i> , 2017, 237-238, 311-325.	1.9	131
82	Greenness indices from digital cameras predict the timing and seasonal dynamics of canopy-scale photosynthesis. <i>Ecological Applications</i> , 2015, 25, 99-115.	1.8	129
83	Statistical properties of random CO ₂ flux measurement uncertainty inferred from model residuals. <i>Agricultural and Forest Meteorology</i> , 2008, 148, 38-50.	1.9	128
84	Semiempirical modeling of abiotic and biotic factors controlling ecosystem respiration across eddy covariance sites. <i>Global Change Biology</i> , 2011, 17, 390-409.	4.2	128
85	An integrated phenology modelling framework in <i>r</i> . <i>Methods in Ecology and Evolution</i> , 2018, 9, 1276-1285.	2.2	126
86	Evaluation of land surface phenology from VIIRS data using time series of PhenoCam imagery. <i>Agricultural and Forest Meteorology</i> , 2018, 256-257, 137-149.	1.9	125
87	Representativeness of Eddy-Covariance flux footprints for areas surrounding AmeriFlux sites. <i>Agricultural and Forest Meteorology</i> , 2021, 301-302, 108350.	1.9	125
88	Predicting Climate Change Impacts on the Amount and Duration of Autumn Colors in a New England Forest. <i>PLoS ONE</i> , 2013, 8, e57373.	1.1	125
89	Multisite analysis of land surface phenology in North American temperate and boreal deciduous forests from Landsat. <i>Remote Sensing of Environment</i> , 2016, 186, 452-464.	4.6	123
90	Comparing simple respiration models for eddy flux and dynamic chamber data. <i>Agricultural and Forest Meteorology</i> , 2006, 141, 219-234.	1.9	120

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91	Distribution and mixing of old and new nonstructural carbon in two temperate trees. <i>New Phytologist</i> , 2015, 206, 590-597.	3.5	117
92	Attaining whole-ecosystem warming using air and deep-soil heating methods with an elevated CO ₂ atmosphere. <i>Biogeosciences</i> , 2017, 14, 861-883.	1.3	115
93	Steeper declines in forest photosynthesis than respiration explain age-driven decreases in forest growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 8856-8860.	3.3	114
94	Urban warming advances spring phenology but reduces the response of phenology to temperature in the conterminous United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 4228-4233.	3.3	109
95	Fine-scale perspectives on landscape phenology from unmanned aerial vehicle (UAV) photography. <i>Agricultural and Forest Meteorology</i> , 2018, 248, 397-407.	1.9	108
96	Spectral reflectance and photosynthetic properties of <i>Betula papyrifera</i> (Betulaceae) leaves along an elevational gradient on Mt. Mansfield, Vermont, USA. <i>American Journal of Botany</i> , 2002, 89, 88-94.	0.8	106
97	Plant carbon allocation in a changing world – challenges and progress: introduction to a Virtual Issue on carbon allocation. <i>New Phytologist</i> , 2020, 227, 981-988.	3.5	105
98	Multiscale modeling of spring phenology across Deciduous Forests in the Eastern United States. <i>Global Change Biology</i> , 2016, 22, 792-805.	4.2	102
99	Phenology model from surface meteorology does not capture satellite-based greenup estimations. <i>Global Change Biology</i> , 2007, 13, 707-721.	4.2	101
100	The model – data fusion pitfall: assuming certainty in an uncertain world. <i>Oecologia</i> , 2011, 167, 587-597.	0.9	99
101	Intercomparison of phenological transition dates derived from the PhenoCam Dataset V1.0 and MODIS satellite remote sensing. <i>Scientific Reports</i> , 2018, 8, 5679.	1.6	99
102	A conceptual and practical approach to data quality and analysis procedures for high-frequency soil respiration measurements. <i>Functional Ecology</i> , 2008, 22, 1000-1007.	1.7	94
103	Latitudinal patterns of magnitude and interannual variability in net ecosystem exchange regulated by biological and environmental variables. <i>Global Change Biology</i> , 2009, 15, 2905-2920.	4.2	94
104	Constraining a global ecosystem model with multi-site eddy-covariance data. <i>Biogeosciences</i> , 2012, 9, 3757-3776.	1.3	94
105	Using FLUXNET data to improve models of springtime vegetation activity onset in forest ecosystems. <i>Agricultural and Forest Meteorology</i> , 2013, 171-172, 46-56.	1.9	91
106	Phenological Differences Between Understory and Overstory. , 2009, , 87-117.		89
107	Changes in foliar spectral reflectance and chlorophyll fluorescence of four temperate species following branch cutting. <i>Tree Physiology</i> , 2002, 22, 499-506.	1.4	88
108	Data-driven diagnostics of terrestrial carbon dynamics over North America. <i>Agricultural and Forest Meteorology</i> , 2014, 197, 142-157.	1.9	88

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109	OptIC project: An intercomparison of optimization techniques for parameter estimation in terrestrial biogeochemical models. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	82
110	A tale of two springs: using recent climate anomalies to characterize the sensitivity of temperate forest phenology to climate change. <i>Environmental Research Letters</i> , 2014, 9, 054006.	2.2	82
111	Continuous, long-term, high-frequency thermal imaging of vegetation: Uncertainties and recommended best practices. <i>Agricultural and Forest Meteorology</i> , 2016, 228-229, 315-326.	1.9	82
112	Tracking vegetation phenology across diverse biomes using Version 2.0 of the PhenoCam Dataset. <i>Scientific Data</i> , 2019, 6, 222.	2.4	82
113	Statistical uncertainty of eddy flux-based estimates of gross ecosystem carbon exchange at Howland Forest, Maine. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	81
114	FLUXNET-CH<sub>4</sub&: a global, multi-ecosystem dataset and analysis of methane seasonality from freshwater wetlands. <i>Earth System Science Data</i> , 2021, 13, 3607-3689.	3.7	79
115	Tracking seasonal rhythms of plants in diverse ecosystems with digital camera imagery. <i>New Phytologist</i> , 2019, 222, 1742-1750.	3.5	77
116	Three scales of temporal resolution from automated soil respiration measurements. <i>Agricultural and Forest Meteorology</i> , 2009, 149, 2012-2021.	1.9	76
117	Estimating Uncertainty in Ecosystem Budget Calculations. <i>Ecosystems</i> , 2010, 13, 239-248.	1.6	76
118	Thermal imaging in plant and ecosystem ecology: applications and challenges. <i>Ecosphere</i> , 2019, 10, e02768.	1.0	76
119	Evaluation of continental carbon cycle simulations with North American flux tower observations. <i>Ecological Monographs</i> , 2013, 83, 531-556.	2.4	75
120	Rate my data: quantifying the value of ecological data for the development of models of the terrestrial carbon cycle. <i>Ecological Applications</i> , 2013, 23, 273-286.	1.8	74
121	Characterizing the performance of ecosystem models across time scales: A spectral analysis of the North American Carbon Program site-level synthesis. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	72
122	Limitations to winter and spring photosynthesis of a Rocky Mountain subalpine forest. <i>Agricultural and Forest Meteorology</i> , 2018, 252, 241-255.	1.9	72
123	Linking big models to big data: efficient ecosystem model calibration through Bayesian model emulation. <i>Biogeosciences</i> , 2018, 15, 5801-5830.	1.3	71
124	Multivariate analyses of visible/near infrared (VIS/NIR) absorbance spectra reveal underlying spectral differences among dried, ground conifer needle samples from different growth environments. <i>New Phytologist</i> , 2004, 161, 291-301.	3.5	70
125	Monitoring vegetation phenology using an infrared-enabled security camera. <i>Agricultural and Forest Meteorology</i> , 2014, 195-196, 143-151.	1.9	70
126	Characterization of seasonal variation of forest canopy in a temperate deciduous broadleaf forest, using daily MODIS data. <i>Remote Sensing of Environment</i> , 2006, 105, 189-203.	4.6	69

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127	Uncertainty Quantification. , 2012, , 173-209.		69
128	Phenocams Bridge the Gap between Field and Satellite Observations in an Arid Grassland Ecosystem. Remote Sensing, 2017, 9, 1071.	1.8	69
129	Spectral reflectance of Picea rubens (Pinaceae) and Abies balsamea (Pinaceae) needles along an elevational gradient, Mt. Moosilauke, New Hampshire, USA. American Journal of Botany, 2001, 88, 667-676.	0.8	68
130	NDVI derived from near-infrared-enabled digital cameras: Applicability across different plant functional types. Agricultural and Forest Meteorology, 2018, 249, 275-285.	1.9	68
131	Carbon budget of the Harvard Forest Long-term Ecological Research site: pattern, process, and response to global change. Ecological Monographs, 2020, 90, e01423.	2.4	67
132	Microclimatology of treeline spruce-fir forests in mountains of the northeastern United States. Agricultural and Forest Meteorology, 2004, 125, 53-66.	1.9	65
133	A new seasonal-deciduous spring phenology submodel in the Community Land Model 4.5: impacts on carbon and water cycling under future climate scenarios. Global Change Biology, 2016, 22, 3675-3688.	4.2	64
134	Using Near-Infrared-Enabled Digital Repeat Photography to Track Structural and Physiological Phenology in Mediterranean Tree-Grass Ecosystems. Remote Sensing, 2018, 10, 1293.	1.8	64
135	Linking annual tree growth with eddy-flux measures of net ecosystem productivity across twenty years of observation in a mixed conifer forest. Agricultural and Forest Meteorology, 2018, 249, 479-487.	1.9	63
136	Remote sensing of annual terrestrial gross primary productivity from MODIS: an assessment using the FLUXNET La Thuile data set. Biogeosciences, 2014, 11, 2185-2200.	1.3	62
137	Phenology from Landsat when data is scarce: Using MODIS and Dynamic Time-Warping to combine multi-year Landsat imagery to derive annual phenology curves. International Journal of Applied Earth Observation and Geoinformation, 2017, 54, 72-83.	1.4	62
138	Foliar chemistry of balsam fir and red spruce in relation to elevation and the canopy light gradient in the mountains of the northeastern United States. Plant and Soil, 2004, 260, 291-299.	1.8	61
139	Global Climate. Bulletin of the American Meteorological Society, 2020, 101, S9-S128.	1.7	61
140	Reflectance of Alaskan black spruce and white spruce foliage in relation to elevation and latitude. Tree Physiology, 2003, 23, 537-544.	1.4	59
141	On the need to consider wood formation processes in global vegetation models and a suggested approach. Annals of Forest Science, 2019, 76, 1.	0.8	59
142	The global network of outdoor webcams. , 2009, , .		58
143	Approaches to advance scientific understanding of macrosystems ecology. Frontiers in Ecology and the Environment, 2014, 12, 15-23.	1.9	57
144	Multiscale assessment of land surface phenology from harmonized Landsat 8 and Sentinel-2, PlanetScope, and PhenoCam imagery. Remote Sensing of Environment, 2021, 266, 112716.	4.6	57

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145	Evidence for a Rising Cloud Ceiling in Eastern North America*. Journal of Climate, 2003, 16, 2093-2098.	1.2	57
146	Spectral reflectance of <i>Thalassia testudinum</i> (Hydrocharitaceae) seagrass: low salinity effects. American Journal of Botany, 2006, 93, 110-117.	0.8	55
147	Observing Spring and Fall Phenology in a Deciduous Forest with Aerial Drone Imagery. Sensors, 2017, 17, 2852.	2.1	55
148	Influence of physiological phenology on the seasonal pattern of ecosystem respiration in deciduous forests. Global Change Biology, 2015, 21, 363-376.	4.2	52
149	On quantifying the apparent temperature sensitivity of plant phenology. New Phytologist, 2020, 225, 1033-1040.	3.5	52
150	Impact of hydrological variations on modeling of peatland CO ₂ fluxes: Results from the North American Carbon Program site synthesis. Journal of Geophysical Research, 2012, 117, .	3.3	50
151	Spectral reflectance of the seagrasses: <i>Thalassia testudinum</i> , <i>Halodule wrightii</i> , <i>Syringodium filiforme</i> and five marine algae. International Journal of Remote Sensing, 2007, 28, 1487-1501.	1.3	49
152	Season Spotter: Using Citizen Science to Validate and Scale Plant Phenology from Near-Surface Remote Sensing. Remote Sensing, 2016, 8, 726.	1.8	49
153	Leaf area index uncertainty estimates for model data fusion applications. Agricultural and Forest Meteorology, 2011, 151, 1287-1292.	1.9	48
154	Photoperiod decelerates the advance of spring phenology of six deciduous tree species under climate warming. Global Change Biology, 2021, 27, 2914-2927.	4.2	48
155	Stomatal Length Correlates with Elevation of Growth in Four Temperate Species. Journal of Sustainable Forestry, 2009, 28, 63-73.	0.6	47
156	Canopy-scale relationships between foliar nitrogen and albedo are not observed in leaf reflectance and transmittance within temperate deciduous tree species. Botany, 2011, 89, 491-497.	0.5	47
157	Within-crown Foliar Plasticity of Western Hemlock, <i>Tsuga heterophylla</i> , in Relation to Stand Age. Annals of Botany, 2001, 88, 1007-1015.	1.4	46
158	Forest ecosystem changes from annual methane source to sink depending on late summer water balance. Geophysical Research Letters, 2014, 41, 673-679.	1.5	44
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