Daniel J Hayes

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3837874/publications.pdf

Version: 2024-02-01

73 papers	13,192 citations	109137 35 h-index	91712 69 g-index
76 all docs	76 docs citations	76 times ranked	16899 citing authors

#	Article	IF	Citations
1	A Large and Persistent Carbon Sink in the Worldâ€™s Forests. Science, 2011, 333, 988-993.	6.0	5,393
2	Climate change and the permafrost carbon feedback. Nature, 2015, 520, 171-179.	13.7	2,369
3	Sensitivity of the carbon cycle in the Arctic to climate change. Ecological Monographs, 2009, 79, 523-555.	2.4	814
4	Global patterns of drought recovery. Nature, 2017, 548, 202-205.	13.7	560
5	Dependence of the evolution of carbon dynamics in the northern permafrost region on the trajectory of climate change. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3882-3887.	3.3	296
6	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
7	Expert assessment of vulnerability of permafrost carbon to climate change. Climatic Change, 2013, 119, 359-374.	1.7	257
8	Global patterns and controls of soil organic carbon dynamics as simulated by multiple terrestrial biosphere models: Current status and future directions. Global Biogeochemical Cycles, 2015, 29, 775-792.	1.9	241
9	The North American Carbon Program Multi-Scale Synthesis and Terrestrial Model Intercomparison Project â€“ Part 1: Overview and experimental design. Geoscientific Model Development, 2013, 6, 2121-2133.	1.3	212
10	North American Carbon Program (NACP) regional interim synthesis: Terrestrial biospheric model intercomparison. Ecological Modelling, 2012, 232, 144-157.	1.2	207
11	Automated Detection of Cloud and Cloud Shadow in Single-Date Landsat Imagery Using Neural Networks and Spatial Post-Processing. Remote Sensing, 2014, 6, 4907-4926.	1.8	168
12	Recent Arctic tundra fire initiates widespread thermokarst development. Scientific Reports, 2015, 5, 15865.	1.6	139
13	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. Environmental Research Letters, 2015, 10, 094008.	2.2	119
14	Reconciling estimates of the contemporary North American carbon balance among terrestrial biosphere models, atmospheric inversions, and a new approach for estimating net ecosystem exchange from inventoryâ€based data. Global Change Biology, 2012, 18, 1282-1299.	4.2	116
15	Variability in the sensitivity among model simulations of permafrost and carbon dynamics in the permafrost region between 1960 and 2009. Global Biogeochemical Cycles, 2016, 30, 1015-1037.	1.9	116
16	Spatial, spectral and temporal patterns of tropical forest cover change as observed with multiple scales of optical satellite data. Remote Sensing of Environment, 2007, 106, 1-16.	4.6	112
17	North American terrestrial CO2 uptake largely offset by CH4 and N2O emissions: toward a full accounting of the greenhouse gas budget. Climatic Change, 2015, 129, 413-426.	1.7	112
18	Layer Stacking: A Novel Algorithm for Individual Forest Tree Segmentation from LiDAR Point Clouds. Canadian Journal of Remote Sensing, 2017, 43, 16-27.	1.1	106

#	Article	IF	Citations
19	The role of remote sensing in process-scaling studies of managed forest ecosystems. Forest Ecology and Management, 2015, 355, 109-123.	1.4	101
20	Insights and issues with simulating terrestrial DOC loading of Arctic river networks. Ecological Applications, 2013, 23, 1817-1836.	1.8	92
21	Carbon cycle uncertainty in the Alaskan Arctic. Biogeosciences, 2014, 11, 4271-4288.	1.3	92
22	Soil moisture and hydrology projections of the permafrost region â€“ a model intercomparison. Cryosphere, 2020, 14, 445-459.	1.5	85
23	The impacts of recent permafrost thaw on landâ€“atmosphere greenhouse gas exchange. Environmental Research Letters, 2014, 9, 045005.	2.2	74
24	The Use of Three-Dimensional Convolutional Neural Networks to Interpret LiDAR for Forest Inventory. Remote Sensing, 2018, 10, 649.	1.8	63
25	The carbon budget of the northern cryosphere region. Current Opinion in Environmental Sustainability, 2010, 2, 231-236.	3.1	61
26	Missing pieces to modeling the Arctic-Boreal puzzle. Environmental Research Letters, 2018, 13, 020202.	2.2	61
27	North American carbon dioxide sources and sinks: magnitude, attribution, and uncertainty. Frontiers in Ecology and the Environment, 2012, 10, 512-519.	1.9	56
28	North America's net terrestrial CO₂ exchange with the atmosphere 1990â€“2009. Biogeosciences, 2015, 12, 399-414.	1.3	54
29	Sensitivity of global terrestrial gross primary production to hydrologic states simulated by the Community Land Model using two runoff parameterizations. Journal of Advances in Modeling Earth Systems, 2014, 6, 658-679.	1.3	48
30	Toward â€œoptimalâ€•integration of terrestrial biosphere models. Geophysical Research Letters, 2015, 42, 4418-4428.	1.5	48
31	Terrestrial ecosystem model performance in simulating productivity and its vulnerability to climate change in the northern permafrost region. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 430-446.	1.3	47
32	Estimating proportional change in forest cover as a continuous variable from multi-year MODIS data. Remote Sensing of Environment, 2008, 112, 735-749.	4.6	43
33	Patch-Based Forest Change Detection from Landsat Time Series. Forests, 2017, 8, 166.	0.9	42
34	Increased lightâ€use efficiency in northern terrestrial ecosystems indicated by CO₂ and greening observations. Geophysical Research Letters, 2016, 43, 11,339.	1.5	40
35	Global land carbon sink response to temperature and precipitation varies with ENSO phase. Environmental Research Letters, 2017, 12, 064007.	2.2	39
36	Ecosystem functional diversity and the representativeness of environmental networks across the conterminous United States. Agricultural and Forest Meteorology, 2018, 262, 423-433.	1.9	37

#	Article	IF	Citations
37	Title is missing!. Landscape Ecology, 2002, 17, 299-314.	1.9	35
38	Global Pyrogenic Carbon Production During Recent Decades Has Created the Potential for a Large, Longâ€Term Sink of Atmospheric CO₂. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3682-3696.	1.3	34
39	Decadal trends in the seasonal-cycle amplitude of terrestrial CO₂ exchange resulting from the ensemble of terrestrial biosphere models. Tellus, Series B: Chemical and Physical Meteorology, 2022, 68, 28968.	0.8	31
40	Enhancing interoperability to facilitate implementation of REDD+: case study of Mexico. Carbon Management, 2017, 8, 57-65.	1.2	31
41	Soil Organic Carbon Across Mexico and the Conterminous United States (1991â€“2010). Global Biogeochemical Cycles, 2020, 34, no.	1.9	28
42	The need for â€œapples-to-applesâ€•comparisons of carbon dioxide source and sink estimates. Eos, 2012, 93, 404-405.	0.1	25
43	A Multi-Sensor Unoccupied Aerial System Improves Characterization of Vegetation Composition and Canopy Properties in the Arctic Tundra. Remote Sensing, 2020, 12, 2638.	1.8	24
44	Contributions of wildland fire to terrestrial ecosystem carbon dynamics in North America from 1990 to 2012. Global Biogeochemical Cycles, 2017, 31, 878-900.	1.9	23
45	Terrestrial Ecosystems and Their Change. Springer Environmental Science and Engineering, 2013, , 171-249.	0.1	22
46	Rising methane emissions from northern wetlands associated with sea ice decline. Geophysical Research Letters, 2015, 42, 7214-7222.	1.5	20
47	Ecosystem carbon storage capacity as affected by disturbance regimes: A general theoretical model. Journal of Geophysical Research, 2012, 117, .	3.3	19
48	Impacts of land use change and elevated CO₂ on the interannual variations and seasonal cycles of gross primary productivity in China. Earth System Dynamics, 2020, 11, 235-249.	2.7	16
49	Global vegetation biomass production efficiency constrained by models and observations. Global Change Biology, 2020, 26, 1474-1484.	4.2	15
50	Fire reduces riverine DOC concentration draining a watershed and alters post-fire DOC recovery patterns. Environmental Research Letters, 2021, 16, 024022.	2.2	14
51	Climate and atmospheric deposition drive the inter-annual variability and long-term trend of dissolved organic carbon flux in the conterminous United States. Science of the Total Environment, 2021, 771, 145448.	3.9	14
52	Divergence in land surface modeling: linking spread to structure. Environmental Research Communications, 2019, 1, 111004.	0.9	13
53	Above-ground carbon stock in merchantable trees not reduced between cycles of spruce budworm outbreaks due to changing species composition in spruce-fir forests of Maine, USA. Forest Ecology and Management, 2019, 453, 117590.	1.4	13
54	Identifying Key Environmental Factors Explaining Temporal Patterns of DOC Export From Watersheds in the Conterminous United States. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005813.	1.3	13

#	Article	IF	Citations
55	Spatial and temporal patterns of plantation forests in the United States since the 1930s: an annual and gridded data set for regional Earth system modeling. Earth System Science Data, 2017, 9, 545-556.	3.7	13
56	Non-uniform seasonal warming regulates vegetation greening and atmospheric CO ₂ amplification over northern lands. Environmental Research Letters, 2018, 13, 124008.	2.2	11
57	Technological advancement expands carbon storage in harvested wood products in Maine, USA. Biomass and Bioenergy, 2022, 161, 106457.	2.9	11
58	Contribution of environmental forcings to US runoff changes for the period 1950â€“2010. Environmental Research Letters, 2018, 13, 054023.	2.2	9
59	The Arctic-Boreal vulnerability experiment model benchmarking system. Environmental Research Letters, 2019, 14, 055002.	2.2	9
60	Ecologically-Based Metrics for Assessing Structure in Developing Area-Based, Enhanced Forest Inventories from LiDAR. Canadian Journal of Remote Sensing, 2019, 45, 88-112.	1.1	9
61	Landscape-scale characterization of Arctic tundra vegetation composition, structure, and function with a multi-sensor unoccupied aerial system. Environmental Research Letters, 2021, 16, 085005.	2.2	9
62	Climate Change and the Future of Natural Disturbances in the Central Hardwood Region. Managing Forest Ecosystems, 2016, , 355-369.	0.4	9
63	Predicting Water Stress in Wild Blueberry Fields Using Airborne Visible and Near Infrared Imaging Spectroscopy. Remote Sensing, 2021, 13, 1425.	1.8	7
64	The Effects of Land Cover and Land Use Change on the Contemporary Carbon Balance of the Arctic and Boreal Terrestrial Ecosystems of Northern Eurasia. , 2010, , 109-136.		5
65	Synthesizing Disparate LiDAR and Satellite Datasets through Deep Learning to Generate Wall-to-Wall Regional Inventories for the Complex, Mixed-Species Forests of the Eastern United States. Remote Sensing, 2021, 13, 5113.	1.8	5
66	A scientific synthesis and assessment of the Arctic Carbon Cycle. Eos, 2007, 88, 270-270.	0.1	4
67	Potential efficiency gains in payment programs from resolving spatial and temporal heterogeneity in the cost of supplying forest carbon. Journal of Environmental Management, 2019, 250, 109421.	3.8	4
68	Do ecologicalâ€“economic tradeoffs triggered by budget allocations for forest carbon sequestration change under different market conditions?. Sustainability Science, 2021, 16, 69-84.	2.5	4
69	Vegetation Cover in the Eurasian Arctic: Distribution, Monitoring, and Role in Carbon Cycling. , 2010, , 79-108.		3
70	Reviewing Global Change Research and Recommending Future Priorities. Eos, 2013, 94, 426-426.	0.1	2
71	Deriving site-specific and time-varying supply curves for forest carbon storage. Journal of Environmental Planning and Management, 2020, 63, 2144-2162.	2.4	1
72	Boreal forests. , 2022, , 203-236.		1

#	Article	IF	Citations
73	Where and When Carbon Storage can be Bought Cost Effectively from Private Forest Owners. Environmental Management, 2021, 67, 930-948.	1.2	0