

Kevin M Schaefer

List of Publications by Year in descending order

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72
papers

9,058
citations

76294

40
h-index

79644

73
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78
all docs

78
docs citations

78
times ranked

10965
citing authors

#	ARTICLE	IF	CITATIONS
1	Decadal trends in the seasonal-cycle amplitude of terrestrial CO ₂ exchange resulting from the ensemble of terrestrial biosphere models. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 68, 28968.	0.8	31
2	The Terrestrial Biosphere Model Farm. <i>Journal of Advances in Modeling Earth Systems</i> , 2022, 14, .	1.3	5
3	Accuracy, Efficiency, and Transferability of a Deep Learning Model for Mapping Retrogressive Thaw Slumps across the Canadian Arctic. <i>Remote Sensing</i> , 2022, 14, 2747.	1.8	9
4	Beyond ecosystem modeling: A roadmap to community cyberinfrastructure for ecological data-model integration. <i>Global Change Biology</i> , 2021, 27, 13-26.	4.2	44
5	Active layer thickness as a function of soil water content. <i>Environmental Research Letters</i> , 2021, 16, 055028.	2.2	35
6	Comparison of Surface Subsidence Measured by Airborne and Satellite InSAR Over Permafrost Areas Near Yellowknife Canada. <i>Earth and Space Science</i> , 2021, 8, e2020EA001631.	1.1	5
7	Validation of Permafrost Active Layer Estimates from Airborne SAR Observations. <i>Remote Sensing</i> , 2021, 13, 2876.	1.8	9
8	Permafrost Dynamics Observatory—Part I: Postprocessing and Calibration Methods of UAVSAR L-band InSAR Data for Seasonal Subsidence Estimation. <i>Earth and Space Science</i> , 2021, 8, e2020EA001630.	1.1	11
9	Global vegetation biomass production efficiency constrained by models and observations. <i>Global Change Biology</i> , 2020, 26, 1474-1484.	4.2	15
10	Evaluation of simulated soil carbon dynamics in Arctic-Boreal ecosystems. <i>Environmental Research Letters</i> , 2020, 15, 025005.	2.2	19
11	Potential impacts of mercury released from thawing permafrost. <i>Nature Communications</i> , 2020, 11, 4650.	5.8	77
12	Active layer freeze-thaw and water storage dynamics in permafrost environments inferred from InSAR. <i>Remote Sensing of Environment</i> , 2020, 248, 112007.	4.6	51
13	Divergence in land surface modeling: linking spread to structure. <i>Environmental Research Communications</i> , 2019, 1, 111004.	0.9	13
14	Inference of the impact of wildfire on permafrost and active layer thickness in a discontinuous permafrost region using the remotely sensed active layer thickness (ReSALT) algorithm. <i>Environmental Research Letters</i> , 2019, 14, 035007.	2.2	64
15	Vegetation Functional Properties Determine Uncertainty of Simulated Ecosystem Productivity: A Traceability Analysis in the East Asian Monsoon Region. <i>Global Biogeochemical Cycles</i> , 2019, 33, 668-689.	1.9	38
16	Climate policy implications of nonlinear decline of Arctic land permafrost and other cryosphere elements. <i>Nature Communications</i> , 2019, 10, 1900.	5.8	108
17	Land carbon models underestimate the severity and duration of drought's impact on plant productivity. <i>Scientific Reports</i> , 2019, 9, 2758.	1.6	42
18	Representing Grasslands Using Dynamic Prognostic Phenology Based on Biological Growth Stages: 1. Implementation in the Simple Biosphere Model (SiB4). <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 4423-4439.	1.3	20

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19	Large loss of CO ₂ in winter observed across the northern permafrost region. <i>Nature Climate Change</i> , 2019, 9, 852-857.	8.1	225
20	On the Ability of Space-Based Passive and Active Remote Sensing Observations of CO ₂ to Detect Flux Perturbations to the Carbon Cycle. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 1460-1477.	1.2	25
21	Permafrost Stores a Globally Significant Amount of Mercury. <i>Geophysical Research Letters</i> , 2018, 45, 1463-1471.	1.5	245
22	Missing pieces to modeling the Arctic-Boreal puzzle. <i>Environmental Research Letters</i> , 2018, 13, 020202.	2.2	61
23	Dependence of the evolution of carbon dynamics in the northern permafrost region on the trajectory of climate change. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 3882-3887.	3.3	296
24	Enhanced peak growth of global vegetation and its key mechanisms. <i>Nature Ecology and Evolution</i> , 2018, 2, 1897-1905.	3.4	169
25	GPS Interferometric Reflectometry Reveals Cyclic Elevation Changes in Thaw and Freezing Seasons in a Permafrost Area (Barrow, Alaska). <i>Geophysical Research Letters</i> , 2018, 45, 5581-5589.	1.5	27
26	The CarbonTracker Data Assimilation System for CO ₂ and CH ₄ (CTDAS-C13 v1.0): retrieving information on land-atmosphere exchange processes. <i>Geoscientific Model Development</i> , 2018, 11, 283-304.	1.3	6
27	Forests dominate the interannual variability of the North American carbon sink. <i>Environmental Research Letters</i> , 2018, 13, 084015.	2.2	23
28	A synthesis dataset of permafrost-affected soil thermal conditions for Alaska, USA. <i>Earth System Science Data</i> , 2018, 10, 2311-2328.	3.7	18
29	Emergent climate and CO ₂ sensitivities of net primary productivity in ecosystem models do not agree with empirical data in temperate forests of eastern North America. <i>Global Change Biology</i> , 2017, 23, 2755-2767.	4.2	43
30	Uncertainty in the response of terrestrial carbon sink to environmental drivers undermines carbon-climate feedback predictions. <i>Scientific Reports</i> , 2017, 7, 4765.	1.6	156
31	Global patterns of drought recovery. <i>Nature</i> , 2017, 548, 202-205.	13.7	560
32	Estimating active layer thickness and volumetric water content from ground penetrating radar measurements in Barrow, Alaska. <i>Geoscience Data Journal</i> , 2017, 4, 72-79.	1.8	14
33	The importance of a surface organic layer in simulating permafrost thermal and carbon dynamics. <i>Cryosphere</i> , 2016, 10, 465-475.	1.5	29
34	A parameterization of respiration in frozen soils based on substrate availability. <i>Biogeosciences</i> , 2016, 13, 1991-2001.	1.3	29
35	Ground-penetrating radar-derived measurements of active-layer thickness on the landscape scale with sparse calibration at Toolik and Happy Valley, Alaska. <i>Geophysics</i> , 2016, 81, H9-H19.	1.4	14
36	Carbon and energy fluxes in cropland ecosystems: a model-data comparison. <i>Biogeochemistry</i> , 2016, 129, 53-76.	1.7	24

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37	Economic impacts of carbon dioxide and methane released from thawing permafrost. <i>Nature Climate Change</i> , 2016, 6, 56-59.	8.1	53
38	Ground-penetrating radar-derived measurements of active-layer thickness on the landscape scale with sparse calibration at Toolik and Happy Valley, Alaska. <i>Geophysics</i> , 2016, 81, H1-H11.	1.4	3
39	Toward "optimal" integration of terrestrial biosphere models. <i>Geophysical Research Letters</i> , 2015, 42, 4418-4428.	1.5	48
40	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. <i>Environmental Research Letters</i> , 2015, 10, 094008.	2.2	119
41	Remotely Sensed Active Layer Thickness (ReSALT) at Barrow, Alaska Using Interferometric Synthetic Aperture Radar. <i>Remote Sensing</i> , 2015, 7, 3735-3759.	1.8	59
42	Active Layer Stratigraphy and Organic Layer Thickness at a Thermokarst Site in Arctic Alaska Identified Using Ground Penetrating Radar. <i>Arctic, Antarctic, and Alpine Research</i> , 2015, 47, 195-202.	0.4	18
43	Detectability of CO ₂ flux signals by a space-based lidar mission. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 1794-1807.	1.2	9
44	Climate change and the permafrost carbon feedback. <i>Nature</i> , 2015, 520, 171-179.	13.7	2,369
45	Carbon cycle uncertainty in the Alaskan Arctic. <i>Biogeosciences</i> , 2014, 11, 4271-4288.	1.3	92
46	Terrestrial cycling of ¹³ C and ¹⁴ C by photosynthesis, respiration, and biomass burning in SiBCASA. <i>Biogeosciences</i> , 2014, 11, 6553-6571.	1.3	37
47	The North American Carbon Program Multi-scale Synthesis and Terrestrial Model Intercomparison Project "Part 2: Environmental driver data. <i>Geoscientific Model Development</i> , 2014, 7, 2875-2893.	1.3	207
48	The impact of the permafrost carbon feedback on global climate. <i>Environmental Research Letters</i> , 2014, 9, 085003.	2.2	279
49	InSAR detects increase in surface subsidence caused by an Arctic tundra fire. <i>Geophysical Research Letters</i> , 2014, 41, 3906-3913.	1.5	64
50	Mechanisms of water supply and vegetation demand govern the seasonality and magnitude of evapotranspiration in Amazonia and Cerrado. <i>Agricultural and Forest Meteorology</i> , 2014, 191, 33-50.	1.9	105
51	Evaluation of continental carbon cycle simulations with North American flux tower observations. <i>Ecological Monographs</i> , 2013, 83, 531-556.	2.4	75
52	Overview of the Large-Scale Biosphere "Atmosphere Experiment in Amazonia Data Model Intercomparison Project (LBA-DMIP). <i>Agricultural and Forest Meteorology</i> , 2013, 182-183, 111-127.	1.9	55
53	Inter-annual variability of carbon and water fluxes in Amazonian forest, Cerrado and pasture sites, as simulated by terrestrial biosphere models. <i>Agricultural and Forest Meteorology</i> , 2013, 182-183, 145-155.	1.9	30
54	Biosphere model simulations of interannual variability in terrestrial ¹³ C/ ¹² C exchange. <i>Global Biogeochemical Cycles</i> , 2013, 27, 637-649.	1.9	46

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55	Evaluating the agreement between measurements and models of net ecosystem exchange at different times and timescales using wavelet coherence: an example using data from the North American Carbon Program Site-Level Interim Synthesis. <i>Biogeosciences</i> , 2013, 10, 6893-6909.	1.3	30
56	The North American Carbon Program Multi-Scale Synthesis and Terrestrial Model Intercomparison Project – Part 1: Overview and experimental design. <i>Geoscientific Model Development</i> , 2013, 6, 2121-2133.	1.3	212
57	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
58	Estimating 1992–2000 average active layer thickness on the Alaskan North Slope from remotely sensed surface subsidence. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	106
59	Impact of hydrological variations on modeling of peatland CO ₂ fluxes: Results from the North American Carbon Program site synthesis. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	50
60	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
61	Terrestrial biosphere models need better representation of vegetation phenology: results from the North American Carbon Program site synthesis. <i>Global Change Biology</i> , 2012, 18, 566-584.	4.2	583
62	Amount and timing of permafrost carbon release in response to climate warming. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2011, 63, 165-180.	0.8	344
63	Seven years of recent European net terrestrial carbon dioxide exchange constrained by atmospheric observations. <i>Global Change Biology</i> , 2010, 16, 1317-1337.	4.2	223
64	A model-data intercomparison of CO ₂ exchange across North America: Results from the North American Carbon Program site synthesis. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	247
65	Incorporation of crop phenology in Simple Biosphere Model (SiBcrop) to improve land-atmosphere carbon exchanges from croplands. <i>Biogeosciences</i> , 2009, 6, 969-986.	1.3	144
66	Improving simulated soil temperatures and soil freeze/thaw at high-latitude regions in the Simple Biosphere/Carnegie-Ames-Stanford Approach model. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	59
67	Global monthly averaged CO ₂ fluxes recovered using a geostatistical inverse modeling approach: 2. Results including auxiliary environmental data. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	57
68	Combined Simple Biosphere/Carnegie-Ames-Stanford Approach terrestrial carbon cycle model. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	138
69	Temperature anomaly reemergence in seasonally frozen soils. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	12
70	The winter Arctic Oscillation, the timing of spring, and carbon fluxes in the Northern Hemisphere. <i>Global Biogeochemical Cycles</i> , 2005, 19, .	1.9	33
71	The winter Arctic Oscillation and the timing of snowmelt in Europe. <i>Geophysical Research Letters</i> , 2004, 31, .	1.5	21
72	Effect of climate on interannual variability of terrestrial CO ₂ fluxes. <i>Global Biogeochemical Cycles</i> , 2002, 16, 49-1-49-12.	1.9	51