

# Anatoly Z Shvidenko

## List of Publications by Year in descending order

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Version: 2024-02-01

89  
papers

11,520  
citations

76196

40  
h-index

56606

83  
g-index

94  
all docs

94  
docs citations

94  
times ranked

13918  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Large and Persistent Carbon Sink in the World's Forests. <i>Science</i> , 2011, 333, 988-993.	6.0	5,393
2	Boreal forest health and global change. <i>Science</i> , 2015, 349, 819-822.	6.0	739
3	FOREST CARBON SINKS IN THE NORTHERN HEMISPHERE. , 2002, 12, 891-899.		696
4	CLIMATE: The Terrestrial Carbon Cycle: Implications for the Kyoto Protocol. <i>Science</i> , 1998, 280, 1393-1394.	6.0	378
5	Carbon stock and density of northern boreal and temperate forests. <i>Global Ecology and Biogeography</i> , 2014, 23, 297-310.	2.7	226
6	Biomass offsets little or none of permafrost carbon release from soils, streams, and wildfire: an expert assessment. <i>Environmental Research Letters</i> , 2016, 11, 034014.	2.2	199
7	Retrieval of growing stock volume in boreal forest using hyper-temporal series of Envisat ASAR ScanSAR backscatter measurements. <i>Remote Sensing of Environment</i> , 2011, 115, 490-507.	4.6	180
8	A spatial comparison of four satellite derived 1km global land cover datasets. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2006, 8, 246-255.	1.4	165
9	The role of historical fire disturbance in the carbon dynamics of the pan-boreal region: A process-based analysis. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	158
10	Climate change and wildfires in Russia. <i>Contemporary Problems of Ecology</i> , 2013, 6, 683-692.	0.3	125
11	A synopsis of land use, land-use change and forestry (LULUCF) under the Kyoto Protocol and Marrakech Accords. <i>Environmental Science and Policy</i> , 2007, 10, 271-282.	2.4	121
12	Large-scale mapping of boreal forest in SIBERIA using ERS tandem coherence and JERS backscatter data. <i>Remote Sensing of Environment</i> , 2003, 85, 125-144.	4.6	120
13	An estimate of the terrestrial carbon budget of Russia using inventory-based, eddy covariance and inversion methods. <i>Biogeosciences</i> , 2012, 9, 5323-5340.	1.3	113
14	Forest growing stock volume of the northern hemisphere: Spatially explicit estimates for 2010 derived from Envisat ASAR. <i>Remote Sensing of Environment</i> , 2015, 168, 316-334.	4.6	112
15	Predicting global change effects on forest biomass and composition in south-central Siberia. <i>Ecological Applications</i> , 2010, 20, 700-715.	1.8	110
16	Tamm Review: Observed and projected climate change impacts on Russia's forests and its carbon balance. <i>Forest Ecology and Management</i> , 2016, 361, 432-444.	1.4	104
17	Comparison of four global FAPAR datasets over Northern Eurasia for the year 2000. <i>Remote Sensing of Environment</i> , 2010, 114, 941-949.	4.6	102
18	Acclimation of Russian forests to recent changes in climate. <i>Global Change Biology</i> , 2005, 11, 2090-2102.	4.2	100

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19	Impact of wildfire in Russia between 1998â€“2010 on ecosystems and the global carbon budget. Doklady Earth Sciences, 2011, 441, 1678-1682.	0.2	97
20	Development of a global hybrid forest mask through the synergy of remote sensing, crowdsourcing and FAO statistics. Remote Sensing of Environment, 2015, 162, 208-220.	4.6	97
21	Spatial distribution of arable and abandoned land across former Soviet Union countries. Scientific Data, 2018, 5, 180056.	2.4	81
22	Boreal forest fires in Siberia in 1998: Estimation of area burned and emissions of pollutants by advanced very high resolution radiometer satellite data. Journal of Geophysical Research, 2002, 107, ACH 4-1.	3.3	77
23	Title is missing!. Climatic Change, 2002, 55, 5-37.	1.7	73
24	Can we reconcile atmospheric estimates of the Northern terrestrial carbon sink with land-based accounting?. Current Opinion in Environmental Sustainability, 2010, 2, 225-230.	3.1	73
25	Properties of ERS-1/2 coherence in the Siberian boreal forest and implications for stem volume retrieval. Remote Sensing of Environment, 2007, 106, 154-172.	4.6	71
26	A new hybrid land cover dataset for Russia: a methodology for integrating statistics, remote sensing and in situ information. Journal of Land Use Science, 2011, 6, 245-259.	1.0	70
27	Empirical estimates of regional carbon budgets imply reduced global soil heterotrophic respiration. National Science Review, 2021, 8, nwaa145.	4.6	70
28	Impact of the Arctic Oscillation pattern on interannual forest fire variability in Central Siberia. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	69
29	Northern Eurasia Future Initiative (NEFI): facing the challenges and pathways of global change in the twenty-first century. Progress in Earth and Planetary Science, 2017, 4, .	1.1	69
30	A dataset of forest biomass structure for Eurasia. Scientific Data, 2017, 4, 170070.	2.4	68
31	Satellite-based terrestrial production efficiency modeling. Carbon Balance and Management, 2009, 4, 8.	1.4	65
32	Semi-empirical models for assessing biological productivity of Northern Eurasian forests. Ecological Modelling, 2007, 204, 163-179.	1.2	63
33	A synthesis of the impact of Russian forests on the global carbon budget for 1961-1998. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 391-415.	0.8	59
34	The pool of organic carbon in the soils of Russia. Eurasian Soil Science, 2013, 46, 107-116.	0.5	57
35	Pan-Eurasian Experiment (PEEX): towards a holistic understanding of the feedbacks and interactions in the landâ€“atmosphereâ€“oceanâ€“society continuum in the northern Eurasian region. Atmospheric Chemistry and Physics, 2016, 16, 14421-14461.	1.9	57
36	Vulnerability of Ukrainian Forests to Climate Change. Sustainability, 2017, 9, 1152.	1.6	47

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37	Can the uncertainty of full carbon accounting of forest ecosystems be made acceptable to policymakers?. <i>Climatic Change</i> , 2010, 103, 137-157.	1.7	46
38	Improved Estimates of Biomass Expansion Factors for Russian Forests. <i>Forests</i> , 2018, 9, 312.	0.9	46
39	Estimating the carbon balance of central Siberia using a landscape-ecosystem approach, atmospheric inversion and Dynamic Global Vegetation Models. <i>Global Change Biology</i> , 2011, 17, 351-365.	4.2	44
40	The Forest Observation System, building a global reference dataset for remote sensing of forest biomass. <i>Scientific Data</i> , 2019, 6, 198.	2.4	44
41	Extent, Distribution, and Ecological Role of Fire in Russian Forests. <i>Ecological Studies</i> , 2000, , 132-150.	0.4	41
42	Mapping certified forests for sustainable management - A global tool for information improvement through participatory and collaborative mapping. <i>Forest Policy and Economics</i> , 2017, 83, 10-18.	1.5	41
43	Small net carbon dioxide uptake by Russian forests during 1981â€“1999. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	40
44	Russian forest sequesters substantially more carbon than previously reported. <i>Scientific Reports</i> , 2021, 11, 12825.	1.6	38
45	Estimates of Forest Growing Stock Volume for Sweden, Central Siberia, and QuÃ©bec Using Envisat Advanced Synthetic Aperture Radar Backscatter Data. <i>Remote Sensing</i> , 2013, 5, 4503-4532.	1.8	36
46	Improving the dynamics of Northern Hemisphere high-latitude vegetation in the ORCHIDEE ecosystem model. <i>Geoscientific Model Development</i> , 2015, 8, 2263-2283.	1.3	36
47	Phytomass (live biomass) and carbon of Siberian forests. <i>Biomass and Bioenergy</i> , 1998, 14, 21-31.	2.9	35
48	Comparison of Data Fusion Methods Using Crowdsourced Data in Creating a Hybrid Forest Cover Map. <i>Remote Sensing</i> , 2016, 8, 261.	1.8	35
49	Definitions and methods to estimate regional land carbon fluxes for the second phase of the REgional Carbon Cycle Assessment and Processes Project (RECCAP-2). <i>Geoscientific Model Development</i> , 2022, 15, 1289-1316.	1.3	34
50	Fire and the Carbon Budget of Russian Forests. <i>Ecological Studies</i> , 2000, , 289-311.	0.4	33
51	Accuracy assessment of a large-scale forest cover map of central Siberia from synthetic aperture radar. <i>Canadian Journal of Remote Sensing</i> , 2002, 28, 719-737.	1.1	32
52	Improved light and temperature responses for light-use-efficiency-based GPP models. <i>Biogeosciences</i> , 2013, 10, 6577-6590.	1.3	30
53	Respiration of Russian soils: Climatic drivers and response to climate change. <i>Science of the Total Environment</i> , 2021, 785, 147314.	3.9	28
54	Effectiveness of forest management strategies to mitigate effects of global change in south-central Siberia. <i>Canadian Journal of Forest Research</i> , 2011, 41, 1405-1421.	0.8	27

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55	Changes in the organic carbon pool of abandoned soils in Russia (1990–2004). <i>Eurasian Soil Science</i> , 2010, 43, 333-340.	0.5	26
56	Soil contribution to carbon budget of Russian forests. <i>Agricultural and Forest Meteorology</i> , 2015, 200, 97-108.	1.9	23
57	Possibilities for increased carbon sequestration through the implementation of rational forest management in Russia. <i>Water, Air, and Soil Pollution</i> , 1997, 94, 137-162.	1.1	22
58	A synthesis of the impact of Russian forests on the global carbon budget for 1961–1998. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 55, 391.	0.8	22
59	Terrestrial Ecosystems and Their Change. <i>Springer Environmental Science and Engineering</i> , 2013, , 171-249.	0.1	22
60	Estimation of forest area and its dynamics in Russia based on synthesis of remote sensing products. <i>Contemporary Problems of Ecology</i> , 2015, 8, 811-817.	0.3	22
61	Differences in satellite-derived NO <sub>x</sub> emission factors between Eurasian and North American boreal forest fires. <i>Atmospheric Environment</i> , 2015, 121, 55-65.	1.9	22
62	Net primary production of forest ecosystems of Russia: A new estimate. <i>Doklady Earth Sciences</i> , 2008, 421, 1009-1012.	0.2	21
63	Uncertainties of a Regional Terrestrial Biota Full Carbon Account: A Systems Analysis. <i>Water, Air and Soil Pollution</i> , 2007, 7, 425-441.	0.8	19
64	Impact of Disturbances on the Carbon Cycle of Forest Ecosystems in Ukrainian Polissya. <i>Forests</i> , 2019, 10, 337.	0.9	19
65	A spatial assessment of the forest carbon budget for Ukraine. <i>Mitigation and Adaptation Strategies for Global Change</i> , 2019, 24, 985-1006.	1.0	19
66	Title is missing!. <i>Russian Journal of Ecology</i> , 2001, 32, 71-77.	0.3	18
67	Estimation of forest phytomass for selected countries of the former European U.S.S.R.. <i>Biomass and Bioenergy</i> , 1996, 11, 371-382.	2.9	17
68	Exploiting Growing Stock Volume Maps for Large Scale Forest Resource Assessment: Cross-Comparisons of ASAR- and PALSAR-Based GSV Estimates with Forest Inventory in Central Siberia. <i>Forests</i> , 2014, 5, 1753-1776.	0.9	13
69	Carbon budget of the Russian boreal forests: a systems analysis approach to uncertainty. , 1996, , 145-152.		13
70	A system for evaluation of growth and mortality in Russian forests. <i>Water, Air, and Soil Pollution</i> , 1995, 82, 333-348.	1.1	11
71	The Missing "Missing Sink". <i>Forestry Chronicle</i> , 2003, 79, 1071-1074.	0.5	10
72	The potential for rising CO <sub>2</sub> to account for the observed uptake of carbon by tropical, temperate, and Boreal forest biomes. , 2004, , 109-149.		9

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73	Sustaining ecosystem services: Overcoming the dilemma posed by local actions and planetary boundaries. <i>Earth's Future</i> , 2014, 2, 407-420.	2.4	8
74	Assessing Forest Ecosystems across the Vertical Edge of the Mid-Latitude Ecotone Using the BioGeoChemistry Management Model (BGC-MAN). <i>Forests</i> , 2019, 10, 523.	0.9	8
75	Can the uncertainty of full carbon accounting of forest ecosystems be made acceptable to policymakers?. , 2010, , 137-157.		8
76	Forest phytomass and carbon in European Russia. <i>Biomass and Bioenergy</i> , 1997, 12, 91-99.	2.9	6
77	Boreal Forests and the Environment: A Foreword. <i>Mitigation and Adaptation Strategies for Global Change</i> , 2006, 11, 1-4.	1.0	6
78	The International Boreal Forest Research Association: Understanding Boreal Forests and Forestry in a Changing World. <i>Mitigation and Adaptation Strategies for Global Change</i> , 2006, 11, 5-32.	1.0	6
79	Development of Information-Computational Infrastructure for Environmental Research in Siberia as a Baseline Component of the Northern Eurasia Earth Science Partnership Initiative (NEESPI) Studies. <i>Springer Environmental Science and Engineering</i> , 2013, , 19-55.	0.1	6
80	Modeling air temperature changes in Northern Asia. <i>Global and Planetary Change</i> , 2014, 122, 14-22.	1.6	6
81	Simulating Growth and Competition on Wet and Waterlogged Soils in a Forest Landscape Model. <i>Frontiers in Ecology and Evolution</i> , 2020, 8, .	1.1	6
82	Uncertainties of a Regional Terrestrial Biota Full Carbon Account: A Systems Analysis. , 2007, , 5-21.		6
83	<sup>90</sup> Sr Content in the Stemwood of Forests within Ukrainian Polissya. <i>Forests</i> , 2020, 11, 270.	0.9	5
84	Aggregated Estimation of Basic Parameters of Biological Production and Carbon Budget of Russian Terrestrial Ecosystems: 3. Biogeochemical Carbon Fluxes. <i>Russian Journal of Ecology</i> , 2004, 35, 150-155.	0.3	4
85	The first digital maps of biological productivity parameters. <i>Eurasian Soil Science</i> , 2010, 43, 1202-1210.	0.5	3
86	Using Landscape Disturbance and Succession Models to Support Forest Management. , 2011, , 99-118.		3
87	Title is missing!. <i>Water, Air, and Soil Pollution</i> , 1997, 94, 137-162.	1.1	1
88	Assessment and monitoring of Siberian forest resources in the framework of the EU-Russia ZAP&#x00C1;S project. , 2012, , .		0
89	Towards harmonizing competing models: Russian forests' net primary production case study. <i>Technological Forecasting and Social Change</i> , 2015, 98, 245-254.	6.2	0