Alexander Kirdyanov

List of Publications by Year
in descending order

76 papers	4,628 citations	101543 36 h-index	102487 66 g-index
80 all docs	80 docs citations	80 times ranked	4436 citing authors

#	Article	IF	Citations
1	Cooling and societal change during the Late Antique Little Ice Age from 536 to around 660 AD. Nature Geoscience, 2016, 9, 231-236.	12.9	596
2	Influence of snowfall and melt timing on tree growth in subarctic Eurasia. Nature, 1999, 400, 149-151.	27.8	536
3	Woody biomass production lags stem-girth increase by over one month in coniferous forests. Nature Plants, 2015, 1, 15160.	9.3	294
4	The importance of early summer temperature and date of snow melt for tree growth in the Siberian Subarctic. Trees - Structure and Function, 2003, 17, 61-69.	1.9	210
5	Tree rings and volcanic cooling. Nature Geoscience, 2012, 5, 836-837.	12.9	137
6	Revising midlatitude summer temperatures back to A.D.â€‰600 based on a wood density network. Geophysical Research Letters, 2015, 42, 4556-4562.	4.0	134
7	Forests synchronize their growth in contrasting Eurasian regions in response to climate warming. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 662-667.	7.1	126
8	Trends and uncertainties in Siberian indicators of 20th century warming. Global Change Biology, 2010, 16, 386-398.	9.5	103
9	Tree rings reveal globally coherent signature of cosmogenic radiocarbon events in 774 and 993 CE. Nature Communications, 2018, 9, 3605.	12.8	98
10	Scientific Merits and Analytical Challenges of Treeâ€Ring Densitometry. Reviews of Geophysics, 2019, 57, 1224-1264.	23.0	98
11	Limited capacity of tree growth to mitigate the global greenhouse effect under predicted warming. Nature Communications, 2019, 10, 2171.	12.8	92
12	Climate signals in tree-ring width, density and Î´13C from larches in Eastern Siberia (Russia). Chemical Geology, 2008, 252, 31-41.	3.3	91
13	20th century treeâ€line advance and vegetation changes along an altitudinal transect in the Putorana Mountains, northern Siberia. Boreas, 2012, 41, 56-67.	2.4	91
14	Reassessing the evidence for tree-growth and inferred temperature change during the Common Era in Yamalia, northwest Siberia. Quaternary Science Reviews, 2013, 72, 83-107.	3.0	91
15	Ranking of tree-ring based temperature reconstructions of the past millennium. Quaternary Science Reviews, 2016, 145, 134-151.	3.0	91
16	Temperatureâ€induced recruitment pulses of Arctic dwarf shrub communities. Journal of Ecology, 2015, 103, 489-501.	4.0	90
17	Do centennial tree-ring and stable isotope trends of Larix gmelinii (Rupr.) Rupr. indicate increasing water shortage in the Siberian north?. Oecologia, 2009, 161, 825-835.	2.0	83
18	Temperatureâ€induced responses of xylem structure of <i>Larix sibirica</i> (Pinaceae) from the Russian Altay. American Journal of Botany, 2013, 100, 1332-1343.	1.7	82

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19	VS-oscilloscope: A new tool to parameterize tree radial growth based on climate conditions. Dendrochronologia, 2016, 39, 42-50.	2.2	79
20	Diverse growth trends and climate responses across Eurasiaâ€™s boreal forest. Environmental Research Letters, 2016, 11, 074021.	5.2	75
21	Structure and Function of Intraâ€“Annual Density Fluctuations: Mind the Gaps. Frontiers in Plant Science, 2016, 7, 595.	3.6	72
22	Prominent role of volcanism in Common Era climate variability and human history. Dendrochronologia, 2020, 64, 125757.	2.2	66
23	The influence of decision-making in tree ring-based climate reconstructions. Nature Communications, 2021, 12, 3411.	12.8	59
24	Comparing forest measurements from tree rings and a space-based index of vegetation activity in Siberia. Environmental Research Letters, 2013, 8, 035034.	5.2	59
25	Long-term ecological consequences of forest fires in the continuous permafrost zone of Siberia. Environmental Research Letters, 2020, 15, 034061.	5.2	58
26	The impact of an inverse climateâ€“isotope relationship in soil water on the oxygenâ€isotope composition of <i>Larix gmelinii</i> in Siberia. New Phytologist, 2016, 209, 955-964.	7.3	50
27	Ranking of tree-ring based hydroclimate reconstructions of the past millennium. Quaternary Science Reviews, 2020, 230, 106074.	3.0	50
28	A multi-proxy approach for revealing recent climatic changes in the Russian Altai. Climate Dynamics, 2012, 38, 175-188.	3.8	49
29	Global fading of the temperatureâ€“growth coupling at alpine and polar treelines. Global Change Biology, 2021, 27, 1879-1889.	9.5	46
30	Climatically induced interannual variability in aboveground production in forest-tundra and northern taiga of central Siberia. Oecologia, 2006, 147, 86-95.	2.0	45
31	Tree ring-based reconstruction of the long-term influence of wildfires on permafrost active layer dynamics in Central Siberia. Science of the Total Environment, 2019, 652, 314-319.	8.0	43
32	Separating the climatic signal from tree-ring width and maximum latewood density records. Trees - Structure and Function, 2006, 21, 37-44.	1.9	40
33	Tree-ring growth of Gmelin larch under contrasting local conditions in the north of Central Siberia. Dendrochronologia, 2013, 31, 114-119.	2.2	40
34	Examining the response of needle carbohydrates from <scp>S</scp>iberian larch trees to climate using compoundâ€specific Î´¹³<scp>C</scp> and concentration analyses. Plant, Cell and Environment, 2015, 38, 2340-2352.	5.7	40
35	Twentieth century trends in tree ring stable isotopes (<i>Î´</i>¹³C and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 Journal of Geophysical Research, 2010, 115, .	3.3	39
36	Tracing the origin of Arctic driftwood. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 68-76.	3.0	37

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37	Seasonal and spatial variability of elemental concentrations in boreal forest larch foliage of Central Siberia on continuous permafrost. Biogeochemistry, 2013, 113, 435-449.	3.5	35
38	Ecological and conceptual consequences of Arctic pollution. Ecology Letters, 2020, 23, 1827-1837.	6.4	31
39	Zn isotope fractionation in a pristine larch forest on permafrost-dominated soils in Central Siberia. Geochemical Transactions, 2015, 16, 3.	0.7	30
40	Influence of wood density in tree-ring-based annual productivity assessments and its errors in Norway spruce. Biogeosciences, 2015, 12, 6205-6217.	3.3	27
41	The relationship between needle sugar carbon isotope ratios and tree rings of larch in Siberia. Tree Physiology, 2015, 35, tpv096.	3.1	27
42	Specific features of xylogenesis in Dahurian larch, Larix gmelinii (Rupr.) Rupr., growing on permafrost soils in Middle Siberia. Russian Journal of Ecology, 2013, 44, 361-366.	0.9	26
43	Siberian tree-ring and stable isotope proxies as indicators of temperature and moisture changes after major stratospheric volcanic eruptions. Climate of the Past, 2019, 15, 685-700.	3.4	26
44	Minimum wood density of conifers portrays changes in early season precipitation at dry and cold Eurasian regions. Trees - Structure and Function, 2017, 31, 1423-1437.	1.9	25
45	Warming Effects on Pinus sylvestris in the Coldâ€"Dry Siberian Forestâ€"Steppe: Positive or Negative Balance of Trade?. Forests, 2017, 8, 490.	2.1	25
46	Timber Logging in Central Siberia is the Main Source for Recent Arctic Driftwood. Arctic, Antarctic, and Alpine Research, 2015, 47, 449-460.	1.1	24
47	The response of Î´13C, Î´18O and cell anatomy of Larix gmelinii tree rings to differing soil active layer depths. Dendrochronologia, 2015, 34, 51-59.	2.2	23
48	Permafrost Regime Affects the Nutritional Status and Productivity of Larches in Central Siberia. Forests, 2018, 9, 314.	2.1	22
49	Climatic factors controlling Pinus sylvestris radial growth along a transect of increasing continentality in southern Siberia. Dendrochronologia, 2020, 62, 125709.	2.2	22
50	Wood transformation in dead-standing trees in the forest-tundra of Central Siberia. Biology Bulletin, 2009, 36, 58-65.	0.5	21
51	Variability of ray anatomy of Larix gmelinii along a forest productivity gradient in Siberia. Trees - Structure and Function, 2015, 29, 1165-1175.	1.9	21
52	No Age Trends in Oak Stable Isotopes. Paleoceanography and Paleoclimatology, 2020, 35, e2019PA003831.	2.9	21
53	Dendro-provenancing of Arctic driftwood. Quaternary Science Reviews, 2017, 162, 1-11.	3.0	20
54	The Relationship Between Variability of Cell Wall Mass of Earlywood and Latewood Tracheids in Larch Tree-Rings, the Rate of Tree-Ring Growth and Climatic Changes. Holzforschung, 2003, 57, 1-7.	1.9	17

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55	Productivity of mosses and organic matter accumulation in the litter of sphagnum larch forest in the permafrost zone. Russian Journal of Ecology, 2006, 37, 225-232.	0.9	15
56	1929-YEAR TREE-RING CHRONOLOGY FOR THE ALTAI-SAYAN REGION (WESTERN TUVA). Archaeology, Ethnology and Anthropology of Eurasia, 2008, 36, 25-31.	0.2	14
57	Regional coherency of boreal forest growth defines Arctic driftwood provenancing. Dendrochronologia, 2016, 39, 3-9.	2.2	13
58	Trends In Elemental Concentrations of Tree Rings From the Siberian Arctic. Tree-Ring Research, 2016, 72, 67-77.	0.6	13
59	Reply to 'Limited Late Antique cooling'. Nature Geoscience, 2017, 10, 243-243.	12.9	13
60	Notes towards an optimal sampling strategy in dendroclimatology. Dendrochronologia, 2018, 52, 162-166.	2.2	11
61	Linking tree growth and intra-annual density fluctuations to climate in suppressed and dominant Pinus sylvestris L. trees in the forest-steppe of Southern Siberia. Dendrochronologia, 2021, 67, 125842.	2.2	11
62	Cruising an archive: On the palaeoclimatic value of the Lena Delta. Holocene, 2014, 24, 627-630.	1.7	10
63	Effects of Boreal Timber Rafting on the Composition of Arctic Driftwood. Forests, 2016, 7, 257.	2.1	10
64	Long-term recruitment dynamics of arctic dwarf shrub communities in coastal east Greenland. Dendrochronologia, 2018, 50, 70-80.	2.2	10
65	Die-off dynamics of Siberian larch under the impact of pollutants emitted by Norilsk enterprises. Contemporary Problems of Ecology, 2014, 7, 679-684.	0.7	9
66	Contribution of Xylem Anatomy to Tree-Ring Width of Two Larch Species in Permafrost and Non-Permafrost Zones of Siberia. Forests, 2020, 11, 1343.	2.1	9
67	Global tree-ring response and inferred climate variation following the mid-thirteenth century Samalas eruption. Climate Dynamics, 2022, 59, 531-546.	3.8	9
68	Recognising bias in Common Era temperature reconstructions. Dendrochronologia, 2022, 74, 125982.	2.2	8
69	Intraseasonal carbon sequestration and allocation in larch trees growing on permafrost in Siberia after 13C labeling (two seasons of 2013â€“2014 observation). Photosynthesis Research, 2016, 130, 267-274.	2.9	6
70	Modern aridity in the Altai-Sayan mountain range derived from multiple millennial proxies. Scientific Reports, 2022, 12, 7752.	3.3	5
71	Short communication: Driftwood provides reliable chronological markers in Arctic coastal deposits. Geochronology, 2021, 3, 171-180.	2.5	4
72	Arctic aerosols and the â€˜Divergence Problemâ€™ in dendroclimatology. Dendrochronologia, 2021, 67, 125837.	2.2	4

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73	The buffering effect of the Lake Baikal on climate impact on Pinus sylvestris L. radial growth. Agricultural and Forest Meteorology, 2022, 313, 108764.	4.8	4
74	Fire as a Major Factor in Dynamics of Tree-Growth and Stable Î´13C and Î´18O Variations in Larch in the Permafrost Zone. Forests, 2022, 13, 725.	2.1	4
75	Towards the Third Millennium Changes in Siberian Triple Tree-Ring Stable Isotopes. Forests, 2022, 13, 934.	2.1	3
76	Predicted sea-ice loss will terminate Iceland's driftwood supply by 2060ÂCE. Global and Planetary Change, 2022, 213, 103834.	3.5	1