

Vladimir E Romanovsky

List of Publications by Year in descending order

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Version: 2024-02-01

111
papers

20,495
citations

25034

57
h-index

23533

111
g-index

134
all docs

134
docs citations

134
times ranked

12092
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | The changing thermal state of permafrost. <i>Nature Reviews Earth & Environment</i> , 2022, 3, 10-23. | 29.7 | 127 |
| 2 | The shifting mosaic of ice-wedge degradation and stabilization in response to infrastructure and climate change, Prudhoe Bay Oilfield, Alaska, USA. <i>Arctic Science</i> , 2022, 8, 498-530. | 2.3 | 12 |
| 3 | Understanding Effects of Permafrost Degradation and Coastal Erosion on Civil Infrastructure in Arctic Coastal Villages: A Community Survey and Knowledge Co-Production. <i>Journal of Marine Science and Engineering</i> , 2022, 10, 422. | 2.6 | 9 |
| 4 | Spatial and Temporal Variability of Permafrost in the Western Part of the Russian Arctic. <i>Energies</i> , 2022, 15, 2311. | 3.1 | 6 |
| 5 | Synthesis of physical processes of permafrost degradation and geophysical and geomechanical properties of permafrost. <i>Cold Regions Science and Technology</i> , 2022, 198, 103522. | 3.5 | 8 |
| 6 | Sub-aerial talik formation observed across the discontinuous permafrost zone of Alaska. <i>Nature Geoscience</i> , 2022, 15, 475-481. | 12.9 | 23 |
| 7 | Changes in precipitation and air temperature contribute comparably to permafrost degradation in a warmer climate. <i>Environmental Research Letters</i> , 2021, 16, 024008. | 5.2 | 52 |
| 8 | Degrading permafrost and its impacts. <i>Advances in Climate Change Research</i> , 2021, 12, 1-5. | 5.1 | 34 |
| 9 | Geophysical Observations of Taliks Below Drained Lake Basins on the Arctic Coastal Plain of Alaska. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB020889. | 3.4 | 9 |
| 10 | Consequences of permafrost degradation for Arctic infrastructure – bridging the model gap between regional and engineering scales. <i>Cryosphere</i> , 2021, 15, 2451-2471. | 3.9 | 42 |
| 11 | Tundra Underlain By Thawing Permafrost Persistently Emits Carbon to the Atmosphere Over 15 Years of Measurements. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2020JG006044. | 3.0 | 19 |
| 12 | Scientific Cooperation: Supporting Circumpolar Permafrost Monitoring and Data Sharing. <i>Land</i> , 2021, 10, 590. | 2.9 | 5 |
| 13 | Projecting Permafrost Thaw of Sub-Arctic Tundra With a Thermodynamic Model Calibrated to Site Measurements. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2020JG006218. | 3.0 | 11 |
| 14 | Water balance response of permafrost-affected watersheds to changes in air temperatures. <i>Environmental Research Letters</i> , 2021, 16, 084054. | 5.2 | 6 |
| 15 | Using Ground Penetrating Radar for Permafrost Monitoring from 2015–2017 at CALM Sites in the Pechora River Delta. <i>Remote Sensing</i> , 2021, 13, 3271. | 4.0 | 12 |
| 16 | Landsat-based lake distribution and changes in western Alaska permafrost regions between the 1970s and 2010s. <i>Environmental Research Letters</i> , 2021, 16, 025006. | 5.2 | 15 |
| 17 | Reply to the comment: Northern Hemisphere permafrost extent: Drylands, glaciers and sea floor. <i>Earth-Science Reviews</i> , 2020, 203, 103036. | 9.1 | 1 |
| 18 | 35 Years of Vegetation and Lake Dynamics in the Pechora Catchment, Russian European Arctic. <i>Remote Sensing</i> , 2020, 12, 1863. | 4.0 | 6 |

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|----|--|------|-----------|
| 19 | Modeling Present and Future Permafrost Distribution at the Seward Peninsula, Alaska. <i>Journal of Geophysical Research F: Earth Surface</i> , 2020, 125, e2019JF005355. | 2.8 | 12 |
| 20 | Co-producing knowledge: the Integrated Ecosystem Model for resource management in Arctic Alaska. <i>Frontiers in Ecology and the Environment</i> , 2020, 18, 447-455. | 4.0 | 3 |
| 21 | Factors Contributing to Anthrax Outbreaks in the Circumpolar North. <i>EcoHealth</i> , 2020, 17, 174-180. | 2.0 | 46 |
| 22 | Attribution of historical near-surface permafrost degradation to anthropogenic greenhouse gas warming. <i>Environmental Research Letters</i> , 2020, 15, 084040. | 5.2 | 9 |
| 23 | Prevention and control measures for coastal erosion in northern high-latitude communities: a systematic review based on Alaskan case studies. <i>Environmental Research Letters</i> , 2020, 15, 093002. | 5.2 | 18 |
| 24 | Climate Change Drives Widespread and Rapid Thermokarst Development in Very Cold Permafrost in the Canadian High Arctic. <i>Geophysical Research Letters</i> , 2019, 46, 6681-6689. | 4.0 | 168 |
| 25 | Northern Hemisphere permafrost map based on TTOP modelling for 2000–2016 at 1-km ² scale. <i>Earth-Science Reviews</i> , 2019, 193, 299-316. | 9.1 | 462 |
| 26 | Key indicators of Arctic climate change: 1971–2017. <i>Environmental Research Letters</i> , 2019, 14, 045010. | 5.2 | 471 |
| 27 | A distributed temperature profiling method for assessing spatial variability in ground temperatures in a discontinuous permafrost region of Alaska. <i>Cryosphere</i> , 2019, 13, 2853-2867. | 3.9 | 27 |
| 28 | Permafrost is warming at a global scale. <i>Nature Communications</i> , 2019, 10, 264. | 12.8 | 1,039 |
| 29 | Circumpolar permafrost maps and geohazard indices for near-future infrastructure risk assessments. <i>Scientific Data</i> , 2019, 6, 190037. | 5.3 | 51 |
| 30 | 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. | 7.1 | 296 |
| 31 | Difference between near-surface air, land surface and ground surface temperatures and their influences on the frozen ground on the Qinghai-Tibet Plateau. <i>Geoderma</i> , 2018, 312, 74-85. | 5.1 | 102 |
| 32 | Modelling the impacts of projected sea ice decline on the low atmosphere and near-surface permafrost on the North Slope of Alaska. <i>International Journal of Climatology</i> , 2018, 38, 5491-5504. | 3.5 | 5 |
| 33 | Elevation-dependent thermal regime and dynamics of frozen ground in the Bayan Har Mountains, northeastern Qinghai-Tibet Plateau, southwest China. <i>Permafrost and Periglacial Processes</i> , 2018, 29, 257-270. | 3.4 | 54 |
| 34 | Remote sensing quantifies widespread abundance of permafrost region disturbances across the Arctic and Subarctic. <i>Nature Communications</i> , 2018, 9, 5423. | 12.8 | 179 |
| 35 | Degrading permafrost puts Arctic infrastructure at risk by mid-century. <i>Nature Communications</i> , 2018, 9, 5147. | 12.8 | 327 |
| 36 | Modeling the role of preferential snow accumulation in through talik development and hillslope groundwater flow in a transitional permafrost landscape. <i>Environmental Research Letters</i> , 2018, 13, 105006. | 5.2 | 90 |

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|----|--|-----|-----------|
| 37 | Detecting the permafrost carbon feedback: talik formation and increased cold-season respiration as precursors to sink-to-source transitions. <i>Cryosphere</i> , 2018, 12, 123-144. | 3.9 | 46 |
| 38 | Modeling Long-Term Permafrost Degradation. <i>Journal of Geophysical Research F: Earth Surface</i> , 2018, 123, 1756-1771. | 2.8 | 32 |
| 39 | Impacts of microtopographic snow redistribution and lateral subsurface processes on hydrologic and thermal states in an Arctic polygonal ground ecosystem: a case study using ELM-3D v1.0. <i>Geoscientific Model Development</i> , 2018, 11, 61-76. | 3.6 | 17 |
| 40 | Characteristics of Water-Heat Exchanges and Inconsistent Surface Temperature Changes at an Elevational Permafrost Site on the Qinghai-Tibet Plateau. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 10,057. | 3.3 | 51 |
| 41 | A synthesis dataset of permafrost-affected soil thermal conditions for Alaska, USA. <i>Earth System Science Data</i> , 2018, 10, 2311-2328. | 9.9 | 18 |
| 42 | Applicability of the ecosystem type approach to model permafrost dynamics across the Alaska North Slope. <i>Journal of Geophysical Research F: Earth Surface</i> , 2017, 122, 50-75. | 2.8 | 72 |
| 43 | Coincident aboveground and belowground autonomous monitoring to quantify covariability in permafrost, soil, and vegetation properties in Arctic tundra. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 1321-1342. | 3.0 | 42 |
| 44 | Large CO ₂ and CH ₄ emissions from polygonal tundra during spring thaw in northern Alaska. <i>Geophysical Research Letters</i> , 2017, 44, 504-513. | 4.0 | 53 |
| 45 | Continuously amplified warming in the Alaskan Arctic: Implications for estimating global warming hiatus. <i>Geophysical Research Letters</i> , 2017, 44, 9029-9038. | 4.0 | 36 |
| 46 | Deep Yedoma permafrost: A synthesis of depositional characteristics and carbon vulnerability. <i>Earth-Science Reviews</i> , 2017, 172, 75-86. | 9.1 | 236 |
| 47 | Long-Term Release of Carbon Dioxide from Arctic Tundra Ecosystems in Alaska. <i>Ecosystems</i> , 2017, 20, 960-974. | 3.4 | 102 |
| 48 | Presence of rapidly degrading permafrost plateaus in south-central Alaska. <i>Cryosphere</i> , 2016, 10, 2673-2692. | 3.9 | 34 |
| 49 | Modeling the spatiotemporal variability in subsurface thermal regimes across a low-relief polygonal tundra landscape. <i>Cryosphere</i> , 2016, 10, 2241-2274. | 3.9 | 29 |
| 50 | Scaling-up permafrost thermal measurements in western Alaska using an ecotype approach. <i>Cryosphere</i> , 2016, 10, 2517-2532. | 3.9 | 38 |
| 51 | Effect of soil property uncertainties on permafrost thaw projections: a calibration-constrained analysis. <i>Cryosphere</i> , 2016, 10, 341-358. | 3.9 | 33 |
| 52 | Changing permafrost in a warming world and feedbacks to the Earth system. <i>Environmental Research Letters</i> , 2016, 11, 040201. | 5.2 | 143 |
| 53 | Threshold sensitivity of shallow Arctic lakes and sublake permafrost to changing winter climate. <i>Geophysical Research Letters</i> , 2016, 43, 6358-6365. | 4.0 | 68 |
| 54 | Report from the International Permafrost Association. <i>Permafrost and Periglacial Processes</i> , 2016, 27, 316-319. | 3.4 | 1 |

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|----|---|------|-----------|
| 55 | Thermokarst rates intensify due to climate change and forest fragmentation in an Alaskan boreal forest lowland. <i>Global Change Biology</i> , 2016, 22, 816-829. | 9.5 | 69 |
| 56 | Late Quaternary Permafrost Distributions Downscaled for South America: Examinations of GCM-based Maps with Observations. <i>Permafrost and Periglacial Processes</i> , 2016, 27, 43-55. | 3.4 | 15 |
| 57 | Circumpolar distribution and carbon storage of thermokarst landscapes. <i>Nature Communications</i> , 2016, 7, 13043. | 12.8 | 343 |
| 58 | Variability in the sensitivity among model simulations of permafrost and carbon dynamics in the permafrost region between 1960 and 2009. <i>Global Biogeochemical Cycles</i> , 2016, 30, 1015-1037. | 4.9 | 116 |
| 59 | Pan-Arctic ice-wedge degradation in warming permafrost and its influence on tundra hydrology. <i>Nature Geoscience</i> , 2016, 9, 312-318. | 12.9 | 527 |
| 60 | Isotopic identification of soil and permafrost nitrate sources in an Arctic tundra ecosystem. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 1000-1017. | 3.0 | 22 |
| 61 | Using field observations to inform thermal hydrology models of permafrost dynamics with ATS (v0.83). <i>Geoscientific Model Development</i> , 2015, 8, 2701-2722. | 3.6 | 56 |
| 62 | Climate change and the permafrost carbon feedback. <i>Nature</i> , 2015, 520, 171-179. | 27.8 | 2,369 |
| 63 | A simplified, data-constrained approach to estimate the permafrost carbon-climate feedback. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140423. | 3.4 | 149 |
| 64 | The new database of the Global Terrestrial Network for Permafrost (GTN-P). <i>Earth System Science Data</i> , 2015, 7, 245-259. | 9.9 | 97 |
| 65 | Evaluation of LPM permafrost distribution in NE Asia reconstructed and downscaled from GCM simulations. <i>Boreas</i> , 2014, 43, 733-749. | 2.4 | 19 |
| 66 | The impact of the permafrost carbon feedback on global climate. <i>Environmental Research Letters</i> , 2014, 9, 085003. | 5.2 | 279 |
| 67 | Cumulative geoecological effects of 62 years of infrastructure and climate change in ice-rich permafrost landscapes, Prudhoe Bay Oilfield, Alaska. <i>Global Change Biology</i> , 2014, 20, 1211-1224. | 9.5 | 154 |
| 68 | Expert assessment of vulnerability of permafrost carbon to climate change. <i>Climatic Change</i> , 2013, 119, 359-374. | 3.6 | 257 |
| 69 | Simulating soil freeze/thaw dynamics with an improved pan-Arctic water balance model. <i>Journal of Advances in Modeling Earth Systems</i> , 2013, 5, 659-675. | 3.8 | 45 |
| 70 | Influence of the physical terrestrial Arctic in the eco-climate system. <i>Ecological Applications</i> , 2013, 23, 1778-1797. | 3.8 | 20 |
| 71 | LGM permafrost distribution: how well can the latest PMIP multi-model ensembles perform reconstruction?. <i>Climate of the Past</i> , 2013, 9, 1697-1714. | 3.4 | 35 |
| 72 | Numerical modeling of permafrost dynamics in Alaska using a high spatial resolution dataset. <i>Cryosphere</i> , 2012, 6, 613-624. | 3.9 | 167 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Geoelectric observations of the degradation of nearshore submarine permafrost at Barrow (Alaskan) Tj ETQq1 1 0.784314 rgBT /Over | 3.3 | 37 |
| 74 | Vulnerability of high-latitude soil organic carbon in North America to disturbance. Journal of Geophysical Research, 2011, 116, . | 3.3 | 337 |
| 75 | High-resolution mapping of ecosystem carbon storage and potential effects of permafrost thaw in periglacial terrain, European Russian Arctic. Journal of Geophysical Research, 2011, 116, . | 3.3 | 88 |
| 76 | Vulnerability and Feedbacks of Permafrost to Climate Change. Eos, 2011, 92, 73-74. | 0.1 | 121 |
| 77 | Modern thermokarst lake dynamics in the continuous permafrost zone, northern Seward Peninsula, Alaska. Journal of Geophysical Research, 2011, 116, . | 3.3 | 250 |
| 78 | Permafrost degradation risk zone assessment using simulation models. Cryosphere, 2011, 5, 1043-1056. | 3.9 | 43 |
| 79 | Thermal state of permafrost in Russia. Permafrost and Periglacial Processes, 2010, 21, 136-155. | 3.4 | 383 |
| 80 | Remote sensing and field-based mapping of permafrost distribution along the Alaska Highway corridor, interior Alaska. Permafrost and Periglacial Processes, 2010, 21, 271-281. | 3.4 | 33 |
| 81 | Permafrost thermal state in the polar Northern Hemisphere during the international polar year 2007-2009: a synthesis. Permafrost and Periglacial Processes, 2010, 21, 106-116. | 3.4 | 625 |
| 82 | Decadal variations of active-layer thickness in moisture-controlled landscapes, Barrow, Alaska. Journal of Geophysical Research, 2010, 115, . | 3.3 | 138 |
| 83 | Fire, climate change, and forest resilience in interior Alaska This article is one of a selection of papers from The Dynamics of Change in Alaska's Boreal Forests: Resilience and Vulnerability in Response to Climate Warming.. Canadian Journal of Forest Research, 2010, 40, 1302-1312. | 1.7 | 306 |
| 84 | Resilience and vulnerability of permafrost to climate change This article is one of a selection of papers from The Dynamics of Change in Alaska's Boreal Forests: Resilience and Vulnerability in Response to Climate Warming.. Canadian Journal of Forest Research, 2010, 40, 1219-1236. | 1.7 | 435 |
| 85 | Thermally-Conditioned Paleo-Permafrost Variations from Global Climate Modeling. Scientific Online Letters on the Atmosphere, 2009, 5, 101-104. | 1.4 | 11 |
| 86 | The Effect of Moisture Content on the Thermal Conductivity of Moss and Organic Soil Horizons From Black Spruce Ecosystems in Interior Alaska. Soil Science, 2009, 174, 646-651. | 0.9 | 143 |
| 87 | Report from the International Permafrost Association: state of permafrost in the first decade of the 21 st century. Permafrost and Periglacial Processes, 2008, 19, 255-260. | 3.4 | 88 |
| 88 | Vulnerability of Permafrost Carbon to Climate Change: Implications for the Global Carbon Cycle. BioScience, 2008, 58, 701-714. | 4.9 | 1,379 |
| 89 | Sensitivity of a model projection of near-surface permafrost degradation to soil column depth and representation of soil organic matter. Journal of Geophysical Research, 2008, 113, . | 3.3 | 239 |
| 90 | Arctic patterned-ground ecosystems: A synthesis of field studies and models along a North American Arctic Transect. Journal of Geophysical Research, 2008, 113, . | 3.3 | 96 |

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|-----|--|-----|-----------|
| 91 | Cryogenesis and soil formation along a bioclimate gradient in Arctic North America. <i>Journal of Geophysical Research</i> , 2008, 113, . | 3.3 | 101 |
| 92 | Global Climate Model Performance over Alaska and Greenland. <i>Journal of Climate</i> , 2008, 21, 6156-6174. | 3.2 | 179 |
| 93 | Improved modeling of permafrost dynamics in a GCM land-surface scheme. <i>Geophysical Research Letters</i> , 2007, 34, . | 4.0 | 179 |
| 94 | An evaluation of deep soil configurations in the CLM3 for improved representation of permafrost. <i>Geophysical Research Letters</i> , 2007, 34, . | 4.0 | 114 |
| 95 | Using in-situ temperature measurements to estimate saturated soil thermal properties by solving a sequence of optimization problems. <i>Cryosphere</i> , 2007, 1, 41-58. | 3.9 | 39 |
| 96 | Importance of recent shifts in soil thermal dynamics on growing season length, productivity, and carbon sequestration in terrestrial high-latitude ecosystems. <i>Global Change Biology</i> , 2006, 12, 731-750. | 9.5 | 292 |
| 97 | The n-factor of nonsorted circles along a climate gradient in Arctic Alaska. <i>Permafrost and Periglacial Processes</i> , 2006, 17, 279-289. | 3.4 | 39 |
| 98 | Evidence and Implications of Recent Climate Change in Northern Alaska and Other Arctic Regions. <i>Climatic Change</i> , 2005, 72, 251-298. | 3.6 | 1,219 |
| 99 | A model for regional-scale estimation of temporal and spatial variability of active layer thickness and mean annual ground temperatures. <i>Permafrost and Periglacial Processes</i> , 2003, 14, 125-139. | 3.4 | 108 |
| 100 | Vegetation-soil-thaw-depth relationships along a low-arctic bioclimate gradient, Alaska: synthesis of information from the ATLAS studies. <i>Permafrost and Periglacial Processes</i> , 2003, 14, 103-123. | 3.4 | 159 |
| 101 | Impacts of wildfire on the permafrost in the boreal forests of Interior Alaska. <i>Journal of Geophysical Research</i> , 2003, 108, FFR 4-1. | 3.3 | 231 |
| 102 | The role of snow cover in the warming of arctic permafrost. <i>Geophysical Research Letters</i> , 2003, 30, . | 4.0 | 236 |
| 103 | Permafrost temperature records: Indicators of climate change. <i>Eos</i> , 2002, 83, 589. | 0.1 | 161 |
| 104 | Observational Evidence of Recent Change in the Northern High-Latitude Environment. <i>Climatic Change</i> , 2000, 46, 159-207. | 3.6 | 1,690 |
| 105 | Effects of unfrozen water on heat and mass transport processes in the active layer and permafrost. <i>Permafrost and Periglacial Processes</i> , 2000, 11, 219-239. | 3.4 | 338 |
| 106 | Evidence for warming and thawing of discontinuous permafrost in Alaska. <i>Permafrost and Periglacial Processes</i> , 1999, 10, 17-37. | 3.4 | 469 |
| 107 | Thawing of the Active Layer on the Coastal Plain of the Alaskan Arctic. <i>Permafrost and Periglacial Processes</i> , 1997, 8, 1-22. | 3.4 | 196 |
| 108 | Freezing of the Active Layer on the Coastal Plain of the Alaskan Arctic. <i>Permafrost and Periglacial Processes</i> , 1997, 8, 23-44. | 3.4 | 93 |

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|-----|--|-----|-----------|
| 109 | Characteristics of Changing Permafrost Temperatures in the Alaskan Arctic, U.S.A.. Arctic and Alpine Research, 1996, 28, 267. | 1.3 | 58 |
| 110 | Interannual variations of the thermal regime of the active layer and near-surface permafrost in northern Alaska. Permafrost and Periglacial Processes, 1995, 6, 313-335. | 3.4 | 200 |
| 111 | Evidence for a cyclic variation of permafrost temperatures in northern alaska. Permafrost and Periglacial Processes, 1994, 5, 137-144. | 3.4 | 41 |