Jouni Antero RÃ¤isÃ¤nen

List of Publications by Year
in descending order

117 papers	4,757 citations	136950 32 h-index	102487 66 g-index
131 all docs	131 docs citations	131 times ranked	5555 citing authors

#	Article	IF	Citations
1	Quantifying the risk of extreme seasonal precipitation events in a changing climate. Nature, 2002, 415, 512-514.	27.8	500
2	European climate in the late twenty-first century: regional simulations with two driving global models and two forcing scenarios. Climate Dynamics, 2004, 22, 13-31.	3.8	474
3	How reliable are climate models?. Tellus, Series A: Dynamic Meteorology and Oceanography, 2007, 59, 2-29.	1.7	286
4	Warmer climate: less or more snow?. Climate Dynamics, 2008, 30, 307-319.	3.8	234
5	An intercomparison of a large ensemble of statistical downscaling methods over Europe: Results from the VALUE perfect predictor crossâ€validation experiment. International Journal of Climatology, 2019, 39, 3750-3785.	3.5	164
6	CO2-Induced Changes in Interannual Temperature and Precipitation Variability in 19 CMIP2 Experiments. Journal of Climate, 2002, 15, 2395-2411.	3.2	160
7	A Probability and Decision-Model Analysis of a Multimodel Ensemble of Climate Change Simulations. Journal of Climate, 2001, 14, 3212-3226.	3.2	154
8	CO2-Induced Climate Change in CMIP2 Experiments: Quantification of Agreement and Role of Internal Variability. Journal of Climate, 2001, 14, 2088-2104.	3.2	150
9	Evaluation of delta change and bias correction methods for future daily precipitation: intermodel cross-validation using ENSEMBLES simulations. Climate Dynamics, 2014, 42, 2287-2303.	3.8	148
10	A regional climate model for northern Europe: model description and results from the downscaling of two GCM control simulations. Climate Dynamics, 2001, 17, 339-359.	3.8	134
11	Projections of daily mean temperature variability in the future: cross-validation tests with ENSEMBLES regional climate simulations. Climate Dynamics, 2013, 41, 1553-1568.	3.8	113
12	Measurements of relative thick target yields for PIGE analysis on light elements in the proton energy interval 2.4â€“4.2 MeV. Journal of Radioanalytical and Nuclear Chemistry, 1985, 89, 123-141.	1.5	109
13	Comparison of climate change scenarios for Sweden based on statistical and dynamical downscaling of monthly precipitation. Climate Research, 2001, 19, 45-55.	1.1	108
14	Towards modelling of decay risk of wooden materials. European Journal of Wood and Wood Products, 2010, 68, 303-313.	2.9	95
15	21st Century changes in snow climate in Northern Europe: a high-resolution view from ENSEMBLES regional climate models. Climate Dynamics, 2012, 38, 2575-2591.	3.8	90
16	A synthesis of regional climate change simulations-A Scandinavian perspective. Geophysical Research Letters, 2001, 28, 1003-1006.	4.0	83
17	Projected changes in thermal seasons and the growing season in Finland. International Journal of Climatology, 2011, 31, 1473-1487.	3.5	80
18	Diffusion of nitrogen in Î±â€Ti. Applied Physics Letters, 1983, 42, 498-500.	3.3	75

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19	Weighting of model results for improving best estimates of climate change. Climate Dynamics, 2010, 35, 407-422.	3.8	75
20	Projections for the duration and degree days of the thermal growing season in Europe derived from <scp>CMIP5</scp> model output. International Journal of Climatology, 2016, 36, 3039-3055.	3.5	70
21	Applying probabilistic projections of climate change with impact models: a case study for sub-arctic palsa mires in Fennoscandia. Climatic Change, 2010, 99, 515-534.	3.6	59
22	Growing season precipitation in Finland under recent and projected climate. Natural Hazards and Earth System Sciences, 2010, 10, 1563-1574.	3.6	48
23	Using statistical downscaling to quantify the GCM-related uncertainty in regional climate change scenarios: A case study of Swedish precipitation. Advances in Atmospheric Sciences, 2006, 23, 54-60.	4.3	46
24	Estimating snow conditions in Finland in the late 21st century using the SNOWPACK model with regional climate scenario data as input. Annals of Glaciology, 2004, 38, 238-244.	1.4	45
25	Direct observation of mono-vacancy and self-interstitial recovery in tungsten. APL Materials, 2019, 7, .	5.1	45
26	Probabilistic forecasts of near-term climate change based on a resampling ensemble technique. Tellus, Series A: Dynamic Meteorology and Oceanography, 2006, 58, 461-472.	1.7	41
27	Thermal seasons in northern Europe in projected future climate. International Journal of Climatology, 2020, 40, 4444-4462.	3.5	39
28	The characteristics and structure of extra-tropical cyclones in a warmer climate. Weather and Climate Dynamics, 2020, 1, 1-25.	3.5	36
29	Diffusion of aluminum in ionâ€implanted Î±â€Ti. Journal of Applied Physics, 1985, 57, 613-614.	2.5	35
30	Hardening Mechanisms in Graphitic Carbon Nitride Films Grown with N2/Ar Ion Assistance. Chemistry of Materials, 2001, 13, 129-135.	6.7	35
31	Diffusion of aluminum in ionâ€implanted alpha iron. Journal of Applied Physics, 1982, 53, 3314-3316.	2.5	34
32	Factors Affecting Synoptic-Scale Vertical Motions: A Statistical Study Using a Generalized Omega Equation. Monthly Weather Review, 1995, 123, 2447-2460.	1.4	34
33	Changes in average and extreme precipitation in two regional climate model experiments. Tellus, Series A: Dynamic Meteorology and Oceanography, 2001, 53, 547-566.	1.7	34
34	Twenty-first century changes in snowfall climate in Northern Europe in ENSEMBLES regional climate models. Climate Dynamics, 2016, 46, 339-353.	3.8	31
35	The summer 2018 heatwave in Finland. Weather, 2019, 74, 403-409.	0.7	31
36	How Much Should Climate Model Output Be Smoothed in Space?. Journal of Climate, 2011, 24, 867-880.	3.2	30

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37	Diffusion of nitrogen in vanadium and niobium. Applied Physics A: Solids and Surfaces, 1984, 34, 49-56.	1.4	29
38	Objective comparison of patterns of CO 2 induced climate change in coupled GCM experiments. Climate Dynamics, 1997, 13, 197-211.	3.8	27
39	Heat waves in Finland: present and projected summertime extreme temperatures and their associated circulation patterns. International Journal of Climatology, 2018, 38, 1393-1408.	3.5	27
40	Intercomparison of Univariate and Joint Bias Correction Methods in Changing Climate From a Hydrological Perspective. Climate, 2018, 6, 33.	2.8	27
41	Direct observations of the vacancy and its annealing in germanium. Physical Review B, 2011, 83, .	3.2	26
42	Net precipitation over the Baltic Sea during present and future climate conditions. Climate Research, 2002, 22, 27-39.	1.1	26
43	Impact of increasing CO2 on monthly-to-annual precipitation extremes: analysis of the CMIP2 experiments. Climate Dynamics, 2005, 24, 309-323.	3.8	25
44	Changes in average and extreme precipitation in two regional climate model experiments. Tellus, Series A: Dynamic Meteorology and Oceanography, 2001, 53, 547-566.	1.7	24
45	Diffusion of nitrogen in ion-implanted chromium and tungsten. Applied Physics A: Solids and Surfaces, 1984, 35, 227-232.	1.4	23
46	Spatiotemporal distribution of threatened high-latitude snowbed and snow patch habitats in warming climate. Environmental Research Letters, 2012, 7, 034024.	5.2	23
47	Regional Climate Scenarios for use in Nordic Water Resources Studies. Hydrology Research, 2003, 34, 399-412.	2.7	23
48	Downscaling of greenhouse gas induced climate change in two GCMs with the Rossby Centre regional climate model for northern Europe. Tellus, Series A: Dynamic Meteorology and Oceanography, 2001, 53, 168-191.	1.7	22
49	CO2-Induced Changes in Atmospheric Angular Momentum in CMIP2 Experiments. Journal of Climate, 2003, 16, 132-143.	3.2	21
50	Can model weighting improve probabilistic projections of climate change?. Climate Dynamics, 2012, 39, 1981-1998.	3.8	19
51	Using impact response surfaces to analyse the likelihood of impacts on crop yield under probabilistic climate change. Agricultural and Forest Meteorology, 2019, 264, 213-224.	4.8	19
52	A probabilistic view on recent and near future climate change in Sweden. Tellus, Series A: Dynamic Meteorology and Oceanography, 2003, 55, 113-125.	1.7	18
53	Twentyâ€first century changes in daily temperature variability in <scp>CMIP3</scp> climate models. International Journal of Climatology, 2014, 34, 1414-1428.	3.5	18
54	Downscaling of greenhouse gas induced climate change in two GCMs with the Rossby Centre regional climate model for northern Europe. Tellus, Series A: Dynamic Meteorology and Oceanography, 2001, 53, 168-191.	1.7	17

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55	Cold months in a warming climate. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	16
56	Effect of atmospheric circulation on recent temperature changes in Finland. Climate Dynamics, 2019, 53, 5675-5687.	3.8	16
57	Stopping powers of 0.4â€“0.9 MeV/u²³Na ions in Al, Au, Mylar, Havar and LR-115 nuclear track material. Radiation Effects and Defects in Solids, 1994, 128, 163-166.	1.2	15
58	Height Tendency Diagnostics Using a Generalized Omega Equation, the Vorticity Equation, and a Nonlinear Balance Equation. Monthly Weather Review, 1997, 125, 1577-1597.	1.4	15
59	CO2-induced climate change in northern Europe: CMIP2 versus CMIP3 versus CMIP5. Climate Dynamics, 2015, 45, 1877-1897.	3.8	15
60	Effect of atmospheric circulation on surface air temperature trends in years 1979â€“2018. Climate Dynamics, 2021, 56, 2303-2320.	3.8	15
61	The extratropical transition of Hurricane Ophelia (2017) as diagnosed with a generalized omega equation and vorticity equation. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 72, 1721215.	1.7	14
62	Annealing behaviour of C-, N-, Mg-, Al- and P-implanted Si and Ge. Applied Physics A: Solids and Surfaces, 1983, 30, 87-93.	1.4	13
63	Snow conditions in northern Europe: the dynamics of interannual variability versus projected long-term change. Cryosphere, 2021, 15, 1677-1696.	3.9	13
64	A probabilistic view on recent and near future climate change in Sweden. Tellus, Series A: Dynamic Meteorology and Oceanography, 2003, 55, 113-125.	1.7	12
65	Effects of activation by proton irradiation on silicon particle detector electric characteristics. Journal of Applied Physics, 2009, 106, 024908.	2.5	12
66	Probabilistic forecasts of near-term climate change: sensitivity to adjustment of simulated variability and choice of baseline period. Tellus, Series A: Dynamic Meteorology and Oceanography, 2007, 59, 309-320.	1.7	11
67	Surface air relative humidities spuriously exceeding 100% in CMIP5 model output and their impact on future projections. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9557-9568.	3.3	11
68	Statistical Learning Methods as a Basis for Skillful Seasonal Temperature Forecasts in Europe. Journal of Climate, 2019, 32, 5363-5379.	3.2	11
69	Research agenda for the Russian Far East and utilization of multi-platform comprehensive environmental observations. International Journal of Digital Earth, 2021, 14, 311-337.	3.9	11
70	Stopping powers of Al and Sn for⁴He,⁷Li,¹¹B,¹²C,¹⁴N and¹⁶O ions in the energy range 0.5â€“2.6 MeV/amu. Radiation Effects and Defects in Solids, 1991, 118, 97-103.	1.2	9
71	Factors affecting atmospheric vertical motions as analyzed with a generalized omega equation and the OpenIFS model. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 69, 1271563.	1.7	9
72	Energetics of interannual temperature variability. Climate Dynamics, 2019, 52, 3139-3156.	3.8	9

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73	How Asian aerosols impact regional surface temperatures across the globe. Atmospheric Chemistry and Physics, 2021, 21, 5865-5881.	4.9	9
74	Overview: Recent advances in the understanding of the northern Eurasian environments and of the urban air quality in China â€“ a Pan-Eurasian Experiment (PEEX) programme perspective. Atmospheric Chemistry and Physics, 2022, 22, 4413-4469.	4.9	9
75	Radiation resistance of MBE-grown GaInP/GaAs-based solar cells. Progress in Photovoltaics: Research and Applications, 1998, 6, 25-33.	8.1	8
76	Estimating present climate in a warming world: a model-based approach. Climate Dynamics, 2008, 31, 573-585.	3.8	8
77	Projections of Future Anthropogenic Climate Change. , 2008, , 133-219.		8
78	Breakdown of silicon particle detectors under proton irradiation. Journal of Applied Physics, 2009, 106, .	2.5	8
79	OZO v.1.0: software for solving a generalised omega equation and the Zwackâ€“Okossi height tendency equation using WRF model output. Geoscientific Model Development, 2017, 10, 827-841.	3.6	8
80	A New Mechanism for the Dependence of Tropical Convection on Freeâ€Tropospheric Humidity. Geophysical Research Letters, 2018, 45, 2516-2523.	4.0	8
81	Sensitivity of idealised baroclinic waves to mean atmospheric temperature and meridional temperature gradient changes. Climate Dynamics, 2019, 52, 2703-2719.	3.8	8
82	Diffusion properties of Ga in Si1â^'xGex alloys. Journal of Applied Physics, 2008, 104, .	2.5	7
83	External beam IBA set-up with large-area thin Si3N4 window. Nuclear Instruments & Methods in Physics Research B, 2016, 380, 11-14.	1.4	7
84	Observational evidence for aerosols increasing upper tropospheric humidity. Atmospheric Chemistry and Physics, 2016, 16, 14331-14342.	4.9	7
85	Evolution of observed and modelled temperatures in Finland in 1901â€“2018 and potential dynamical reasons for the differences. International Journal of Climatology, 2021, 41, 3374-3390.	3.5	7
86	CO2- and Aerosol-Induced Changes in Vertically Integrated Zonal Momentum Budget in a GCM Experiment. Journal of Climate, 1998, 11, 625-639.	3.2	6
87	Study of variations of the carrier recombination and charge transport parameters during proton irradiation of silicon pin diode structures. AIP Advances, 2011, 1, .	1.3	6
88	Quantifying sources of climate uncertainty to inform risk analysis for climate change decision-making. Local Environment, 2015, 20, 811-835.	2.4	6
89	Radiosonde comparison of ERA5 and ERA-Interim reanalysis datasets over tropical oceans. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 73, 1929752.	1.7	6
90	How soon will climate records of the 20th century be broken according to climate model simulations?. Tellus, Series A: Dynamic Meteorology and Oceanography, 2008, 61, 476-490.	1.7	5

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91	EXPERIMENTAL ARRANGEMENTS FOR NON-VACUUM BIO-PIXE. International Journal of PIXE, 1992, 02, 339-350.	0.4	4
92	Internal Variability as a Cause of Qualitative Intermodel Disagreement on Anthropogenic Climate Changes. Theoretical and Applied Climatology, 1999, 64, 1-13.	2.8	4
93	Diffusion of beryllium in Ge and Siâ€“Ge alloys. Journal of Applied Physics, 2008, 103, .	2.5	4
94	Climate change projections for variables affecting road networks in Europe. Transportation Planning and Technology, 2014, 37, 678-694.	2.0	4
95	Particle Concentration Profile in a Vertical Displacement Flow: A Study in an Industrial Hall. Journal of Occupational and Environmental Hygiene, 2003, 18, 183-192.	0.4	3
96	Effect of proton energy on damage generation in irradiated silicon. Journal of Applied Physics, 2010, 107, 084903.	2.5	3
97	Spin-glass magnetism of surface rich Au cluster film. Applied Physics Letters, 2011, 99, .	3.3	3
98	How does model development affect climate projections?. Atmospheric Science Letters, 2015, 16, 414-419.	1.9	3
99	Cross-validation analysis of bias models in Bayesian multi-model projections of climate. Climate Dynamics, 2017, 48, 1555-1570.	3.8	3
100	An energy balance perspective on regional CO2-induced temperature changes in CMIP5 models. Climate Dynamics, 2017, 48, 3441-3454.	3.8	3
101	Growth mode-dependent ferromagnetic properties of palladium nanoclusters. Journal of Applied Physics, 2018, 124, 033904.	2.5	3
102	Elastic-Plastic Transition in MBE-Grown GaSb Semiconducting Crystal Examined by Nanoindentation. Acta Physica Polonica A, 2016, 130, 1131-1133.	0.5	3
103	Probabilistic forecasts of near-term climate change: verification for temperature and precipitation changes from years 1971â€“2000 to 2011â€“2020. Climate Dynamics, 2022, 59, 1175-1188.	3.8	3
104	Ambiguities in PIGE caused by different reactions. AIP Conference Proceedings, 1985, , .	0.4	2
105	Silicon-based Coulomb blockade thermometer with Schottky barriers. Applied Physics Letters, 2014, 104, .	3.3	2
106	Vertical Temperature Structure Associated with Evaporation of Stratiform Precipitation in Idealized WRF Simulations. Journals of the Atmospheric Sciences, 2020, 77, 1851-1864.	1.7	2
107	Understanding the surface temperature response and its uncertainty to CO₂, CH₄, black carbon, and sulfate. Atmospheric Chemistry and Physics, 2021, 21, 14941-14958.	4.9	2
108	Effect of Ageostrophic Vorticity and Temperature Advection on Lower-Tropospheric Vertical Motions in a Strong Extratropical Cyclone. Monthly Weather Review, 1996, 124, 2607-2613.	1.4	1

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109	Electron-phonon coupling in ion implanted cobalt silicide below 1K. Applied Physics Letters, 2008, 92, .	3.3	1
110	Comment on â€œNanoindentation hardness anisotropy of alumina crystal: A molecular dynamics studyâ€• [Appl. Phys. Lett. 92, 161904 (2008)]. Applied Physics Letters, 2009, 94, 146101.	3.3	1
111	Recent Progress in CERN RD39: Radiation Hard Cryogenic Silicon Detectors for Applications in LHC Experiments and Their Future Upgrades. IEEE Transactions on Nuclear Science, 2009, 56, 2119-2123.	2.0	1
112	Enhanced Greenhouse Effect and Climate Change in Northern Europe. Lecture Notes in Earth Sciences, 2012, , 227-239.	0.5	1
113	Multi-annual modes in the 20th century temperature variability in reanalyses and CMIP5 models. Geoscientific Model Development, 2016, 9, 4097-4109.	3.6	1
114	Recent progress in CERN RD39: radiation hard cryogenic silicon detectors for applications in LHC experiments and their future upgrades. , 2008, , .		0
115	Aerosols may increase upper tropospheric humidity. , 2013, , .		0
116	Diffusion studies with radioactive ions. Hyperfine Interactions, 2014, 223, 231-238.	0.5	0
117	Reply to Comment by Genthon et al. on â€œSurface Air Relative Humidities Spuriously Exceeding 100% in CMIP5 Model Output and Their Impact on Future Projectionsâ€• Journal of Geophysical Research D: Atmospheres, 2018, 123, 8728-8734.	3.3	0