# Alan Robock

## List of Publications by Year in descending order

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|---|---|---|---|
| 265 papers | 23,971 citations | 6233 80 h-index | 9073 144 g-index |
| 299 all docs | 299 docs citations | 299 times ranked | 14911 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Volcanic eruptions and climate. Reviews of Geophysics, 2000, 38, 191-219. | 9.0 | 2,008 |
| 2 | The multi-institution North American Land Data Assimilation System (NLDAS): Utilizing multiple GCIP products and partners in a continental distributed hydrological modeling system. Journal of Geophysical Research, 2004, 109, . | 3.3 | 985 |
| 3 | The International Soil Moisture Network: a data hosting facility for global in situ soil moisture measurements. Hydrology and Earth System Sciences, 2011, 15, 1675-1698. | 1.9 | 864 |
| 4 | The Global Soil Moisture Data Bank. Bulletin of the American Meteorological Society, 2000, 81, 1281-1299. | 1.7 | 719 |
| 5 | Volcanic forcing of climate over the past 1500 years: An improved ice coreâ€based index for climate models. Journal of Geophysical Research, 2008, 113, . | 3.3 | 574 |
| 6 | Temporal and spatial scales of observed soil moisture variations in the extratropics. Journal of Geophysical Research, 2000, 105, 11865-11877. | 3.3 | 455 |
| 7 | Global Cooling After the Eruption of Mount Pinatubo: A Test of Climate Feedback by Water Vapor. Science, 2002, 296, 727-730. | 6.0 | 424 |
| 8 | Steady decline of east Asian monsoon winds, 1969â€“2000: Evidence from direct ground measurements of wind speed. Journal of Geophysical Research, 2006, 111, . | 3.3 | 397 |
| 9 | The Volcanic Signal in Surface Temperature Observations. Journal of Climate, 1995, 8, 1086-1103. | 1.2 | 369 |
| 10 | Realâ€time and retrospective forcing in the North American Land Data Assimilation System (NLDAS) project. Journal of Geophysical Research, 2003, 108, . | 3.3 | 357 |
| 11 | Global Warming and Northern Hemisphere Sea Ice Extent. Science, 1999, 286, 1934-1937. | 6.0 | 345 |
| 12 | Regional climate responses to geoengineering with tropical and Arctic SO<sub>2</sub> injections. Journal of Geophysical Research, 2008, 113, . | 3.3 | 339 |
| 13 | Radiative forcing from the 1991 Mount Pinatubo volcanic eruption. Journal of Geophysical Research, 1998, 103, 13837-13857. | 3.3 | 328 |
| 14 | The Geoengineering Model Intercomparison Project (GeoMIP). Atmospheric Science Letters, 2011, 12, 162-167. | 0.8 | 314 |
| 15 | Scales of temporal and spatial variability of midlatitude soil moisture. Journal of Geophysical Research, 1996, 101, 7163-7174. | 3.3 | 292 |
| 16 | Spectral nudging to eliminate the effects of domain position and geometry in regional climate model simulations. Journal of Geophysical Research, 2004, 109, n/a-n/a. | 3.3 | 279 |
| 17 | Benefits, risks, and costs of stratospheric geoengineering. Geophysical Research Letters, 2009, 36, . | 1.5 | 275 |
| 18 | Winter warming from large volcanic eruptions. Geophysical Research Letters, 1992, 19, 2405-2408. | 1.5 | 259 |

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|---|---|---|---|
| 19 | An overview of geoengineering of climate using stratospheric sulphate aerosols. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 4007-4037. | 1.6 | 251 |
| 20 | Validation of the Snow Submodel of the Biosphereâ€“Atmosphere Transfer Scheme with Russian Snow Cover and Meteorological Observational Data. Journal of Climate, 1997, 10, 353-373. | 1.2 | 250 |
| 21 | Coupled Model Intercomparison Project 5 (CMIP5) simulations of climate following volcanic eruptions. Journal of Geophysical Research, 2012, 117, . | 3.3 | 231 |
| 22 | Incorporating water table dynamics in climate modeling: 1. Water table observations and equilibrium water table simulations. Journal of Geophysical Research, 2007, 112, . | 3.3 | 227 |
| 23 | Temperature and precipitation history of the Arctic. Quaternary Science Reviews, 2010, 29, 1679-1715. | 1.4 | 226 |
| 24 | Climate model response from the Geoengineering Model Intercomparison Project (GeoMIP). Journal of Geophysical Research D: Atmospheres, 2013, 118, 8320-8332. | 1.2 | 226 |
| 25 | Evidence of enhanced precipitation due to irrigation over the Great Plains of the United States. Journal of Geophysical Research, 2010, 115, . | 3.3 | 214 |
| 26 | Arctic Oscillation response to the 1991 Mount Pinatubo eruption: Effects of volcanic aerosols and ozone depletion. Journal of Geophysical Research, 2002, 107, ACL 28-1. | 3.3 | 210 |
| 27 | Large Volcanic Aerosol Load in the Stratosphere Linked to Asian Monsoon Transport. Science, 2012, 337, 78-81. | 6.0 | 208 |
| 28 | The hydrological impact of geoengineering in the Geoengineering Model Intercomparison Project (GeoMIP). Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,036. | 1.2 | 202 |
| 29 | Arctic Oscillation response to volcanic eruptions in the IPCC AR4 climate models. Journal of Geophysical Research, 2006, 111, . | 3.3 | 199 |
| 30 | Surface radiation budgets in support of the GEWEX Continentalâ€Scale International Project (GCIP) and the GEWEX Americas Prediction Project (GAPP), including the North American Land Data Assimilation System (NLDAS) project. Journal of Geophysical Research, 2003, 108, . | 3.3 | 196 |
| 31 | Climate model simulation of winter warming and summer cooling following the 1991 Mount Pinatubo volcanic eruption. Journal of Geophysical Research, 1999, 104, 19039-19055. | 3.3 | 181 |
| 32 | The Seasonal Cycle of Snow Cover, Sea Ice and Surface Albedo. Monthly Weather Review, 1980, 108, 267-285. | 0.5 | 179 |
| 33 | 20 reasons why geoengineering may be a bad idea. Bulletin of the Atomic Scientists, 2008, 64, 14-59. | 0.2 | 179 |
| 34 | Use of Midlatitude Soil Moisture and Meteorological Observations to Validate Soil Moisture Simulations with Biosphere and Bucket Models. Journal of Climate, 1995, 8, 15-35. | 1.2 | 177 |
| 35 | Pinatubo eruption winter climate effects: model versus observations. Climate Dynamics, 1993, 9, 81-93. | 1.7 | 176 |
| 36 | Incorporating water table dynamics in climate modeling: 2. Formulation, validation, and soil moisture simulation. Journal of Geophysical Research, 2007, 112, . | 3.3 | 164 |

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|---|---|---|---|
| 37 | 20 reasons why geoengineering may be a bad idea. Bulletin of the Atomic Scientists, 2008, 64, 14-18. | 0.2 | 159 |
| 38 | Black carbon lofts wildfire smoke high into the stratosphere to form a persistent plume. Science, 2019, 365, 587-590. | 6.0 | 159 |
| 39 | Evaluation of the North American Land Data Assimilation System over the southern Great Plains during the warm season. Journal of Geophysical Research, 2003, 108, . | 3.3 | 157 |
| 40 | Climatic response to high-latitude volcanic eruptions. Journal of Geophysical Research, 2005, 110, . | 3.3 | 157 |
| 41 | Stratospheric ozone response to sulfate geoengineering: Results from the Geoengineering Model Intercomparison Project (GeoMIP). Journal of Geophysical Research D: Atmospheres, 2014, 119, 2629-2653. | 1.2 | 151 |
| 42 | Effects of Frozen Soil on Soil Temperature, Spring Infiltration, and Runoff: Results from the PILPS 2(d) Experiment at Valdai, Russia. Journal of Hydrometeorology, 2003, 4, 334-351. | 0.7 | 150 |
| 43 | Simulations of a Boreal Grassland Hydrology at Valdai, Russia: PILPS Phase 2(d). Monthly Weather Review, 2000, 128, 301-321. | 0.5 | 148 |
| 44 | High-latitude eruptions cast shadow over the African monsoon and the flow of the Nile. Geophysical Research Letters, 2006, 33, n/a-n/a. | 1.5 | 144 |
| 45 | Streamflow and water balance intercomparisons of four land surface models in the North American Land Data Assimilation System project. Journal of Geophysical Research, 2004, 109, . | 3.3 | 141 |
| 46 | The Geoengineering Model Intercomparison Project Phase 6 (GeoMIP6): simulation design and preliminary results. Geoscientific Model Development, 2015, 8, 3379-3392. | 1.3 | 140 |
| 47 | The Model Intercomparison Project on the climatic response to Volcanic forcing (VolMIP): experimental design and forcing input data for CMIP6. Geoscientific Model Development, 2016, 9, 2701-2719. | 1.3 | 138 |
| 48 | Validation of the North American Land Data Assimilation System (NLDAS) retrospective forcing over the southern Great Plains. Journal of Geophysical Research, 2003, 108, . | 3.3 | 136 |
| 49 | Did the Toba volcanic eruption of â¼74 ka B.P. produce widespread glaciation?. Journal of Geophysical Research, 2009, 114, . | 3.3 | 136 |
| 50 | Regional Climate Simulations over North America: Interaction of Local Processes with Improved Large-Scale Flow. Journal of Climate, 2005, 18, 1227-1246. | 1.2 | 135 |
| 51 | Evaluation of the AMIP soil moisture simulations. Global and Planetary Change, 1998, 19, 181-208. | 1.6 | 132 |
| 52 | Tropical explosive volcanic eruptions can trigger El NiÃ±o by cooling tropical Africa. Nature Communications, 2017, 8, 778. | 5.8 | 132 |
| 53 | Ice cores as an index of global volcanism from 1850 to the present. Journal of Geophysical Research, 1995, 100, 11549. | 3.3 | 130 |
| 54 | The impact of abrupt suspension of solar radiation management (termination effect) in experiment G2 of the Geoengineering Model Intercomparison Project (GeoMIP). Journal of Geophysical Research D: Atmospheres, 2013, 118, 9743-9752. | 1.2 | 129 |

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|---|---|---|---|
| 55 | Land surface conditions over Eurasia and Indian summer monsoon rainfall. Journal of Geophysical Research, 2003, 108, . | 3.3 | 127 |
| 56 | Incorporating water table dynamics in climate modeling: 3. Simulated groundwater influence on coupled landâ€atmosphere variability. Journal of Geophysical Research, 2008, 113, . | 3.3 | 125 |
| 57 | Climatic consequences of regional nuclear conflicts. Atmospheric Chemistry and Physics, 2007, 7, 2003-2012. | 1.9 | 124 |
| 58 | Global warming in the context of the Little Ice Age. Journal of Geophysical Research, 1999, 104, 19057-19070. | 3.3 | 123 |
| 59 | Tropospheric volcanic aerosol. Geophysical Monograph Series, 2003, , 189-212. | 0.1 | 121 |
| 60 | Nuclear winter revisited with a modern climate model and current nuclear arsenals: Still catastrophic consequences. Journal of Geophysical Research, 2007, 112, . | 3.3 | 120 |
| 61 | Evaluation of Global Soil Wetness Project Soil Moisture Simulations. Journal of the Meteorological Society of Japan, 1999, 77, 183-198. | 0.7 | 118 |
| 62 | PINATUBO ERUPTION: The Climatic Aftermath. Science, 2002, 295, 1242-1244. | 6.0 | 116 |
| 63 | The International Soil Moisture Network: serving Earth system science for over a decade. Hydrology and Earth System Sciences, 2021, 25, 5749-5804. | 1.9 | 116 |
| 64 | A Test for Geoengineering?. Science, 2010, 327, 530-531. | 6.0 | 115 |
| 65 | Modeling the distribution of the volcanic aerosol cloud from the 1783â€“1784 Laki eruption. Journal of Geophysical Research, 2006, 111, . | 3.3 | 112 |
| 66 | Satellite remote sensing of soil moisture in Illinois, United States. Journal of Geophysical Research, 1999, 104, 4145-4168. | 3.3 | 110 |
| 67 | Impacts of land cover data quality on regional climate simulations. International Journal of Climatology, 2010, 30, 1942-1953. | 1.5 | 108 |
| 68 | Evaluation of Reanalysis Soil Moisture Simulations Using Updated Chinese Soil Moisture Observations. Journal of Hydrometeorology, 2005, 6, 180-193. | 0.7 | 106 |
| 69 | Tambora 1815 as a test case for high impact volcanic eruptions: Earth system effects. Wiley Interdisciplinary Reviews: Climate Change, 2016, 7, 569-589. | 3.6 | 105 |
| 70 | Ice and Snow Feedbacks and the Latitudinal and Seasonal Distribution of Climate Sensitivity. Journals of the Atmospheric Sciences, 1983, 40, 986-997. | 0.6 | 104 |
| 71 | Key results and implications from phase 1(c) of the Project for Intercomparison of Land-surface Parametrization Schemes. Climate Dynamics, 1999, 15, 673-684. | 1.7 | 103 |
| 72 | Large-scale water cycle perturbation due to irrigation pumping in the US High Plains: A synthesis of observed streamflow changes. Journal of Hydrology, 2010, 390, 222-244. | 2.3 | 101 |

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| 73 | A multi-model assessment of regional climate disparities caused by solar geoengineering. Environmental Research Letters, 2014, 9, 074013. | 2.2 | 101 |
| 74 | Internally and Externally Caused Climate Change. Journals of the Atmospheric Sciences, 1978, 35, 1111-1122. | 0.6 | 99 |
| 75 | Sensitivity of satellite microwave and infrared observations to soil moisture at a global scale: Relationship of satellite observations to in situ soil moisture measurements. Journal of Geophysical Research, 2005, 110, . | 3.3 | 99 |
| 76 | Land surface model spinâ€up behavior in the North American Land Data Assimilation System (NLDAS). Journal of Geophysical Research, 2003, 108, . | 3.3 | 96 |
| 77 | The 1452 or 1453 A.D. Kuwae eruption signal derived from multiple ice core records: Greatest volcanic sulfate event of the past 700 years. Journal of Geophysical Research, 2006, 111, . | 3.3 | 91 |
| 78 | Ocean response to volcanic eruptions in <scp>C</scp>oupled <scp>M</scp>odel <scp>I</scp>ntercomparison <scp>P</scp>roject 5 simulations. Journal of Geophysical Research: Oceans, 2014, 119, 5622-5637. | 1.0 | 90 |
| 79 | Geoengineering by stratospheric SO<sub>2</sub> injection: results from the Met Office HadGEM2 climate model and comparison with the Goddard Institute for Space Studies ModelE. Atmospheric Chemistry and Physics, 2010, 10, 5999-6006. | 1.9 | 89 |
| 80 | Potentially dangerous consequences for biodiversity of solar geoengineering implementation and termination. Nature Ecology and Evolution, 2018, 2, 475-482. | 3.4 | 89 |
| 81 | Climate effects of high-latitude volcanic eruptions: Role of the time of year. Journal of Geophysical Research, 2011, 116, . | 3.3 | 88 |
| 82 | Relationships between tropospheric water vapor and surface temperature as observed by radiosondes. Geophysical Research Letters, 1992, 19, 1839-1842. | 1.5 | 87 |
| 83 | Allergenic pollen season variations in the past two decades under changing climate in the United States. Global Change Biology, 2015, 21, 1581-1589. | 4.2 | 84 |
| 84 | Atmospheric effects and societal consequences of regional scale nuclear conflicts and acts of individual nuclear terrorism. Atmospheric Chemistry and Physics, 2007, 7, 1973-2002. | 1.9 | 82 |
| 85 | Radiative impact of the Mount Pinatubo volcanic eruption: Lower stratospheric response. Journal of Geophysical Research, 2000, 105, 24409-24429. | 3.3 | 80 |
| 86 | Use of general circulation model output in the creation of climate change scenarios for impact analysis. Climatic Change, 1993, 23, 293-335. | 1.7 | 79 |
| 87 | Studying geoengineering with natural and anthropogenic analogs. Climatic Change, 2013, 121, 445-458. | 1.7 | 76 |
| 88 | A multimodel examination of climate extremes in an idealized geoengineering experiment. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3900-3923. | 1.2 | 75 |
| 89 | Anticipating future Volcanic Explosivity Index (VEI) 7 eruptions and their chilling impacts. , 2018, 14, 572-603. | | 75 |
| 90 | Sulfuric acid deposition from stratospheric geoengineering with sulfate aerosols. Journal of Geophysical Research, 2009, 114, . | 3.3 | 74 |

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| 91 | Multidecadal global cooling and unprecedented ozone loss following a regional nuclear conflict. Earth's Future, 2014, 2, 161-176. | 2.4 | 74 |
| 92 | The Volcanic Signal in Goddard Institute for Space Studies Three-Dimensional Model Simulations. Journal of Climate, 1994, 7, 44-55. | 1.2 | 73 |
| 93 | Atmospheric volcanic loading derived from bipolar ice cores: Accounting for the spatial distribution of volcanic deposition. Journal of Geophysical Research, 2007, 112, . | 3.3 | 72 |
| 94 | Arctic oscillation response to the 1991 Pinatubo eruption in the SKYHI general circulation model with a realistic quasi-biennial oscillation. Journal of Geophysical Research, 2004, 109, n/a-n/a. | 3.3 | 71 |
| 95 | Local Nuclear War, Global Suffering. Scientific American, 2010, 302, 74-81. | 1.0 | 71 |
| 96 | Evaluation of SMOS retrievals of soil moisture over the central United States with currently available in situ observations. Journal of Geophysical Research, 2012, 117, . | 3.3 | 71 |
| 97 | Surface cooling due to forest fire smoke. Journal of Geophysical Research, 1991, 96, 20869-20878. | 3.3 | 69 |
| 98 | Stratospheric sulfate geoengineering could enhance the terrestrial photosynthesis rate. Atmospheric Chemistry and Physics, 2016, 16, 1479-1489. | 1.9 | 66 |
| 99 | Environmental consequences of nuclear war. Physics Today, 2008, 61, 37-42. | 0.3 | 63 |
| 100 | An energetic perspective on hydrological cycle changes in the Geoengineering Model Intercomparison Project. Journal of Geophysical Research D: Atmospheres, 2013, 118, 13,087. | 1.2 | 63 |
| 101 | A regional nuclear conflict would compromise global food security. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7071-7081. | 3.3 | 63 |
| 102 | The Campanian Ignimbrite Eruption, Heinrich Event 4, and palaeolithic change in Europe: A high-resolution investigation. Geophysical Monograph Series, 2003, , 301-325. | 0.1 | 62 |
| 103 | Analysis of seasonal cycles in climatic trends with application to satellite observations of sea ice extent. Geophysical Research Letters, 2002, 29, 24-1-24-4. | 1.5 | 61 |
| 104 | 18-Year Land-Surface Hydrology Model Simulations for a Midlatitude Grassland Catchment in Valdai, Russia. Monthly Weather Review, 1997, 125, 3279-3296. | 0.5 | 58 |
| 105 | Global, long-term sulphur dioxide measurements from TOVS data: A new tool for studying explosive volcanism and climate. Geophysical Monograph Series, 2003, , 75-92. | 0.1 | 57 |
| 106 | Emissions from volcanoes. Advances in Global Change Research, 2004, , 269-303. | 1.6 | 57 |
| 107 | Nuclear Winter Responses to Nuclear War Between the United States and Russia in the Whole Atmosphere Community Climate Model Version 4 and the Goddard Institute for Space Studies ModelE. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8522-8543. | 1.2 | 57 |
| 108 | Temperature trends at the surface and in the troposphere. Journal of Geophysical Research, 2006, 111, . | 3.3 | 56 |

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| 109 | A New International Network for in Situ Soil Moisture Data. Eos, 2011, 92, 141-142. | 0.1 | 54 |
| 110 | Snow and ice feedbacks prolong effects of nuclear winter. Nature, 1984, 310, 667-670. | 13.7 | 53 |
| 111 | Optimal design of surface networks for observation of soil moisture. Journal of Geophysical Research, 1999, 104, 19743-19749. | 3.3 | 53 |
| 112 | Forty-five years of observed soil moisture in the Ukraine: No summer desiccation (yet). Geophysical Research Letters, 2005, 32, . | 1.5 | 53 |
| 113 | Solar radiation management impacts on agriculture in China: A case study in the Geoengineering Model Intercomparison Project (GeoMIP). Journal of Geophysical Research D: Atmospheres, 2014, 119, 8695-8711. | 1.2 | 53 |
| 114 | Impact of Volcanic Eruptions on Decadal to Centennial Fluctuations of Arctic Sea Ice Extent during the Last Millennium and on Initiation of the Little Ice Age. Journal of Climate, 2018, 31, 2145-2167. | 1.2 | 52 |
| 115 | A latitudinally dependent volcanic dust veil index, and its effect on climate simulations. Journal of Volcanology and Geothermal Research, 1981, 11, 67-80. | 0.8 | 51 |
| 116 | Consequences of Regional-Scale Nuclear Conflicts. Science, 2007, 315, 1224-1225. | 6.0 | 51 |
| 117 | A new Geoengineering Model Intercomparison Project (GeoMIP) experiment designed for climate and chemistry models. Geoscientific Model Development, 2015, 8, 43-49. | 1.3 | 51 |
| 118 | Winter warming and summer monsoon reduction after volcanic eruptions in Coupled Model Intercomparison Project 5 (CMIP5) simulations. Geophysical Research Letters, 2016, 43, 10,920. | 1.5 | 50 |
| 119 | Reaching 1.5 and 2.0â€‰Â°C global surface temperature targets using stratospheric aerosol geoengineering. Earth System Dynamics, 2020, 11, 579-601. | 2.7 | 50 |
| 120 | Southern Hemisphere atmospheric circulation effects of the 1991 Mount Pinatubo eruption. Geophysical Research Letters, 2007, 34, . | 1.5 | 49 |
| 121 | The volcanic record in ice cores for the past 2000 years. , 1996, , 533-546. | | 49 |
| 122 | Whither Geoengineering?. Science, 2008, 320, 1166-1167. | 6.0 | 48 |
| 123 | Potential ecological impacts of climate intervention by reflecting sunlight to cool Earth. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 3.3 | 46 |
| 124 | Cooling following large volcanic eruptions corrected for the effect of diffuse radiation on tree rings. Geophysical Research Letters, 2005, 32, . | 1.5 | 45 |
| 125 | Simulation and observations of stratospheric aerosols from the 2009 Sarychev volcanic eruption. Journal of Geophysical Research, 2011, 116, . | 3.3 | 45 |
| 126 | An overview of the Geoengineering Model Intercomparison Project (GeoMIP). Journal of Geophysical Research D: Atmospheres, 2013, 118, 13,103. | 1.2 | 45 |

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|---|---|---|---|
| 127 | Arctic sea ice and atmospheric circulation under the GeoMIP G1 scenario. Journal of Geophysical Research D: Atmospheres, 2014, 119, 567-583. | 1.2 | 45 |
| 128 | Resilience to global food supply catastrophes. Environment Systems and Decisions, 2015, 35, 301-313. | 1.9 | 44 |
| 129 | Diurnal asymmetry of climatic response to increased CO2and aerosols: Forcings and feedbacks. Journal of Geophysical Research, 1995, 100, 26211. | 3.3 | 43 |
| 130 | Surface Air Temperature Simulations by AMIP General Circulation Models: Volcanic and ENSO Signals and Systematic Errors. Journal of Climate, 1998, 11, 1538-1552. | 1.2 | 43 |
| 131 | Northern Hemisphere winter warming and summer monsoon reduction after volcanic eruptions over the last millennium. Journal of Geophysical Research D: Atmospheres, 2017, 122, 7971-7989. | 1.2 | 43 |
| 132 | Rapidly expanding nuclear arsenals in Pakistan and India portend regional and global catastrophe. Science Advances, 2019, 5, eaay5478. | 4.7 | 43 |
| 133 | Self-assured destruction: The climate impacts of nuclear war. Bulletin of the Atomic Scientists, 2012, 68, 66-74. | 0.2 | 42 |
| 134 | Impacts of stratospheric sulfate geoengineering on tropospheric ozone. Atmospheric Chemistry and Physics, 2017, 17, 11913-11928. | 1.9 | 42 |
| 135 | Solar dimming and CO2effects on soil moisture trends. Geophysical Research Letters, 2006, 33, . | 1.5 | 41 |
| 136 | Multi-model comparison of the volcanic sulfate deposition from the 1815 eruption of Mt.ÂTambora. Atmospheric Chemistry and Physics, 2018, 18, 2307-2328. | 1.9 | 41 |
| 137 | El ChinchÃ³n eruption: The dust cloud of the century. Nature, 1983, 301, 373-374. | 13.7 | 40 |
| 138 | Evaluation of Intergovernmental Panel on Climate Change Fourth Assessment soil moisture simulations for the second half of the twentieth century. Journal of Geophysical Research, 2007, 112, . | 3.3 | 40 |
| 139 | Negligible climatic effects from the 2008 Okmok and Kasatochi volcanic eruptions. Journal of Geophysical Research, 2010, 115, . | 3.3 | 39 |
| 140 | Petrological and volcanological constraints on volcanic sulfur emissions to the atmosphere. Geophysical Monograph Series, 2003, , 11-40. | 0.1 | 37 |
| 141 | Impacts of a nuclear war in South Asia on rice production in Mainland China. Climatic Change, 2013, 116, 357-372. | 1.7 | 37 |
| 142 | Sea spray geoengineering experiments in the geoengineering model intercomparison project (GeoMIP): Experimental design and preliminary results. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,175. | 1.2 | 37 |
| 143 | 100 Years of Progress in Understanding the Stratosphere and Mesosphere. Meteorological Monographs, 2019, 59, 27.1-27.62. | 5.0 | 37 |
| 144 | Arctic cryosphere response in the Geoengineering Model Intercomparison Project G3 and G4 scenarios. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1308-1321. | 1.2 | 36 |

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| 145 | Spatial Variation of Soil Moisture in China: Geostatistical Characterization.. Journal of the Meteorological Society of Japan, 2001, 79, 555-574. | 0.7 | 36 |
| 146 | Lidar validation of SAGE II aerosol measurements after the 1991 Mount Pinatubo eruption. Journal of Geophysical Research, 2002, 107, ACL 3-1. | 3.3 | 35 |
| 147 | Title is missing!. Climatic Change, 1999, 42, 663-675. | 1.7 | 34 |
| 148 | Soil moisture simulations in revised AMIP models. Journal of Geophysical Research, 2000, 105, 26635-26644. | 3.3 | 34 |
| 149 | Potential effects of global climatic change on the phenology and yield of maize in venezuela. Climatic Change, 1995, 29, 189-211. | 1.7 | 33 |
| 150 | Trends in moments of climatic indices. Geophysical Research Letters, 2002, 29, 14-1. | 1.5 | 33 |
| 151 | Modelling land cover change impact on the summer climate of the Marmara Region, Turkey. International Journal of Global Warming, 2011, 3, 194. | 0.2 | 33 |
| 152 | Impacts of a nuclear war in South Asia on soybean and maize production in the Midwest United States. Climatic Change, 2013, 116, 373-387. | 1.7 | 33 |
| 153 | Influences of soil moisture and vegetation on convective precipitation forecasts over the United States Great Plains. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9338-9358. | 1.2 | 33 |
| 154 | Model physics and chemistry causing intermodel disagreement within the VolMIP-Tambora Interactive Stratospheric Aerosol ensemble. Atmospheric Chemistry and Physics, 2021, 21, 3317-3343. | 1.9 | 33 |
| 155 | Sensitivity of stratospheric geoengineering with black carbon to aerosol size and altitude of injection. Journal of Geophysical Research, 2012, 117, . | 3.3 | 32 |
| 156 | Climatic impact of the longâ€lasting 1783 Laki eruption: Inapplicability of massâ€independent sulfur isotopic composition measurements. Journal of Geophysical Research, 2012, 117, . | 3.3 | 32 |
| 157 | Modeling the 1783â€“1784 Laki Eruption in Iceland: 2. Climate Impacts. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6770-6790. | 1.2 | 32 |
| 158 | Stratospheric Aerosol Geoengineering. Issues in Environmental Science and Technology, 2014, , 162-185. | 0.4 | 32 |
| 159 | Volcanic effects on climate: recent advances and future avenues. Bulletin of Volcanology, 2022, 84, . | 1.1 | 32 |
| 160 | The number and magnitude of large explosive volcanic eruptions between 904 and 1865 A.D.: Quantitative evidence from a new South Pole ice core. Geophysical Monograph Series, 2003, , 165-176. | 0.1 | 30 |
| 161 | Response to Comments on "Large Volcanic Aerosol Load in the Stratosphere Linked to Asian Monsoon Transport". Science, 2013, 339, 647-647. | 6.0 | 29 |
| 162 | Decadal reduction of Chinese agriculture after a regional nuclear war. Earth's Future, 2015, 3, 37-48. | 2.4 | 28 |

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| 163 | Robust winter warming over Eurasia under stratospheric sulfate geoengineering â€“ the role of stratospheric dynamics. Atmospheric Chemistry and Physics, 2021, 21, 6985-6997. | 1.9 | 28 |
| 164 | Surface climate responses to explosive volcanic eruptions seen in long European temperature records and mid-to-high latitude tree-ring density around the Northern Hemisphere. Geophysical Monograph Series, 2003, , 239-254. | 0.1 | 27 |
| 165 | Tropical volcanism enhanced the East Asian summer monsoon during the last millennium. Nature Communications, 2022, 13, . | 5.8 | 27 |
| 166 | The Volcanic Contribution to Climate Change of the Past 100 Years. Developments in Atmospheric Science, 1991, , 429-443. | 0.3 | 26 |
| 167 | Albedo enhancement by stratospheric sulfur injections: More research needed. Earth's Future, 2016, 4, 644-648. | 2.4 | 26 |
| 168 | Detection of volcanic, CO2, and ENSO signals in surface air temperature. Advances in Space Research, 1985, 5, 53-56. | 1.2 | 25 |
| 169 | Spatial and temporal variability of the stratospheric aerosol cloud produced by the 1991 Mount Pinatubo eruption. Journal of Geophysical Research, 2003, 108, . | 3.3 | 25 |
| 170 | North Atlantic Oscillation response in GeoMIP experiments G6solar and G6sulfur: why detailed modelling is needed for understanding regional implications of solar radiation management. Atmospheric Chemistry and Physics, 2021, 21, 1287-1304. | 1.9 | 25 |
| 171 | GCM evaluation of a mechanism for El NiÃ±o triggering by the El ChichÃ³n ash cloud. Geophysical Research Letters, 1995, 22, 2369-2372. | 1.5 | 24 |
| 172 | Nuclear winter. Wiley Interdisciplinary Reviews: Climate Change, 2010, 1, 418-427. | 3.6 | 24 |
| 173 | High resolution ice core records of late Holocene volcanism: Current and future contributions from the Greenland PARCA core. Geophysical Monograph Series, 2003, , 153-164. | 0.1 | 22 |
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