Tomonori Sato

List of Publications by Year
in descending order

72 papers	2,838 citations	279487 23 h-index	174990 52 g-index
72 all docs	72 docs citations	72 times ranked	3260 citing authors

#	Article	IF	Citations
1	Holocene moisture evolution in arid central Asia and its out-of-phase relationship with Asian monsoon history. Quaternary Science Reviews, 2008, 27, 351-364.	1.4	967
2	Projection of global warming onto regional precipitation over Mongolia using a regional climate model. Journal of Hydrology, 2007, 333, 144-154.	2.3	282
3	Diurnal Cycle of Precipitation in the Tropics Simulated in a Global Cloud-Resolving Model. Journal of Climate, 2009, 22, 4809-4826.	1.2	214
4	How Does the Tibetan Plateau Affect the Transition of Indian Monsoon Rainfall?. Monthly Weather Review, 2007, 135, 2006-2015.	0.5	76
5	Precipitation Changes in a Climate With 2â€K Surface Warming From Large Ensemble Simulations Using 60â€km Global and 20â€km Regional Atmospheric Models. Geophysical Research Letters, 2019, 46, 435-442.	1.5	65
6	Resolution Dependency of the Diurnal Cycle of Convective Clouds over the Tibetan Plateau in a Mesoscale Model. Journal of the Meteorological Society of Japan, 2008, 86A, 17-31.	0.7	57
7	Impact of diabatic heating over the Tibetan Plateau on subsidence over northeast Asian arid region. Geophysical Research Letters, 2005, 32, .	1.5	55
8	Water sources in semiarid northeast Asia as revealed by field observations and isotope transport model. Journal of Geophysical Research, 2007, 112, .	3.3	54
9	Recent Intensification of the Western Pacific Subtropical High Associated with the East Asian Summer Monsoon. Journal of Climate, 2015, 28, 2873-2883.	1.2	48
10	Interannual and spatial variability of solar radiation energy potential in Kenya using Meteosat satellite. Renewable Energy, 2018, 116, 88-96.	4.3	48
11	Diurnal Cycle of Convective Instability around the Central Mountains in Japan during the Warm Season. Journals of the Atmospheric Sciences, 2005, 62, 1626-1636.	0.6	47
12	Dust storms generated by mesoscale cold fronts in the Tarim Basin, Northwest China. Geophysical Research Letters, 2005, 32, .	1.5	46
13	Influences of subtropical jet and Tibetan Plateau on precipitation pattern in Asia: Insights from regional climate modeling. Quaternary International, 2009, 194, 148-158.	0.7	43
14	Validating a regional climate modelâ€™s downscaling ability for East Asian summer monsoonal interannual variability. Climate Dynamics, 2013, 41, 2411-2426.	1.7	39
15	Mechanism of Orographic Precipitation around the Meghalaya Plateau Associated with Intraseasonal Oscillation and the Diurnal Cycle. Monthly Weather Review, 2013, 141, 2451-2466.	0.5	39
16	Recent increase in heat wave frequency around Mongolia: role of atmospheric forcing and possible influence of soil moisture deficit. Atmospheric Science Letters, 2016, 17, 135-140.	0.8	36
17	Intensification of hot Eurasian summers by climate change and landâ€“atmosphere interactions. Scientific Reports, 2019, 9, 10866.	1.6	34
18	Contrasting Features of Monsoon Precipitation Around the Meghalaya Plateau Under Westerly and Easterly Regimes. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9591-9610.	1.2	33

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19	Observed behaviours of precipitable water vapour and precipitation intensity in response to upper air profiles estimated from surface air temperature. Scientific Reports, 2017, 7, 4233.	1.6	32
20	A Two-Dimensional Numerical Study on Diurnal Cycle of Mountain Lee Precipitation. Journals of the Atmospheric Sciences, 2003, 60, 1992-2003.	0.6	31
21	Impact of Initialized Land Surface Temperature and Snowpack on Subseasonal to Seasonal Prediction Project, Phase I (LS4P-I): organization and experimental design. Geoscientific Model Development, 2021, 14, 4465-4494.	1.3	31
22	Effects of Synoptic-Scale Control on Long-Term Declining Trends of Summer Fog Frequency over the Pacific Side of Hokkaido Island. Journal of Applied Meteorology and Climatology, 2013, 52, 2226-2242.	0.6	27
23	Memory effects of Eurasian land processes cause enhanced cooling in response to sea ice loss. Nature Communications, 2019, 10, 5111.	5.8	26
24	Impact of extensive irrigation on the formation of cumulus clouds. Geophysical Research Letters, 2008, 35, .	1.5	25
25	A composite analysis of diurnal cycle of GPS precipitable water vapor in central Japan during Calm Summer Days. Theoretical and Applied Climatology, 2008, 92, 15-29.	1.3	24
26	Multiâ€‹scp›GCM‹/scp› by multiâ€‹scp›RAM‹/scp› experiments for dynamical downscaling on summertime climate change in Hokkaido. Atmospheric Science Letters, 2015, 16, 297-304.	0.8	24
27	Vegetation and topographic control of cloud activity over arid/semiarid Asia. Journal of Geophysical Research, 2007, 112, .	3.3	20
28	Spring diurnal cycle of clouds over Tibetan Plateau: Global cloudâ€‹resolving simulations and satellite observations. Geophysical Research Letters, 2007, 34, .	1.5	20
29	Regional Climate Response of Middle Eastern, African, and South Asian Monsoon Regions to Explosive Volcanism and ENSO Forcing. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7580-7598.	1.2	20
30	Analysis of Climate Trends and Leading Modes of Climate Variability for MENA Region. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13,074.	1.2	19
31	Towards understanding the global and regional climatic impacts of Modoki magnitude. Global and Planetary Change, 2019, 172, 223-241.	1.6	19
32	Sharp rises in large-scale, long-duration precipitation extremes with higher temperatures over Japan. Npj Climate and Atmospheric Science, 2021, 4, .	2.6	19
33	Extensive dust outbreaks following the morning inversion breakup in the Taklimakan Desert. Journal of Geophysical Research, 2005, 110, .	3.3	18
34	Role of soil moisture-atmosphere feedback during high temperature events in 2002 over Northeast Eurasia. Progress in Earth and Planetary Science, 2018, 5, .	1.1	18
35	Extreme precipitation intensity in future climates associated with the Clausius-Clapeyron-like relationship. Hydrological Research Letters, 2014, 8, 108-113.	0.3	17
36	A possible linkage of Eurasian heat wave and East Asian heavy rainfall in Relation to the Rapid Arctic warming. Environmental Research, 2022, 209, 112881.	3.7	17

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37	Future Changes in Monthly Extreme Precipitation in Japan Using Large-Ensemble Regional Climate Simulations. Journal of Hydrometeorology, 2019, 20, 563-574.	0.7	16
38	Potential impact of spatial patterns of future atmospheric warming on Asian dust emission. Atmospheric Environment, 2011, 45, 6682-6695.	1.9	15
39	Response of the Baiu Rainband to Northwest Pacific SST Anomalies and Its Impact on Atmospheric Circulation. Journal of Climate, 2016, 29, 3075-3093.	1.2	15
40	A numerical experiment on the influence of the interannual variation of sea surface temperature on terrestrial precipitation in northern Japan during the cold season. Water Resources Research, 2013, 49, 7763-7777.	1.7	14
41	Twiceâ€Daily Monsoon Precipitation Maxima in the Himalayas Driven by Land Surface Effects. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034255.	1.2	12
42	Snow/Ice and Cloud Responses to Future Climate Change around Hokkaido. Scientific Online Letters on the Atmosphere, 2011, 7, 205-208.	0.6	12
43	Regional Projection of Tropical-Cyclone-Induced Extreme Precipitation around Japan Based on Large Ensemble Simulations. Scientific Online Letters on the Atmosphere, 2020, 16, 23-29.	0.6	12
44	Prediction of climatic suitability for wine grape production under the climatic change in Hokkaido. J Agricultural Meteorology, 2016, 72, 167-172.	0.8	11
45	An Oceanic Impact of the Kuroshio on Surface Air Temperature on the Pacific Coast of Japan in Summer: Regional H2O Greenhouse Gas Effect. Journal of Climate, 2015, 28, 7128-7144.	1.2	10
46	Seasonal and diurnal variability in historical warming due to the urbanization of Hokkaido, Japan. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5437-5445.	1.2	9
47	Spatio-Temporal Variation of High-Temperature Events in Hokkaido, North Japan. Journal of the Meteorological Society of Japan, 2014, 92, 327-346.	0.7	9
48	The TianShan Rain-shadow Influence on the Arid Climate Formation in Northwestern China. Scientific Online Letters on the Atmosphere, 2005, 1, 13-16.	0.6	8
49	Numerical experiments on cloud streets in the lee of island arcs during cold-air outbreaks. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	8
50	Diurnal Variation of Convective Activity and Precipitable Water around Ulaanbaator, Mongolia, and the Impact of Soil Moisture on Convective Activity during Nighttime. Monthly Weather Review, 2008, 136, 1401-1415.	0.5	8
51	Decreasing number of propagating mesoscale convective systems in Bangladesh and surrounding area during 1998â€“2015. Atmospheric Science Letters, 2019, 20, e879.	0.8	8
52	Performance analysis of short-term electricity demand with meteorological parameters. , 2017, , .		7
53	Direct measurement of leaf area index in a deciduous needle-leaf forest, eastern Siberia. Polar Science, 2020, 25, 100550.	0.5	7
54	Ocean Sensitivity to Periodic and Constant Volcanism. Scientific Reports, 2020, 10, 293.	1.6	7

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55	The Distribution of Cool Spots as Microrefugia in a Mountainous Area. PLoS ONE, 2015, 10, e0135732.	1.1	7
56	Role of Siberian Land-Atmosphere Coupling in the Development of the August Okhotsk High in 2008. Journal of the Meteorological Society of Japan, 2015, 93, 229-244.	0.7	6
57	Effect of ENSO phase on the contribution of environmental variables to tropical cyclone genesis in the western North Pacific. International Journal of Climatology, 2019, 39, 2461-2473.	1.5	6
58	Precipitable Water Vapor around Orographically Induced Convergence Line. Scientific Online Letters on the Atmosphere, 2006, 2, 25-28.	0.6	6
59	Evaluating the Role of Snow Cover in Urban Canopy Layer on the Urban Heat Island in Sapporo, Japan with a Regional Climate Model. Journal of the Meteorological Society of Japan, 2015, 93, 581-592.	0.7	5
60	Impact of Land-Use Change on Winter Precipitation in Hokkaido, Japan. Scientific Online Letters on the Atmosphere, 2015, 11, 95-99.	0.6	4
61	Analyses of Extreme Precipitation Associated with the Kinugawa River Flood in September 2015 Using a Large Ensemble Downscaling Experiment. Journal of the Meteorological Society of Japan, 2019, 97, 387-401.	0.7	4
62	Sensitivity of cool summer-induced sterility of rice to increased growing-season temperatures: A case study in Hokkaido, Japan. J Agricultural Meteorology, 2014, 70, 25-40.	0.8	4
63	Performance of Dynamic Downscaling for Extreme Weather Event in Eastern Mongolia: Case Study of Severe Windstorm on 26 May 2008. Scientific Online Letters on the Atmosphere, 2011, 7, 117-120.	0.6	3
64	Verification of Downscaling Framework for Interannual Variation of Tropical Cyclone in Western North Pacific. Scientific Online Letters on the Atmosphere, 2011, 7, 169-172.	0.6	3
65	Hourly Variation of Wind Speeds in the Philippines and Its Potential Impact on the Stability of the Power System. Energies, 2021, 14, 2310.	1.6	2
66	Cellulose Oxygen Isotopes of Sphagnum and Vascular Plants in a Peat Core Reveal Climate Change in Northern Japan Over the Past 2,000ÂYears. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009597.	1.0	2
67	Influence of Terrestrial Precipitation on the Variability of Extreme Sea Levels along the Coast of Bangladesh. Water (Switzerland), 2021, 13, 2915.	1.2	2
68	Responses of Polar Mesocyclone Genesis to Topographic Forcing along the Eastern Coast of Eurasian Continent. Journal of the Meteorological Society of Japan, 2020, 98, 1261-1277.	0.7	2
69	Controlling Factors of Historical Variation of Winter Tibetan Plateau Snow Cover Revealed by Largeâ€Ensemble Experiments. Journal of Geophysical Research D: Atmospheres, 2021, 126, .	1.2	1
70	Observed Evidence of Enhanced Probability of Mesoscale Convective System Initiations due to Land Surface Heterogeneity in Semiarid East Asia. Scientific Online Letters on the Atmosphere, 2019, 15, 143-148.	0.6	1
71	Impact of SST on Present and Future Extreme Precipitation in Hokkaido Investigated Considering Weather Patterns. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	1
72	Decrease of winter cyclone passage over northern Japan due to the reduction in the regional cyclogenesis associated with cold air outbreak. International Journal of Climatology, 0, , .	1.5	1