

# Thomas Nauss

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8819106/publications.pdf>

Version: 2024-02-01

73  
papers

3,563  
citations

136940

32  
h-index

144002

57  
g-index

77  
all docs

77  
docs citations

77  
times ranked

5084  
citing authors

#	ARTICLE	IF	CITATIONS
1	Climateâ€œland-use interactions shape tropical mountain biodiversity and ecosystem functions. <i>Nature</i> , 2019, 568, 88-92.	27.8	313
2	Improving performance of spatio-temporal machine learning models using forward feature selection and target-oriented validation. <i>Environmental Modelling and Software</i> , 2018, 101, 1-9.	4.5	233
3	Predictors of elevational biodiversity gradients change from single taxa to the multi-taxa community level. <i>Nature Communications</i> , 2016, 7, 13736.	12.8	229
4	Multiple forest attributes underpin the supply of multiple ecosystem services. <i>Nature Communications</i> , 2018, 9, 4839.	12.8	182
5	Improving the accuracy of rainfall rates from optical satellite sensors with machine learning â€œ A random forests-based approach applied to MSG SEVIRI. <i>Remote Sensing of Environment</i> , 2014, 141, 129-143.	11.0	158
6	Evaluating machine learning approaches for the interpolation of monthly air temperature at Mt. Kilimanjaro, Tanzania. <i>Spatial Statistics</i> , 2015, 14, 91-113.	1.9	142
7	Quantifying and Mapping Ecosystem Services Supplies and Demands: A Review of Remote Sensing Applications. <i>Environmental Science &amp; Technology</i> , 2012, 46, 8529-8541.	10.0	112
8	Mapping Daily Air Temperature for Antarctica Based on MODIS LST. <i>Remote Sensing</i> , 2016, 8, 732.	4.0	89
9	Comparison of four machine learning algorithms for their applicability in satellite-based optical rainfall retrievals. <i>Atmospheric Research</i> , 2016, 169, 424-433.	4.1	80
10	Middle Stone Age foragers resided in high elevations of the glaciated Bale Mountains, Ethiopia. <i>Science</i> , 2019, 365, 583-587.	12.6	79
11	Heterogeneityâ€œdiversity relationships differ between and within trophic levels in temperate forests. <i>Nature Ecology and Evolution</i> , 2020, 4, 1204-1212.	7.8	76
12	Ground Fog Detection from Space Based on MODIS Daytime Dataâ€œA Feasibility Study. <i>Weather and Forecasting</i> , 2005, 20, 989-1005.	1.4	75
13	Temperature versus resource constraints: which factors determine bee diversity on <sc>M</sc>ount <sc>K</sc>ilimanjaro, <sc>T</sc>anzania?. <i>Global Ecology and Biogeography</i> , 2015, 24, 642-652.	5.8	73
14	Seasonal and long-term vegetation dynamics from 1-km GIMMS-based NDVI time series at Mt. Kilimanjaro, Tanzania. <i>Remote Sensing of Environment</i> , 2016, 178, 70-83.	11.0	73
15	Precipitation Estimates from MSG SEVIRI Daytime, Nighttime, and Twilight Data with Random Forests. <i>Journal of Applied Meteorology and Climatology</i> , 2014, 53, 2457-2480.	1.5	68
16	Radar vision in the mapping of forest biodiversity from space. <i>Nature Communications</i> , 2019, 10, 4757.	12.8	66
17	Plant and animal functional diversity drive mutualistic network assembly across an elevational gradient. <i>Nature Communications</i> , 2018, 9, 3177.	12.8	63
18	Climatic control of radial growth of <i>Cedrela montana</i> in a humid mountain rainforest in southern Ecuador. <i>Erdkunde</i> , 2009, 63, 337-345.	0.8	63

#	ARTICLE	IF	CITATIONS
19	Precipitation process and rainfall intensity differentiation using Meteosat Second Generation Spinning Enhanced Visible and Infrared Imager data. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	61
20	Discriminating raining from non-raining clouds at mid-latitudes using multispectral satellite data. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 5031-5036.	4.9	60
21	A feasibility study of daytime fog and low stratus detection with TERRA/AQUA-MODIS over land. <i>Meteorological Applications</i> , 2006, 13, 111.	2.1	59
22	Land-cover classification in the Andes of southern Ecuador using Landsat ETM+ data as a basis for SVAT modelling. <i>International Journal of Remote Sensing</i> , 2009, 30, 1867-1886.	2.9	55
23	Thermal structure of a megadiverse Andean mountain ecosystem in southern Ecuador and its regionalization. <i>Erdkunde</i> , 2009, 63, 321-335.	0.8	55
24	Discriminating raining from non-raining cloud areas at mid-latitudes using meteosat second generation SEVIRI nighttime data. <i>Meteorological Applications</i> , 2008, 15, 219-230.	2.1	53
25	Eco-meteorological characteristics of the southern slopes of Kilimanjaro, Tanzania. <i>International Journal of Climatology</i> , 2016, 36, 3245-3258.	3.5	52
26	Discriminating raining from non-raining clouds at mid-latitudes using meteosat second generation daytime data. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 2341-2349.	4.9	48
27	Formation of Convective Clouds at the Foothills of the Tropical Eastern Andes (South Ecuador). <i>Journal of Applied Meteorology and Climatology</i> , 2009, 48, 1682-1695.	1.5	44
28	Near surface air humidity in a megadiverse Andean mountain ecosystem of southern Ecuador and its regionalization. <i>Agricultural and Forest Meteorology</i> , 2012, 152, 17-30.	4.8	44
29	Optical properties of selected plants from a tropical mountain ecosystem – Traits for plant functional types to parametrize a land surface model. <i>Ecological Modelling</i> , 2011, 222, 493-502.	2.5	39
30	The intercomparison of selected cloud retrieval algorithms. <i>Atmospheric Research</i> , 2005, 78, 46-78.	4.1	37
31	Machine learning and multi-sensor based modelling of woody vegetation in the Molopo Area, South Africa. <i>Remote Sensing of Environment</i> , 2019, 222, 195-203.	11.0	37
32	Satellite-based retrieval of ice cloud properties using a semianalytical algorithm. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	35
33	Species richness is more important for ecosystem functioning than species turnover along an elevational gradient. <i>Nature Ecology and Evolution</i> , 2021, 5, 1582-1593.	7.8	35
34	El Niño meets La Niña – anomalous rainfall patterns in the “traditional” El Niño region of southern Ecuador. <i>Erdkunde</i> , 2011, 65, 151-167.	0.8	34
35	From local spectral measurements to maps of vegetation cover and biomass on the Qinghai-Tibet-Plateau: Do we need hyperspectral information?. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2017, 55, 21-31.	2.8	33
36	Seasonality of stable isotope composition of atmospheric water input at the southern slopes of Mt. Kilimanjaro, Tanzania. <i>Hydrological Processes</i> , 2017, 31, 3932-3947.	2.6	32

#	ARTICLE	IF	CITATIONS
37	Verification of precipitation from regional climate simulations and remote-sensing observations with respect to ground-based observations in the upper Danube catchment. <i>Meteorologische Zeitschrift</i> , 2007, 16, 275-293.	1.0	31
38	Rainfall-Rate Assignment Using MSG SEVIRI Data—A Promising Approach to Spaceborne Rainfall-Rate Retrieval for Midlatitudes. <i>Journal of Applied Meteorology and Climatology</i> , 2010, 49, 1477-1495.	1.5	31
39	The semianalytical cloud retrieval algorithm for SCIAMACHY I. The validation. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 1905-1911.	4.9	30
40	Projecting land-use and land-cover changes in a tropical mountain forest of Southern Ecuador. <i>Journal of Land Use Science</i> , 2014, 9, 1-33.	2.2	28
41	Seasonality and diurnal pattern of very low clouds in a deeply incised valley of the eastern tropical Andes (South Ecuador) as observed by a cost-effective WebCam system. <i>Meteorological Applications</i> , 2008, 15, 281-291.	2.1	27
42	Synergistic effects of climate and land use on avian beta-diversity. <i>Diversity and Distributions</i> , 2017, 23, 1246-1255.	4.1	27
43	Automatic classification of Google Earth images for a larger scale monitoring of bush encroachment in South Africa. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2016, 50, 89-94.	2.8	25
44	Multidecadal Trends and Interannual Variability of Rainfall as Observed from Five Lowland Stations at Mt. Kilimanjaro, Tanzania. <i>Journal of Hydrometeorology</i> , 2017, 18, 349-361.	1.9	25
45	The Impact of Different Terrain Configurations on the Formation and Dynamics of Katabatic Flows: Idealised Case Studies. <i>Boundary-Layer Meteorology</i> , 2010, 134, 307-325.	2.3	24
46	Assignment of rainfall confidence values using multispectral satellite data at mid-latitudes: first results. <i>Advances in Geosciences</i> , 0, 10, 99-102.	12.0	24
47	A Comparative Study of Cross-Product NDVI Dynamics in the Kilimanjaro Region—A Matter of Sensor, Degradation Calibration, and Significance. <i>Remote Sensing</i> , 2016, 8, 159.	4.0	22
48	Reflection and transmission of solar light by clouds: asymptotic theory. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 5537-5545.	4.9	20
49	Model parameterization to simulate and compare the PAR absorption potential of two competing plant species. <i>International Journal of Biometeorology</i> , 2010, 54, 283-295.	3.0	19
50	Introduction of an automatic and open-source radio-tracking system for small animals. <i>Methods in Ecology and Evolution</i> , 2019, 10, 2163-2172.	5.2	19
51	Retrieval of warm cloud optical properties using simple approximations. <i>Remote Sensing of Environment</i> , 2011, 115, 1317-1325.	11.0	18
52	remote: Empirical Orthogonal Teleconnections in <i>R</i> . <i>Journal of Statistical Software</i> , 2015, 65, .	3.7	17
53	First results on a process-oriented rain area classification technique using Meteosat Second Generation SEVIRI nighttime data. <i>Advances in Geosciences</i> , 0, 16, 63-72.	12.0	14
54	Weather type dependent quality assessment of a satellite-based rainfall detection scheme for the mid-latitudes. <i>Meteorology and Atmospheric Physics</i> , 2010, 107, 81-89.	2.0	13

#	ARTICLE	IF	CITATIONS
55	An evaluation of a semi-analytical cloud property retrieval using MSG SEVIRI, MODIS and CloudSat. <i>Atmospheric Research</i> , 2013, 122, 111-135.	4.1	13
56	The Intercomparison of Cloud Parameters Derived Using Multiple Satellite Instruments. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2007, 45, 195-200.	6.3	12
57	Heterogeneous patterns of abundance of epigeic arthropod taxa along a major elevation gradient. <i>Biotropica</i> , 2017, 49, 217-228.	1.6	12
58	Analyzing the relationship between historic canopy dynamics and current plant species diversity in the herb layer of temperate forests using long-term Landsat time series. <i>Remote Sensing of Environment</i> , 2019, 232, 111305.	11.0	12
59	High-Resolution MaxEnt Modelling of Habitat Suitability for Maternity Colonies of the Barbastelle Bat <i>Barbastella barbastellus</i> (Schreber, 1774) in Rhineland-Palatinate, Germany. <i>Acta Chiropterologica</i> , 2017, 19, 389-398.	0.6	11
60	Satellite-based high-resolution mapping of rainfall over southern Africa. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 2009-2019.	3.1	11
61	Spatial Patterns of Sea Surface Temperature Influences on East African Precipitation as Revealed by Empirical Orthogonal Teleconnections. <i>Frontiers in Earth Science</i> , 2016, 4, .	1.8	10
62	Beyond body size: consistent decrease of traits within orthopteran assemblages with elevation. <i>Ecology</i> , 2018, 99, 2090-2102.	3.2	10
63	Hourly gridded air temperatures of South Africa derived from MSG SEVIRI. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2019, 78, 261-267.	2.8	9
64	BatRack: An open-source multi-sensor device for wildlife research. <i>Methods in Ecology and Evolution</i> , 2021, 12, 1867-1874.	5.2	9
65	Revealing the potential of spectral and textural predictor variables in a neural network-based rainfall retrieval technique. <i>Remote Sensing Letters</i> , 2017, 8, 647-656.	1.4	8
66	High-Altitude Rock Shelters and Settlements in an African Alpine Ecosystem: The Bale Mountains National Park, Ethiopia. <i>Human Ecology</i> , 2018, 46, 587-600.	1.4	8
67	An operational MODIS processing scheme for PC dedicated to direct broadcasting applications in meteorology and earth sciences. <i>Computers and Geosciences</i> , 2005, 31, 804-808.	4.2	7
68	Does plant diversity affect the water balance of established grassland systems?. <i>Ecohydrology</i> , 2018, 11, e1945.	2.4	7
69	RSDB: an easy to deploy open-source web platform for remote sensing raster and point cloud data management, exploration and processing. <i>Ecography</i> , 2021, 44, 414-426.	4.5	6
70	Retrieving Precipitation with GOES, Meteosat, and Terra/MSG at the Tropics and Mid-latitudes. , 2007, , 509-519.		4
71	A glimpse at short-term controls of evapotranspiration along the southern slopes of Kilimanjaro. <i>Environmental Monitoring and Assessment</i> , 2017, 189, 465.	2.7	3
72	Operational discrimination of raining from non-raining clouds in mid-latitudes using multispectral satellite data. , 2008, , 171-194.		2

#	ARTICLE	IF	CITATIONS
73	Citizen Science and Digital Geomedia: Implementing a Biodiversity Information System in Cabo Verde. , 0, , .		1