Marco Tedesco

List of Publications by Year
in descending order

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78	5,598	76326 40	82547 72
papers	citations	h-index	g-index

82	82	82	4580
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The extreme melt across the Greenland ice sheet in 2012. Geophysical Research Letters, 2012, 39, .	4.0	397
2	Greenland ice sheet albedo feedback: thermodynamics and atmospheric drivers. Cryosphere, 2012, 6, 821-839.	3.9	327
3	Estimating the Greenland ice sheet surface mass balance contribution to future sea level rise using the regional atmospheric climate model MAR. Cryosphere, 2013, 7, 469-489.	3.9	325
4	A review of global satellite-derived snow products. Advances in Space Research, 2012, 50, 1007-1029.	2.6	242
5	Evidence and analysis of 2012 Greenland records from spaceborne observations, a regional climate model and reanalysis data. Cryosphere, 2013, 7, 615-630.	3.9	242
6	Melting trends over the Greenland ice sheet (1958â€“2009) from spaceborne microwave data and regional climate models. Cryosphere, 2011, 5, 359-375.	3.9	217
7	The role of albedo and accumulation in the 2010 melting record in Greenland. Environmental Research Letters, 2011, 6, 014005.	5.2	207
8	Snowmelt detection over the Greenland ice sheet from SSM/I brightness temperature daily variations. Geophysical Research Letters, 2007, 34, .	4.0	169
9	Efficient meltwater drainage through supraglacial streams and rivers on the southwest Greenland ice sheet. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1001-1006.	7.1	163
10	Artificial neural network-based techniques for the retrieval of SWE and snow depth from SSM/I data. Remote Sensing of Environment, 2004, 90, 76-85.	11.0	161
11	The darkening of the Greenland ice sheet: trends, drivers, and projections (1981â€“2100). Cryosphere, 2016, 10, 477-496.	3.9	152
12	Antarctic ice shelf potentially stabilized by export of meltwater in surface river. Nature, 2017, 544, 344-348.	27.8	124
13	Trends in Antarctic Peninsula surface melting conditions from observations and regional climate modeling. Journal of Geophysical Research F: Earth Surface, 2013, 118, 315-330.	2.8	116
14	GrSMBMIP: intercomparison of the modelled 1980â€“2012 surface mass balance over the Greenland Ice Sheet. Cryosphere, 2020, 14, 3935-3958.	3.9	111
15	Unprecedented atmospheric conditions (1948â€“2019) drive the 2019 exceptional melting season over the Greenland ice sheet. Cryosphere, 2020, 14, 1209-1223.	3.9	109
16	Retrieval of snow grain size over Greenland from MODIS. Remote Sensing of Environment, 2009, 113, 1976-1987.	11.0	96
17	Greenland Ice Sheet Surface Mass Loss: Recent Developments in Observation and Modeling. Current Climate Change Reports, 2017, 3, 345-356.	8.6	94
18	Ice dynamic response to two modes of surface lake drainage on the Greenland ice sheet. Environmental Research Letters, 2013, 8, 034007.	5.2	88

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19	Intercomparison of Electromagnetic Models for Passive Microwave Remote Sensing of Snow. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 2654-2666.	6.3	85
20	Oceanic transport of surface meltwater from the southern Greenland ice sheet. Nature Geoscience, 2016, 9, 528-532.	12.9	85
21	Evaluation of long-term Northern Hemisphere snow water equivalent products. Cryosphere, 2020, 14, 1579-1594.	3.9	85
22	Melting glaciers stimulate large summer phytoplankton blooms in southwest Greenland waters. Geophysical Research Letters, 2017, 44, 6278-6285.	4.0	82
23	Assessment and development of snowmelt retrieval algorithms over Antarctica from K-band spaceborne brightness temperature (1979â€“2008). Remote Sensing of Environment, 2009, 113, 979-997.	11.0	81
24	The air content of Larsen Ice Shelf. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	77
25	Estimating supraglacial lake depth in West Greenland using Landsat 8 and comparison with other multispectral methods. Cryosphere, 2016, 10, 15-27.	3.9	73
26	Annual Greenland accumulation rates (2009â€“2012) from airborne snow radar. Cryosphere, 2016, 10, 1739-1752.	3.9	73
27	Arctic cut-off high drives the poleward shift of a new Greenland melting record. Nature Communications, 2016, 7, 11723.	12.8	67
28	Toward Monitoring Surface and Subsurface Lakes on the Greenland Ice Sheet Using Sentinel-1 SAR and Landsat-8 OLI Imagery. Frontiers in Earth Science, 2017, 5, .	1.8	67
29	Direct measurements of meltwater runoff on the Greenland ice sheet surface. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10622-E10631.	7.1	66
30	Measurement and modeling of ablation of the bottom of supraglacial lakes in western Greenland. Geophysical Research Letters, 2012, 39, .	4.0	65
31	Diagnosing the extreme surface melt event over southwestern Greenland in 2007. Cryosphere, 2008, 2, 159-166.	3.9	64
32	Microwave emission from dry snow: a comparison of experimental and model results. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 2649-2656.	6.3	55
33	Assessing spatio-temporal variability and trends in modelled and measured Greenland Ice Sheet albedo (2000â€“2013). Cryosphere, 2014, 8, 2293-2312.	3.9	55
34	The Effect of Foehnâ€Induced Surface Melt on Firn Evolution Over the Northeast Antarctic Peninsula. Geophysical Research Letters, 2019, 46, 3822-3831.	4.0	55
35	Identification of atmospheric influences on the estimation of snow water equivalent from AMSR-E measurements. Remote Sensing of Environment, 2007, 111, 398-408.	11.0	50
36	In-situ multispectral and bathymetric measurements over a supraglacial lake in western Greenland using a remotely controlled watercraft. Cryosphere, 2011, 5, 445-452.	3.9	50

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37	The semi-analytical snow retrieval algorithm and its application to MODIS data. Remote Sensing of Environment, 2007, 111, 228-241.	11.0	46
38	Understanding Greenland ice sheet hydrology using an integrated multi-scale approach. Environmental Research Letters, 2013, 8, 015017.	5.2	46
39	Mapping the bathymetry of supraglacial lakes and streams on the Greenland ice sheet using field measurements and high-resolution satellite images. Cryosphere, 2014, 8, 215-228.	3.9	46
40	Derivation and validation of supraglacial lake volumes on the Greenland Ice Sheet from high-resolution satellite imagery. Remote Sensing of Environment, 2016, 183, 294-303.	11.0	46
41	A New Operational Snow Retrieval Algorithm Applied to Historical AMSR-E Brightness Temperatures. Remote Sensing, 2016, 8, 1037.	4.0	44
42	Dynamic Approaches for Snow Depth Retrieval From Spaceborne Microwave Brightness Temperature. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 1955-1967.	6.3	40
43	Impact of MODIS sensor calibration updates on Greenland Ice Sheet surface reflectance and albedo trends. Cryosphere, 2017, 11, 1781-1795.	3.9	40
44	Editorial "Remote sensing in hydrological sciences". Hydrology and Earth System Sciences, 2009, 13, 813-817.	4.9	38
45	Brightness Temperatures of Snow Melting/Refreezing Cycles: Observations and Modeling Using a Multilayer Dense Medium Theory-Based Model. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 3563-3573.	6.3	37
46	Exploring the Potential Impact of Greenland Meltwater on Stratification, Photosynthetically Active Radiation, and Primary Production in the Labrador Sea. Journal of Geophysical Research: Oceans, 2018, 123, 2570-2591.	2.6	37
47	Increased Greenland melt triggered by large-scale, year-round cyclonic moisture intrusions. Cryosphere, 2019, 13, 815-825.	3.9	37
48	Atmospheric drivers of Greenland surface melt revealed by selfâ€organizing maps. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5095-5114.	3.3	36
49	21st century projections of surface mass balance changes for major drainage systems of the Greenland ice sheet. Environmental Research Letters, 2012, 7, 045405.	5.2	33
50	Atmospheric Correction of AMSR-E Brightness Temperatures for Dry Snow Cover Mapping. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 320-324.	3.1	30
51	The Arctic. Bulletin of the American Meteorological Society, 2020, 101, S239-S286.	3.3	29
52	Study of the snow meltâ€“freeze cycle using multi-sensor data and snow modeling. Journal of Glaciology, 2004, 50, 419-426.	2.2	25
53	Seasonal monitoring of melt and accumulation within the deep percolation zone of the Greenland Ice Sheet and comparison with simulations of regional climate modeling. Cryosphere, 2018, 12, 1851-1866.	3.9	24
54	L-band ice-sheet brightness temperatures at Dome C, Antarctica: spectral emission modelling, temporal stability and impact of the ionosphere. Annals of Glaciology, 2004, 39, 391-396.	1.4	23

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55	Observations and statistical analysis of combined activeâ€“passive microwave space-borne data and snow depth at large spatial scales. Remote Sensing of Environment, 2007, 111, 382-397.	11.0	23
56	Southeast Greenland Winter Precipitation Strongly Linked to the Icelandic Low Position. Journal of Climate, 2018, 31, 4483-4500.	3.2	23
57	A new surface meltwater routing model for use on the Greenland Ice Sheet surface. Cryosphere, 2018, 12, 3791-3811.	3.9	23
58	Spatial Shift of Greenland Moisture Sources Related toÂEnhanced Arctic Warming. Geophysical Research Letters, 2019, 46, 14723-14731.	4.0	23
59	Microwave radiometric measurements of soil moisture in Italy. Hydrology and Earth System Sciences, 2003, 7, 937-948.	4.9	22
60	Investigating the local-scale influence of sea ice on Greenland surface melt. Cryosphere, 2017, 11, 2363-2381.	3.9	22
61	Mapping Ice Algal Blooms in Southwest Greenland From Space. Geophysical Research Letters, 2018, 45, 11,779.	4.0	21
62	Retrieval of dry-snow parameters from microwave radiometric data using a dense-medium model and genetic algorithms. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 2143-2151.	6.3	19
63	Melting over the northeast Antarctic Peninsula (1999â€“2009): evaluation of a high-resolution regional climate model. Cryosphere, 2018, 12, 2901-2922.	3.9	19
64	Calibration and evaluation of a high-resolution surface mass-balance model for Paakitsoq, West Greenland. Journal of Glaciology, 2012, 58, 1047-1062.	2.2	17
65	Application of Satellite Microwave Images in Estimating Snow Water Equivalent¹. Journal of the American Water Resources Association, 2008, 44, 1347-1362.	2.4	16
66	Comparative analysis of morphological, mineralogical and spectral properties of cryoconite in Jakobshavn IsbrÃ¦, Greenland, and Canada Glacier, Antarctica. Annals of Glaciology, 2013, 54, 147-157.	1.4	16
67	A wavelet melt detection algorithm applied to enhanced-resolution scatterometer data over Antarctica (2000â€“2009). Cryosphere, 2014, 8, 25-40.	3.9	16
68	Simulated Greenland Surface Mass Balance in the GISS ModelE2 GCM: Role of the Ice Sheet Surface. Journal of Geophysical Research F: Earth Surface, 2019, 124, 750-765.	2.8	15
69	Greenland Ice Sheet seasonal and spatial mass variability from model simulations and GRACE (2003â€“2012). Cryosphere, 2016, 10, 1259-1277.	3.9	14
70	Evaluating a Regional Climate Model Simulation of Greenland Ice Sheet Snow and Firn Density for Improved Surface Mass Balance Estimates. Geophysical Research Letters, 2019, 46, 12073-12082.	4.0	14
71	Multimodel Estimation of Snow Microwave Emission during CLPX 2003 Using Operational Parameterization of Microphysical Snow Characteristics. Journal of Hydrometeorology, 2008, 9, 1491-1505.	1.9	13
72	Controls on the Transport of Meltwater From the Southern Greenland Ice Sheet in the Labrador Sea. Journal of Geophysical Research: Oceans, 2019, 124, 3551-3560.	2.6	12

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73	Feasibility of improving a priori regional climate model estimates of Greenland ice sheet surface mass loss through assimilation of measured ice surface temperatures. Cryosphere, 2016, 10, 103-120.	3.9	10
74	Quantifying spatiotemporal variability of glacier algal blooms and the impact on surface albedo in southwestern Greenland. Cryosphere, 2020, 14, 2687-2713.	3.9	9
75	Improving Greenland Surface Mass Balance Estimates Through the Assimilation of MODIS Albedo: A Case Study Along the Kâ€Transect. Geophysical Research Letters, 2018, 45, 6549-6556.	4.0	7
76	A New Dataset Integrating Public Socioeconomic, Physical Risk, and Housing Data for Climate Justice Metrics: A Test-Case Study in Miami. Environmental Justice, 2022, 15, 149-159.	1.5	5
77	Summer Greenland Blocking Diversity and Its Impact on the Surface Mass Balance of the Greenland Ice Sheet. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	4
78	Reanalysis Surface Mass Balance of the Greenland Ice Sheet Along Kâ€Transect (2000â€“2014). Geophysical Research Letters, 2021, 48, e2021GL094602.	4.0	0