Marie Dumont

List of Publications by Year
in descending order

51 papers	1,882 citations	218677 26 h-index	276875 41 g-index
113 all docs	113 docs citations	113 times ranked	2343 citing authors

#	Article	IF	Citations
1	X-Ray Tomography-Based Microstructure Representation in the Snow Microwave Radiative Transfer Model. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	6.3	6
2	On the energy budget of a low-Arctic snowpack. Cryosphere, 2022, 16, 127-142.	3.9	8
3	Propagating information from snow observations with CrocO ensemble data assimilation system: a 10-years case study over a snow depth observation network. Cryosphere, 2022, 16, 1281-1298.	3.9	6
4	Induction of spontaneous human neocentromere formation and long-term maturation. Journal of Cell Biology, 2021, 220, .	5.2	27
5	Fractional snow-covered area: scale-independent peak of winter parameterization. Cryosphere, 2021, 15, 615-632.	3.9	10
6	CrocO_v1.0: a particle filter to assimilate snowpack observations in a spatialised framework. Geoscientific Model Development, 2021, 14, 1595-1614.	3.6	17
7	Experimental and model-based investigation of the links between snow bidirectional reflectance and snow microstructure. Cryosphere, 2021, 15, 3921-3948.	3.9	11
8	Brief communication: Evaluation of the snow cover detection in the Copernicus High Resolution Snow & Ice Monitoring Service. Cryosphere, 2021, 15, 4975-4980.	3.9	9
9	A versatile method for computing optimized snow albedo from spectrally fixed radiative variables: VALHALLA v1.0. Geoscientific Model Development, 2021, 14, 7329-7343.	3.6	0
10	Human chromosomeâ€specific aneuploidy is influenced by <scp>DNA</scp> â€dependent centromeric features. EMBO Journal, 2020, 39, e102924.	7.8	79
11	Random forests as a tool to understand the snow depth distribution and its evolution in mountain areas. Hydrological Processes, 2020, 34, 5384-5401.	2.6	17
12	Spectral albedo measurements over snow-covered slopes: theory and slope effect corrections. Cryosphere, 2020, 14, 1497-1517.	3.9	37
13	A genetic memory initiates the epigenetic loop necessary to preserve centromere position. EMBO Journal, 2020, 39, e105505.	7.8	26
14	Snow albedo sensitivity to macroscopic surface roughness using a new ray-tracing model. Cryosphere, 2020, 14, 1651-1672.	3.9	20
15	Snow depth mapping from stereo satellite imagery in mountainous terrain: evaluation using airborne laser-scanning data. Cryosphere, 2020, 14, 2925-2940.	3.9	52
16	Simulating optical top-of-atmosphere radiance satellite images over snow-covered rugged terrain. Cryosphere, 2020, 14, 3995-4020.	3.9	11
17	Quantification of the radiative impact of light-absorbing particles during two contrasted snow seasons at Col du Lautaret (2058â€‰mâ€‰a.s.l., French Alps). Cryosphere, 2020, 14, 4553-4579.	3.9	26
18	Snow depth variability in the Northern Hemisphere mountains observed from space. Nature Communications, 2019, 10, 4629.	12.8	180

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19	Influence of light-absorbing particles on snow spectral irradiance profiles. Cryosphere, 2019, 13, 2169-2187.	3.9	31
20	Motion of dust particles in dry snow under temperature gradient metamorphism. Cryosphere, 2019, 13, 2345-2359.	3.9	14
21	57Âyears (1960â€“2017) of snow and meteorological observations from a mid-altitude mountain site (Col) Tj ETQq1 1 0.784314 rgB	9.9	30
22	Meteorological and evaluation datasets for snow modelling at 10 reference sites: description of in situ and bias-corrected reanalysis data. Earth System Science Data, 2019, 11, 865-880.	9.9	36
23	Review of Snow Data Assimilation Methods for Hydrological, Land Surface, Meteorological and Climate Models: Results from a COST HarmoSnow Survey. Geosciences (Switzerland), 2018, 8, 489.	2.2	35
24	Radiative forcing by light-absorbing particles in snow. Nature Climate Change, 2018, 8, 964-971.	18.8	216
25	Snow physical properties may be a significant determinant of lemming population dynamics in the high Arctic. Arctic Science, 2018, 4, 813-826.	2.3	38
26	Monitoring glacier albedo as aÂproxy to derive summer and annual surface mass balances from optical remote-sensing data. Cryosphere, 2018, 12, 271-286.	3.9	30
27	Technical note: A low-cost albedometer for snow and ice measurements â€“ theoretical results and application on a tropical mountain in Bolivia. Geoscientific Instrumentation, Methods and Data Systems, 2018, 7, 169-178.	1.6	3
28	Multi-Criteria Evaluation of Snowpack Simulations in Complex Alpine Terrain Using Satellite and In Situ Observations. Remote Sensing, 2018, 10, 1171.	4.0	22
29	Relative performance of empirical and physical models in assessing the seasonal and annual glacier surface mass balance of Saint-Sorlin Glacier (French Alps). Cryosphere, 2018, 12, 1367-1386.	3.9	28
30	The VIS/NIR Land and Snow BRDF Atlas for RTTOV: Comparison between MODIS MCD43C1 C5 and C6. Remote Sensing, 2018, 10, 21.	4.0	7
31	An Assessment of Existing Methodologies to Retrieve Snow Cover Fraction from MODIS Data. Remote Sensing, 2018, 10, 619.	4.0	58
32	On the reflectance spectroscopy of snow. Cryosphere, 2018, 12, 2371-2382.	3.9	53
33	A daytime VIIRS RGB pseudo composite for snow detection. Remote Sensing of Environment, 2017, 196, 134-139.	11.0	1
34	In situ continuous visible and near-infrared spectroscopy of an alpine snowpack. Cryosphere, 2017, 11, 1091-1110.	3.9	43
35	A multiphysical ensemble system of numerical snow modelling. Cryosphere, 2017, 11, 1173-1198.	3.9	74
36	Annual and Seasonal Glacier-Wide Surface Mass Balance Quantified from Changes in Glacier Surface State: A Review on Existing Methods Using Optical Satellite Imagery. Remote Sensing, 2017, 9, 507.	4.0	25

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37	A multilayer physically based snowpack model simulating direct and indirect radiative impacts of light-absorbing impurities in snow. Cryosphere, 2017, 11, 2633-2653.	3.9	61
38	Reconstructing the mass balance of Brewster Glacier, New Zealand, using MODIS-derived glacier-wide albedo. Cryosphere, 2016, 10, 2465-2484.	3.9	34
39	Phase relationships between orbital forcing and the composition of air trapped in Antarctic ice cores. Climate of the Past, 2016, 12, 729-748.	3.4	13
40	A 7-year dataset for driving and evaluating snow models at an Arctic site (SodankylÃ, Finland). Geoscientific Instrumentation, Methods and Data Systems, 2016, 5, 219-227.	1.6	32
41	CENP-A Is Dispensable for Mitotic Centromere Function after Initial Centromere/Kinetochore Assembly. Cell Reports, 2016, 17, 2394-2404.	6.4	89
42	On the assimilation of optical reflectances and snow depth observations into a detailed snowpack model. Cryosphere, 2016, 10, 1021-1038.	3.9	50
43	Development and calibration of an automatic spectral albedometer to estimate near-surface snow SSA time series. Cryosphere, 2016, 10, 1297-1316.	3.9	50
44	Snowpack modelling in the Pyrenees driven by kilometric-resolution meteorological forecasts. Cryosphere, 2016, 10, 1571-1589.	3.9	48
45	Recent glacier decline in the Kerguelen Islands (49Â°S, 69Â°E) derived from modeling, field observations, and satellite data. Journal of Geophysical Research F: Earth Surface, 2015, 120, 637-654.	2.8	17
46	Experimental determination of the absorption enhancement parameter of snow. Journal of Glaciology, 2014, 60, 714-724.	2.2	45
47	Comparing MODIS daily snow albedo to spectral albedo field measurements in Central Greenland. Remote Sensing of Environment, 2014, 140, 118-129.	11.0	51
48	Improved characterisation of sea ice using simultaneous aerial photography and sea ice thickness measurements. Cold Regions Science and Technology, 2013, 92, 37-47.	3.5	20
49	Small-scale horizontal variability of snow, sea-ice thickness and freeboard in the first-year ice region north of Svalbard. Annals of Glaciology, 2013, 54, 261-266.	1.4	18
50	Variational assimilation of albedo in a snowpack model and reconstruction of the spatial mass-balance distribution of an alpine glacier. Journal of Glaciology, 2012, 58, 151-164.	2.2	41
51	Modeling an extreme dust deposition event to the French alpine seasonal snowpack in April 2018: Meteorological context and predictions of dust deposition. Journal of Geophysical Research D: Atmospheres, 0, , .	3.3	2