Ruth H Mottram

List of Publications by Year
in descending order

31 papers	2,155 citations	331670 21 h-index	454955 30 g-index
54 all docs	54 docs citations	54 times ranked	2500 citing authors

#	Article	IF	Citations
1	Calving processes and the dynamics of calving glaciers. Earth-Science Reviews, 2007, 82, 143-179.	9.1	513
2	Contribution of the Greenland Ice Sheet to sea level over the next millennium. Science Advances, 2019, 5, eaav9396.	10.3	164
3	â€˜Calving lawsâ€™, â€˜sliding lawsâ€™ and the stability of tidewater glaciers. Annals of Glaciology, 2007, 46, 123-130.	1.4	160
4	Glacier crevasses: Observations, models, and mass balance implications. Reviews of Geophysics, 2016, 54, 119-161.	23.0	126
5	Very high resolution regional climate model simulations over Greenland: Identifying added value. Journal of Geophysical Research, 2012, 117, .	3.3	119
6	GrSMBMIP: intercomparison of the modelled 1980â€“2012 surface mass balance over the Greenland Ice Sheet. Cryosphere, 2020, 14, 3935-3958.	3.9	111
7	Amplified melt and flow of the Greenland ice sheet driven by late-summer cyclonic rainfall. Nature Geoscience, 2015, 8, 647-653.	12.9	107
8	Algae Drive Enhanced Darkening of Bare Ice on the Greenland Ice Sheet. Geophysical Research Letters, 2017, 44, 11,463.	4.0	101
9	Rapid expansion of Greenlandâ€™s low-permeability ice slabs. Nature, 2019, 573, 403-407.	27.8	84
10	The implication of nonradiative energy fluxes dominating Greenland ice sheet exceptional ablation area surface melt in 2012. Geophysical Research Letters, 2016, 43, 2649-2658.	4.0	77
11	Liquid Water Flow and Retention on the Greenland Ice Sheet in the Regional Climate Model HIRHAM5: Local and Large-Scale Impacts. Frontiers in Earth Science, 2017, 4, .	1.8	72
12	What is the surface mass balance of Antarctica? An intercomparison of regional climate model estimates. Cryosphere, 2021, 15, 3751-3784.	3.9	55
13	Ice-sheet losses track high-end sea-level rise projections. Nature Climate Change, 2020, 10, 879-881.	18.8	50
14	Testing crevasse-depth models: a field study at BreiÃ°amerkurjÃ¶kull, Iceland. Journal of Glaciology, 2009, 55, 746-752.	2.2	49
15	Cyclone Activity in the Arctic From an Ensemble of Regional Climate Models (Arctic CORDEX). Journal of Geophysical Research D: Atmospheres, 2018, 123, 2537-2554.	3.3	46
16	The firn meltwater Retention Model Intercomparison Project (RetMIP): evaluation of nine firn models at four weather station sites on the Greenland ice sheet. Cryosphere, 2020, 14, 3785-3810.	3.9	38
17	Future projections of cyclone activity in the Arctic for the 21st century from regional climate models (Arctic-CORDEX). Global and Planetary Change, 2019, 182, 103005.	3.5	32
18	An Integrated View of Greenland Ice Sheet Mass Changes Based on Models and Satellite Observations. Remote Sensing, 2019, 11, 1407.	4.0	31

#	Article	IF	Citations
19	The importance of accurate glacier albedo for estimates of surface mass balance on VatnajÃ¶kull: evaluating the surface energy budget in a regional climate model with automatic weather station observations. Cryosphere, 2017, 11, 1665-1684.	3.9	28
20	The Case for a Sustained Greenland Ice Sheet-Ocean Observing System (GrIOOS). Frontiers in Marine Science, 2019, 6, .	2.5	24
21	Role of model initialization for projections of 21st-century Greenland ice sheet mass loss. Journal of Glaciology, 2014, 60, 782-794.	2.2	22
22	Freshwater in the Arctic Ocean 2010â€“2019. Ocean Science, 2021, 17, 1081-1102.	3.4	22
23	Application of PROMICE Qâ€Transect in Situ Accumulation and Ablation Measurements (2000â€“2017) to Constrain Mass Balance at the Southern Tip of the Greenland Ice Sheet. Journal of Geophysical Research F: Earth Surface, 2018, 123, 1235-1256.	2.8	16
24	Hagen BrÃ¦: A Surging Glacier in North Greenlandâ€”35ÂYears of Observations. Geophysical Research Letters, 2020, 47, e2019GL085802.	4.0	14
25	Downscaled surface mass balance in Antarctica: impacts of subsurface processes and large-scale atmospheric circulation. Cryosphere, 2021, 15, 4315-4333.	3.9	14
26	Decelerated Greenland Ice Sheet Melt Driven by Positive Summer North Atlantic Oscillation. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7633-7646.	3.3	13
27	Uncertainty in East Antarctic Firn Thickness Constrained Using a Model Ensemble Approach. Geophysical Research Letters, 2021, 48, e2020GL092060.	4.0	10
28	Modelling Glaciers in the HARMONIE-AROME NWP model. Advances in Science and Research, 0, 14, 323-334.	1.0	10
29	Brief communication: Impact of common ice mask in surface mass balance estimates over the Antarctic ice sheet. Cryosphere, 2022, 16, 711-718.	3.9	9
30	Trends of intense cyclone activity in the Arctic from reanalyses data and regional climate models (Arctic-CORDEX). IOP Conference Series: Earth and Environmental Science, 2019, 231, 012003.	0.3	3
31	Uncertainties in projected surface mass balance over the polar ice sheets from dynamically downscaled EC-Earth models. Cryosphere, 2022, 16, 17-33.	3.9	2