Mauro Guglielmin

List of Publications by Year
in descending order

100 papers	4,906 citations	117571 34 h-index	106281 65 g-index
104 all docs	104 docs citations	104 times ranked	5101 citing authors

#	Article	IF	Citations
1	Permafrost is warming at a global scale. Nature Communications, 2019, 10, 264.	5.8	1,039
2	Antarctic climate change and the environment: an update. Polar Record, 2014, 50, 237-259.	0.4	411
3	Unexpected impacts of climate change on alpine vegetation. Frontiers in Ecology and the Environment, 2007, 5, 360-364.	1.9	255
4	Thermal state of permafrost and activeâ€layer monitoring in the antarctic: Advances during the international polar year 2007â€“2009. Permafrost and Periglacial Processes, 2010, 21, 182-197.	1.5	167
5	ACCELERATING CLIMATE CHANGE IMPACTS ON ALPINE GLACIER FOREFIELD ECOSYSTEMS IN THE EUROPEAN ALPS. , 2008, 18, 637-648.		143
6	Climate warming and permafrost dynamics in the Antarctic Peninsula region. Global and Planetary Change, 2013, 100, 215-223.	1.6	135
7	Active layer thermal regime under different vegetation conditions in permafrost areas. A case study at Signy Island (Maritime Antarctica). Geoderma, 2008, 144, 73-85.	2.3	103
8	Primary succession of lichen and bryophyte communities following glacial recession on Signy Island, South Orkney Islands, Maritime Antarctic. Antarctic Science, 2012, 24, 323-336.	0.5	101
9	Ground surface temperature (GST), active layer and permafrost monitoring in continental Antarctica. Permafrost and Periglacial Processes, 2006, 17, 133-143.	1.5	91
10	Biotic and abiotic factors influencing soil properties across a latitudinal gradient in Victoria Land, Antarctica. Geoderma, 2008, 144, 50-65.	2.3	84
11	Vascular plant changes in extreme environments: effects of multiple drivers. Climatic Change, 2016, 134, 651-665.	1.7	81
12	Permafrost conditions in the Mediterranean region since the Last Glaciation. Earth-Science Reviews, 2018, 185, 397-436.	4.0	81
13	Permafrost warming and vegetation changes in continental Antarctica. Environmental Research Letters, 2014, 9, 045001.	2.2	74
14	Searching for eukaryotic life preserved in Antarctic permafrost. Polar Biology, 2012, 35, 749-757.	0.5	62
15	A permafrost warming in a cooling Antarctica?. Climatic Change, 2012, 111, 177-195.	1.7	62
16	Interactions between climate, vegetation and the active layer in soils at two Maritime Antarctic sites. Antarctic Science, 2006, 18, 323-333.	0.5	60
17	The internal structure of rock glaciers and recently deglaciated slopes as revealed by geoelectrical tomography: insights on permafrost and recent glacial evolution in the Central and Western Alps (Italyâ€“France). Quaternary Science Reviews, 2010, 29, 507-521.	1.4	60
18	Frozen ground phenomena in the vicinity of terra nova bay, northern victoria land, antarctica: a preliminary report. Geografiska Annaler, Series A: Physical Geography, 2000, 82, 513-526.	0.6	59

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19	Rock glaciers, protalus ramparts and pronival ramparts in the south-eastern Alps. Geomorphology, 2016, 269, 112-121.	1.1	56
20	Applicability of frequency-domain and time-domain electromagnetic methods for mountain permafrost studies. Permafrost and Periglacial Processes, 2001, 12, 39-52.	1.5	54
21	Spatial and temporal variability of ground surface temperature and active layer thickness at the margin of maritime Antarctica, Signy Island. Geomorphology, 2012, 155-156, 20-33.	1.1	54
22	Precipitationâ€“temperature changes and evolution of a small glacier in the southeastern European Alps during the last 90 years. International Journal of Climatology, 2015, 35, 2783-2797.	1.5	52
23	Twenty years of European mountain permafrost dynamicsâ€”the PACE legacy. Environmental Research Letters, 2020, 15, 104070.	2.2	50
24	Observations on the iceâ€marginal, periglacial geomorphology of Terra Nova Bay, Northern Victoria Land, Antarctica. Permafrost and Periglacial Processes, 1999, 10, 331-347.	1.5	49
25	Cryogenic Weathering of Granite, Northern Victoria Land, Antarctica. Permafrost and Periglacial Processes, 2000, 11, 305-314.	1.5	49
26	Relationships between vegetation patterns and periglacial landforms in northwestern Svalbard. Polar Biology, 2004, 27, 562.	0.5	49
27	Vegetation colonization of permafrostâ€related landslides, Ellesmere Island, Canadian High Arctic. Journal of Geophysical Research, 2010, 115, .	3.3	49
28	Weathering of granite in Antarctica: II. Thermal stress at the grain scale. Earth Surface Processes and Landforms, 2008, 33, 475-493.	1.2	46
29	Biotic and abiotic processes on granite weathering landforms in a cryotic environment, Northern Victoria Land, Antarctica. Permafrost and Periglacial Processes, 2005, 16, 69-85.	1.5	43
30	Tafoni development in a cryotic environment: an example from Northern Victoria Land, Antarctica. Earth Surface Processes and Landforms, 2008, 33, 1502-1519.	1.2	41
31	Ecology of moss banks on Signy Island (maritime Antarctic). Botanical Journal of the Linnean Society, 2017, 184, 518-533.	0.8	39
32	Warming permafrost and active layer variability at Cime Bianche, Western European Alps. Cryosphere, 2015, 9, 647-661.	1.5	38
33	Relationships between glacier and rock glacier in the Maritime Alps, Schiantala Valley, Italy. Quaternary Research, 2007, 68, 353-363.	1.0	37
34	Weathering of granite in Antarctica: I. Light penetration into rock and implications for rock weathering and endolithic communities. Earth Surface Processes and Landforms, 2008, 33, 295-307.	1.2	37
35	Influence of vegetation on the ground thermal regime in continental Antarctica. Geoderma, 2009, 151, 215-223.	2.3	37
36	Response of ice caves to weather extremes in the southeastern Alps, Europe. Geomorphology, 2016, 261, 1-11.	1.1	37

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37	Evaluation of Internal Structure, Volume and Mass of Glacial Bodies by Integrated LiDAR and Ground Penetrating Radar Surveys: The Case Study of Canin Eastern Glacieret (Julian Alps, Italy). Surveys in Geophysics, 2015, 36, 231-252.	2.1	35
38	Permafrost and snow monitoring at Rothera Point (Adelaide Island, Maritime Antarctica): Implications for rock weathering in cryotic conditions. Geomorphology, 2014, 225, 47-56.	1.1	34
39	Permafrost-glacial evolution during the Holocene in the Italian Central Alps. Permafrost and Periglacial Processes, 2001, 12, 111-124.	1.5	31
40	PERMACLIM: a model for the distribution of mountain permafrost, based on climatic observations. Geomorphology, 2003, 51, 245-257.	1.1	31
41	Active layer monitoring in Antarctica: an overview of results from 2006 to 2015. Polar Geography, 2021, 44, 217-231.	0.8	30
42	Acceleration of climate warming and plant dynamics in Antarctica. Current Biology, 2022, 32, 1599-1606.e2.	1.8	30
43	Permafrost thermal regime from two 30â€m deep boreholes in southern victoria land, antarctica. Permafrost and Periglacial Processes, 2011, 22, 129-139.	1.5	29
44	Changes in lichen diversity and community structure with fur seal population increase on Signy Island, South Orkney Islands. Antarctic Science, 2011, 23, 65-77.	0.5	28
45	Pressurized brines in continental Antarctica as a possible analogue of Mars. Scientific Reports, 2016, 6, 33158.	1.6	28
46	Patterns of spatio-temporal paraglacial response in the Antarctic Peninsula region and associated ecological implications. Earth-Science Reviews, 2019, 192, 379-402.	4.0	28
47	Diversity trends of bryophytes in continental Antarctica. Polar Biology, 2013, 36, 259-271.	0.5	27
48	Microbial Assemblages in Pressurized Antarctic Brine Pockets (Tarn Flat, Northern Victoria Land): A Hotspot of Biodiversity and Activity. Microorganisms, 2019, 7, 333.	1.6	26
49	An Old Relict Glacier Body Preserved in Permafrost Environment: The Foscagno Rock Glacier Ice Core (Upper Valtellina, Italian Central Alps). Arctic, Antarctic, and Alpine Research, 2004, 36, 108-116.	0.4	25
50	CO2 fluxes among different vegetation types during the growing season in Marguerite Bay (Antarctic) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.3	25
51	Moss survival through in situ cryptobiosis after six centuries of glacier burial. Scientific Reports, 2017, 7, 4438.	1.6	25
52	Is that a relict rock glacier?. Geomorphology, 2019, 330, 177-189.	1.1	24
53	Radiocarbon dating and postglacial evolution, upper Valtellina and Livignese area (Sondrio, Central) Tj ETQq1 1 0.784314 rgBT /Overl	1.5	23
54	Effect of climate and moss vegetation on ground surface temperature and the active layer among different biogeographical regions in Antarctica. Catena, 2020, 190, 104562.	2.2	23

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55	Schmidt Hammer studies in the maritime Antarctic: Application to dating Holocene deglaciation and estimating the effects of macrolichens on rock weathering. Geomorphology, 2012, 155-156, 34-44.	1.1	22
56	Observations on granite weathering phenomena, Mount Keinath, Northern Victoria Land, Antarctica. Permafrost and Periglacial Processes, 2002, 13, 231-236.	1.5	21
57	A thin ice layer segregates two distinct fungal communities in Antarctic brines from Tarn Flat (Northern Victoria Land). Scientific Reports, 2018, 8, 6582.	1.6	21
58	Permafrost distribution and rock glaciers in the livigno area (Northern Italy). Permafrost and Periglacial Processes, 1994, 5, 25-36.	1.5	20
59	Lakeâ€ice blisters, terra nova bay area, northern victoria land, antarctica. Geografiska Annaler, Series A: Physical Geography, 2009, 91, 99-111.	0.6	20
60	Prokaryotic assemblages within permafrost active layer at Edmonson Point (Northern Victoria Land,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	4.2	20
61	Rapid soil and vegetation changes at regional scale in continental Antarctica. Geoderma, 2021, 394, 115017.	2.3	20
62	Permafrost as a climatic indicator in northern Victoria Land, Antarctica. Annals of Glaciology, 1999, 29, 131-135.	2.8	19
63	The origins of Antarctic rock glaciers: periglacial or glacial features?. Earth Surface Processes and Landforms, 2018, 43, 1390-1402.	1.2	18
64	Prokaryotic Abundance and Activity in Permafrost of the Northern Victoria Land and Upper Victoria Valley (Antarctica). Microbial Ecology, 2017, 74, 402-415.	1.4	17
65	Relationships between periglacial features and vegetation development in Victoria Land, continental Antarctica. Antarctic Science, 2010, 22, 703-713.	0.5	16
66	Glacial fluctuations since the â€˜Medieval Warm Periodâ€™ at Rothera Point (western Antarctic Peninsula). Holocene, 2016, 26, 154-158.	0.9	16
67	The contribution of geoelectrical investigations in the analysis of periglacial and glacial landforms in ice free areas of the northern foothills (northern victoria land, antarctica). Geografiska Annaler, Series A: Physical Geography, 1997, 79, 17-24.	0.6	15
68	An oxygen isotope record from the Foscagno rock-glacier ice core, Upper Valtellina, Italian Central Alps. Holocene, 2007, 17, 1033-1039.	0.9	15
69	Advances in permafrost and periglacial research in Antarctica: A review. Geomorphology, 2012, 155-156, 1-6.	1.1	15
70	Ground surface temperature reconstruction for the last 500 years obtained from permafrost temperatures observed in the SHARE STELVIO Borehole, Italian Alps. Climate of the Past, 2018, 14, 709-724.	1.3	15
71	Soil microbial community structure and enzymatic activity along a plant cover gradient in Victoria Land (continental Antarctica). Geoderma, 2019, 353, 144-151.	2.3	14
72	Cultivable Bacterial Communities in Brines from Perennially Ice-Covered and Pristine Antarctic Lakes: Ecological and Biotechnological Implications. Microorganisms, 2020, 8, 819.	1.6	14

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73	Ground ice in the Northern Foothills, northern Victoria Land, Antarctica. Annals of Glaciology, 2004, 39, 495-500.	2.8	13
74	Needle ice formation, induced frost heave, and frost creep: A case study through photogrammetry at Stelvio Pass (Italian Central Alps). Catena, 2018, 164, 62-70.	2.2	12
75	A new simple topo-climatic model to predict surface displacement in paraglacial and periglacial mountains of the European Alps: The importance of ground heating index and floristic components as ecological indicators. Ecological Indicators, 2021, 120, 106889.	2.6	12
76	The Contribution of Geoelectrical Investigations in the Analysis of Periglacial and Glacial Landforms in Ice Free Areas of the Northern Foothills (Northern Victoria Land, Antarctica). Geografiska Annaler, Series A: Physical Geography, 1997, 79A, 17-24.	0.6	12
77	Effects of active layer seasonal dynamics and plant phenology on CO2 land-atmosphere fluxes at polygonal tundra in the High Arctic, Svalbard. Catena, 2019, 174, 142-153.	2.2	11
78	Role of lichens in granite weathering in cold and arid environments of continental Antarctica. Geological Society Special Publication, 2011, 354, 195-204.	0.8	10
79	Intraâ€•and interâ€cores fungal diversity suggests interconnection of different habitats in an Antarctic frozen lake (Boulder Clay, Northern Victoria Land). Environmental Microbiology, 2020, 22, 3463-3477.	1.8	10
80	Abiotic factors affecting the bacterial and fungal diversity of permafrost in a rock glacier in the Stelvio Pass (Italian Central Alps). Applied Soil Ecology, 2021, 166, 104079.	2.1	10
81	The development of Antarctic tafoni: Relations between differential weathering rates and spatial distribution of thermal events, salts concentration and mineralogy. Geomorphology, 2021, 373, 107475.	1.1	9
82	Recent thermokarst evolution in the Italian Central Alps. Permafrost and Periglacial Processes, 2021, 32, 299-317.	1.5	9
83	Cryogenic grooves on a granite nunatak, Northern Victoria Land, Antarctica. Norsk Geografisk Tidsskrift, 2002, 56, 112-116.	0.3	8
84	Effects of Heavy Ion Particle Irradiation on Spore Germination of Bacillus spp. from Extremely Hot and Cold Environments. Life, 2020, 10, 264.	1.1	8
85	The Spatio-Temporal Variability of Frost Blisters in a Perennial Frozen Lake along the Antarctic Coast as Indicator of the Groundwater Supply. Remote Sensing, 2021, 13, 435.	1.8	8
86	Prokaryotic Diversity and Metabolically Active Communities in Brines from Two Perennially Ice-Covered Antarctic Lakes. Astrobiology, 2021, 21, 551-565.	1.5	8
87	Small-scale spatialâ€“temporal variability in snow cover and relationships with vegetation and climate in maritime Antarctica. Catena, 2022, 208, 105739.	2.2	7
88	Salix shrub encroachment along a 1000 m elevation gradient triggers a major ecosystem change in the European Alps. Ecography, 2022, 2022, .	2.1	7
89	Reconstruction of the glacial history after the Last Glacial Maximum in the Italian Central Alps using Schmidt's hammer R-values and crystallinity ratio indices of soils. Quaternary International, 2020, 558, 19-27.	0.7	5
90	The use of iron chemical analysis of podzols to date the Late Pleistoceneâ€“Holocene deglaciation history of the Central Italian Alps. Journal of Quaternary Science, 2020, 35, 1021-1035.	1.1	5

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91	The prokaryotic community in an extreme Antarctic environment: the brines of Boulder Clay lakes (Northern Victoria Land). Hydrobiologia, 2021, 848, 1837-1857.	1.0	5
92	First Insights into the Microbiology of Three Antarctic Briny Systems of the Northern Victoria Land. Diversity, 2021, 13, 323.	0.7	5
93	Shore Evidences of a High Antarctic Ocean Wave Event: Geomorphology, Event Reconstruction and Coast Dynamics through a Remote Sensing Approach. Remote Sensing, 2021, 13, 518.	1.8	4
94	Soil micromorphology as tool for the past permafrost and paleoclimate reconstruction. Catena, 2021, 207, 105628.	2.2	3
95	The glacial history since the Last Glacial Maximum in the Forni Valley (Italian Central Alps). Reconstruction based on Schmidt's Hammer R-values and crystallinity ratio indices of soils. Geomorphology, 2021, 387, 107765.	1.1	2
96	Investigations of polygonal patterned ground in continuous Antarctic permafrost by means of ground penetrating radar and electrical resistivity tomography: Some unexpected correlations. Permafrost and Periglacial Processes, 0, , .	1.5	2
97	Tâ€RFLP Fingerprinting Analysis of Bacterial Communities in Debris Cones, Northern Victoria Land, Antarctica. Permafrost and Periglacial Processes, 2012, 23, 244-248.	1.5	1
98	Past geomorphic processes: The role of permafrost and periglacial processes in ice-free environments. , 2020, , 125-137.		0
99	Hugh French memorial for Permafrost and Periglacial Processes. Permafrost and Periglacial Processes, 2021, 32, 181-185.	1.5	0
100	The search for brines: GPR markers, proxies, and challenges. , 2020, , .		0