

# Matthias Leopold

## List of Publications by Year in descending order

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Version: 2024-02-01

53  
papers

837  
citations

516710

16  
h-index

552781

26  
g-index

57  
all docs

57  
docs citations

57  
times ranked

1237  
citing authors

#	ARTICLE	IF	CITATIONS
1	Colluvium: Definition, differentiation, and possible suitability for reconstructing Holocene climate data. <i>Quaternary International</i> , 2007, 162-163, 133-140.	1.5	90
2	Soil Salinity and pH Drive Soil Bacterial Community Composition and Diversity Along a Lateritic Slope in the Avon River Critical Zone Observatory, Western Australia. <i>Frontiers in Microbiology</i> , 2019, 10, 1486.	3.5	41
3	What drives large-scale glacier detachments? Insights from Flat Creek glacier, St. Elias Mountains, Alaska. <i>Geology</i> , 2020, 48, 703-707.	4.4	38
4	Using Geophysical Methods to Study the Shallow Subsurface of a Sensitive Alpine Environment, Niwot Ridge, Colorado Front Range, U.S.A. <i>Arctic, Antarctic, and Alpine Research</i> , 2008, 40, 519-530.	1.1	36
5	Influence of glacier advance on the development of the multipart Riffeltal rock glacier, Central Austrian Alps. <i>Earth Surface Processes and Landforms</i> , 2015, 40, 965-980.	2.5	35
6	Character, Age, and Ecological Significance of Pleistocene Periglacial Slope Deposits in Germany. <i>Physical Geography</i> , 2007, 28, 451-473.	1.4	34
7	Subsurface architecture of the Boulder Creek Critical Zone Observatory from electrical resistivity tomography. <i>Earth Surface Processes and Landforms</i> , 2013, 38, 1417-1431.	2.5	33
8	Karnatukul (Serpentâ€™s Glen): A new chronology for the oldest site in Australiaâ€™s Western Desert. <i>PLoS ONE</i> , 2018, 13, e0202511.	2.5	32
9	Environmental drivers of soil microbial community structure and function at the Avon River Critical Zone Observatory. <i>Science of the Total Environment</i> , 2016, 571, 1407-1418.	8.0	29
10	Chronostratigraphy and geomorphology of washover fans in the Exmouth Gulf (NW Australia) â€™ A record of tropical cyclone activity during the late Holocene. <i>Quaternary Science Reviews</i> , 2017, 169, 65-84.	3.0	26
11	The Impact of Soil Water Repellency and Slope upon Runoff and Erosion. <i>Soil and Tillage Research</i> , 2021, 205, 104756.	5.6	24
12	A comparison of gap-filling algorithms for eddy covariance fluxes and their drivers. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , 2021, 10, 123-140.	1.6	21
13	Black soils, sediments and brown calcic luvisols: A pedological description of a newly discovered neolithic ring ditch system at Stephansposching, Eastern Bavaria, Germany. <i>Quaternary International</i> , 2011, 243, 293-304.	1.5	20
14	Quantifying prehistoric soil erosionâ€™ A review of soil loss methods and their application to a Celtic square enclosure (Viereckschanze) in Southern Germany. <i>Geoarchaeology - an International Journal</i> , 2007, 22, 873-889.	1.5	19
15	Mineralogy, magnetic susceptibility and geochemistry of Fe-rich Oxisols developed from several parent materials. <i>Scientia Agricola</i> , 2018, 75, 410-419.	1.2	19
16	A threatened ecological community: research advances and priorities for Banksia woodlands. <i>Australian Journal of Botany</i> , 2021, 69, 53.	0.6	18
17	Methods of surveying the thickness of humous horizons using ground penetrating radar (GPR): an example from the Garmisch-Partenkirchen area of the Northern Alps. <i>European Journal of Forest Research</i> , 2011, 130, 799-812.	2.5	17
18	Murujuga Rockshelter: First evidence for Pleistocene occupation on the Burrup Peninsula. <i>Quaternary Science Reviews</i> , 2018, 193, 266-287.	3.0	17

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19	Integrating pedological and geophysical methods to enhance the informative value of an archaeological prospection – The example of a Roman villa rustica near Regensburg, Germany. <i>Journal of Archaeological Science</i> , 2010, 37, 1731-1741.	2.4	16
20	Significance of slope sediments layering on physical characteristics and interflow within the Critical Zone – Examples from the Colorado Front Range, USA. <i>Applied Geochemistry</i> , 2011, 26, S143-S145.	3.0	16
21	Time lapse electric resistivity tomography to portray infiltration and hydrologic flow paths from surface to cave. <i>Journal of Hydrology</i> , 2021, 593, 125810.	5.4	16
22	Combining sediment analysis and seismic refraction to describe the structure, thickness and distribution of periglacial slope deposits at Niwot Ridge, Rocky Mountains Front Range, Colorado, USA. <i>Zeitschrift für Geomorphologie</i> , 2008, 52, 77-94.	0.8	15
23	Cryosphere: ice on Niwot Ridge and in the Green Lakes Valley, Colorado Front Range. <i>Plant Ecology and Diversity</i> , 2015, 8, 625-638.	2.4	15
24	Evaluation of surfactant effectiveness on water repellent soils using electrical resistivity tomography. <i>Agricultural Water Management</i> , 2017, 181, 56-65.	5.6	15
25	A ground-penetrating radar survey of late Holocene fluvial sediments in NW Namibian river valleys: characterization and comparison. <i>Journal of the Geological Society</i> , 2006, 163, 923-936.	2.1	14
26	Characteristics of a paleosol and its implication for the Critical Zone development, Rocky Mountain Front Range of Colorado, USA. <i>Applied Geochemistry</i> , 2011, 26, S72-S75.	3.0	13
27	Changing mountain permafrost from the 1970s to today - comparing two examples from Niwot Ridge, Colorado Front Range, USA. <i>Zeitschrift für Geomorphologie</i> , 2014, 58, 137-157.	0.8	13
28	Chenier-type ridges in Giralia Bay (Exmouth Gulf, Western Australia) - Processes, chronostratigraphy, and significance for recording past tropical cyclones. <i>Marine Geology</i> , 2018, 396, 186-204.	2.1	13
29	<i>Bacillus subtilis</i> and surfactant amendments for the breakdown of soil water repellency in a sandy soil. <i>Geoderma</i> , 2019, 344, 108-118.	5.1	13
30	Geophysical prospection of a bronze foundry on the southern slope of the acropolis at Athens, Greece. <i>Archaeological Prospection</i> , 2011, 18, 27-41.	2.2	12
31	Neolithic flint mines in Arnhofen, southern Germany: a ground-penetrating radar survey. <i>Archaeological Prospection</i> , 2004, 11, 57-64.	2.2	10
32	Edaphic niche characterization of four Proteaceae reveals unique calcicole physiology linked to hyperendemism of <i>Grevillea thelemanniana</i> . <i>New Phytologist</i> , 2020, 228, 869-883.	7.3	10
33	Plant-Dependent Soil Bacterial Responses Following Amendment With a Multispecies Microbial Biostimulant Compared to Rock Mineral and Chemical Fertilizers. <i>Frontiers in Plant Science</i> , 2020, 11, 550169.	3.6	10
34	GPR images of periglacial slope deposits beneath peat bogs in the Central European Highlands, Germany. <i>Geological Society Special Publication</i> , 2003, 211, 181-189.	1.3	9
35	State of High-Altitude Permafrost on Tropical Maunakea Volcano, Hawaii. <i>Permafrost and Periglacial Processes</i> , 2017, 28, 685-697.	3.4	9
36	Corrigendum to: A threatened ecological community: research advances and priorities for <i>Banksia</i> woodlands. <i>Australian Journal of Botany</i> , 2021, 69, 111.	0.6	9

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37	The Coldest Places in Hawaii: The Ice-Preserving Microclimates of High-Altitude Craters and Caves on Tropical Island Volcanoes. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, 2313-2324.	3.3	8
38	The application of quartz grain morphology measurements to studying iron-rich duricrusts. <i>Catena</i> , 2018, 170, 397-408.	5.0	7
39	Vacuum drying water-repellent sandy soil: Anoxic conditions retain original soil water repellency under variable soil drying temperature and air pressure. <i>Geoderma</i> , 2020, 372, 114385.	5.1	6
40	Quasi-3D mapping of soil moisture in agricultural fields using electrical conductivity sensing. <i>Agricultural Water Management</i> , 2022, 259, 107246.	5.6	6
41	Subsurface architecture of two tropical alpine desert cinder cones that hold water. <i>Journal of Geophysical Research F: Earth Surface</i> , 2016, 121, 1148-1160.	2.8	5
42	Reconstruction of the old cultural surface of a Bronze Age Settlement – An example for a multi-methodological interaction of Soil Science and Archaeology in Southern Germany. <i>Geodinamica Acta</i> , 2007, 20, 257-265.	2.2	4
43	Colluvial filling of a glacial bypass channel near the Chiemsee (St. Ättham) and its function as geoarchive. <i>Zeitschrift für Geomorphologie</i> , 2012, 56, 371-386.	0.8	4
44	What to make of the “Murchison Cement”? A re-examination of a megafaunal fossil site in the Mid West, Western Australia. <i>Australian Archaeology</i> , 2014, 79, 116-123.	0.6	4
45	The first radiometric Pleistocene dates for Aboriginal occupation at Weld Range, inland Mid West, Western Australia. <i>Australian Archaeology</i> , 2016, 82, 60-66.	0.6	3
46	Rock-art microbiome: influences on long term preservation of historic and culturally important engravings. <i>Microbiology Australia</i> , 2018, 39, 33.	0.4	3
47	Origin and age of the Lower Bavarian sand dune landscape around Abensberg and Siegenburg. <i>Zeitschrift für Geomorphologie</i> , 2011, 55, 515-536.	0.8	2
48	Periglacial Morphodynamics in the Upper Kaunertal. <i>Geography of the Physical Environment</i> , 2019, , 99-116.	0.4	2
49	Soil water repellency in sandy soil depends on the soil drying method, incubation temperature and specific surface area. <i>Geoderma</i> , 2021, 402, 115264.	5.1	2
50	Thermal imagery of woodland tree canopies provides new insights into drought-induced tree mortality. <i>Science of the Total Environment</i> , 2022, 834, 155395.	8.0	2
51	Thermal imaging of a hydrophobic soil’s response to surfactant application at the Avon River Catchment Critical Zone Observatory. <i>Geoderma</i> , 2020, 368, 114309.	5.1	1
52	Soil Mapping Using Electromagnetic Induction to Assess the Suitability of Land for Growing <i>Leptospermum nitens</i> in Western Australia. <i>Frontiers in Environmental Science</i> , 0, 10, .	3.3	1
53	Valuable phosphorus retained by ironstone gravels can be measured as bicarbonate extractable P. <i>Geoderma</i> , 2022, 418, 115862.	5.1	0