Katrin Meusburger

List of Publications by Year
in descending order

80 papers	8,153 citations	87723 38 h-index	64668 79 g-index
83 all docs	83 docs citations	83 times ranked	6680 citing authors

#	Article	IF	Citations
1	An assessment of the global impact of 21st century land use change on soil erosion. Nature Communications, 2017, 8, 2013.	5.8	1,398
2	The new assessment of soil loss by water erosion in Europe. Environmental Science and Policy, 2015, 54, 438-447.	2.4	825
3	Estimating the soil erosion cover-management factor at the European scale. Land Use Policy, 2015, 48, 38-50.	2.5	516
4	Rainfall erosivity in Europe. Science of the Total Environment, 2015, 511, 801-814.	3.9	443
5	Using the USLE: Chances, challenges and limitations of soil erosion modelling. International Soil and Water Conservation Research, 2019, 7, 203-225.	3.0	389
6	Soil erodibility in Europe: A high-resolution dataset based on LUCAS. Science of the Total Environment, 2014, 479-480, 189-200.	3.9	354
7	Global rainfall erosivity assessment based on high-temporal resolution rainfall records. Scientific Reports, 2017, 7, 4175.	1.6	348
8	A New European Slope Length and Steepness Factor (LS-Factor) for Modeling Soil Erosion by Water. Geosciences (Switzerland), 2015, 5, 117-126.	1.0	246
9	Modelling the effect of support practices (P-factor) on the reduction of soil erosion by water at European scale. Environmental Science and Policy, 2015, 51, 23-34.	2.4	240
10	Spatial and temporal variability of rainfall erosivity factor for Switzerland. Hydrology and Earth System Sciences, 2012, 16, 167-177.	1.9	199
11	Fallout 210Pb as a soil and sediment tracer in catchment sediment budget investigations: A review. Earth-Science Reviews, 2014, 138, 335-351.	4.0	194
12	Mapping monthly rainfall erosivity in Europe. Science of the Total Environment, 2017, 579, 1298-1315.	3.9	142
13	Towards estimates of future rainfall erosivity in Europe based on REDES and WorldClim datasets. Journal of Hydrology, 2017, 548, 251-262.	2.3	132
14	Soil Conservation in Europe: Wish or Reality?. Land Degradation and Development, 2016, 27, 1547-1551.	1.8	125
15	Spatio-temporal analysis of rainfall erosivity and erosivity density in Greece. Catena, 2016, 137, 161-172.	2.2	121
16	A step towards a holistic assessment of soil degradation in Europe: Coupling on-site erosion with sediment transfer and carbon fluxes. Environmental Research, 2018, 161, 291-298.	3.7	116
17	Impacts of anthropogenic and environmental factors on the occurrence of shallow landslides in an alpine catchment (Urseren Valley, Switzerland). Natural Hazards and Earth System Sciences, 2008, 8, 509-520.	1.5	113
18	The usefulness of 137Cs as a tracer for soil erosion assessment: A critical reply to Parsons and Foster (2011). Earth-Science Reviews, 2013, 127, 300-307.	4.0	113

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19	Global maps of soil temperature. Global Change Biology, 2022, 28, 3110-3144.	4.2	113
20	Assessing soil erosion in Europe based on data collected through a European network. Soil Science and Plant Nutrition, 2014, 60, 15-29.	0.8	95
21	Tracking water pathways in steep hillslopes by Î´18O depth profiles of soil water. Journal of Hydrology, 2014, 519, 340-352.	2.3	89
22	Soil erosion modelled with USLE and PESERA using QuickBird derived vegetation parameters in an alpine catchment. International Journal of Applied Earth Observation and Geoinformation, 2010, 12, 208-215.	1.4	86
23	Suitability of 239+240Pu and 137Cs as tracers for soil erosion assessment in mountain grasslands. Chemosphere, 2014, 103, 274-280.	4.2	84
24	An attempt to estimate tolerable soil erosion rates by matching soil formation with denudation in Alpine grasslands. Journal of Soils and Sediments, 2015, 15, 1383-1399.	1.5	82
25	Soil erodibility estimation using LUCAS point survey data of Europe. Environmental Modelling and Software, 2012, 30, 143-145.	1.9	73
26	Methods to describe and predict soil erosion in mountain regions. Landscape and Urban Planning, 2008, 88, 46-53.	3.4	64
27	Quantitative sediment source attribution with compound-specific isotope analysis in a C3 plant-dominated catchment (central Switzerland). Biogeosciences, 2016, 13, 1587-1596.	1.3	63
28	Monthly Rainfall Erosivity: Conversion Factors for Different Time Resolutions and Regional Assessments. Water (Switzerland), 2016, 8, 119.	1.2	60
29	Storm pulses and varying sources of hydrologic carbon export from a mountainous watershed. Journal of Hydrology, 2012, 440-441, 90-101.	2.3	59
30	Modification of the RUSLE slope length and steepness factor (LS-factor) based on rainfall experiments at steep alpine grasslands. MethodsX, 2019, 6, 219-229.	0.7	56
31	Determinants of legacy effects in pine trees â€“ implications from an irrigationâ€stop experiment. New Phytologist, 2020, 227, 1081-1096.	3.5	52
32	239+240 Pu from â€œcontaminantâ€•to soil erosion tracer: Where do we stand?. Earth-Science Reviews, 2017, 172, 107-123.	4.0	51
33	Drought reduces water uptake in beech from the drying topsoil, but no compensatory uptake occurs from deeper soil layers. New Phytologist, 2022, 233, 194-206.	3.5	51
34	Mapping spatio-temporal dynamics of the cover and management factor (C-factor) for grasslands in Switzerland. Remote Sensing of Environment, 2018, 211, 89-104.	4.6	47
35	Novel application of Compound Specific Stable Isotope (CSSI) techniques to investigate on-site sediment origins across arable fields. Geoderma, 2018, 316, 19-26.	2.3	45
36	Regionalization of monthly rainfall erosivity patterns in Switzerland. Hydrology and Earth System Sciences, 2016, 20, 4359-4373.	1.9	44

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37	Objectâ€oriented soil erosion modelling: A possible paradigm shift from potential to actual risk assessments in agricultural environments. Land Degradation and Development, 2018, 29, 1270-1281.	1.8	44
38	Use of a 137Cs re-sampling technique to investigate temporal changes in soil erosion and sediment mobilisation for a small forested catchment in southern Italy. Journal of Environmental Radioactivity, 2014, 138, 137-148.	0.9	43
39	On the influence of temporal change on the validity of landslide susceptibility maps. Natural Hazards and Earth System Sciences, 2009, 9, 1495-1507.	1.5	41
40	Estimating vegetation parameter for soil erosion assessment in an alpine catchment by means of QuickBird imagery. International Journal of Applied Earth Observation and Geoinformation, 2010, 12, 201-207.	1.4	40
41	Erosion-induced changes in soil biogeochemical and microbiological properties in Swiss Alpine grasslands. Soil Biology and Biochemistry, 2014, 69, 382-392.	4.2	39
42	Combined use of stable isotopes and fallout radionuclides as soil erosion indicators in a forested mountain site, South Korea. Biogeosciences, 2013, 10, 5627-5638.	1.3	37
43	A multi-radionuclide approach to evaluate the suitability of 239+240Pu as soil erosion tracer. Science of the Total Environment, 2016, 566-567, 1489-1499.	3.9	36
44	Effect of permafrost on the formation of soil organic carbon pools and their physicalâ€“chemical properties in the Eastern Swiss Alps. Catena, 2013, 110, 70-85.	2.2	34
45	Modelling Deposition and Erosion rates with RadioNuclides (MODERN) â€“ Part 1: A new conversion model to derive soil redistribution rates from inventories of fallout radionuclides. Journal of Environmental Radioactivity, 2016, 162-163, 45-55.	0.9	34
46	Geophysical imaging of shallow subsurface topography and its implication for shallow landslide susceptibility in the Urseren Valley, Switzerland. Journal of Applied Geophysics, 2012, 83, 46-56.	0.9	32
47	Drought alters the carbon footprint of trees in soilsâ€"tracking the spatioâ€temporal fate of ¹³Câ€labelled assimilates in the soil of an oldâ€growth pine forest. Global Change Biology, 2021, 27, 2491-2506.	4.2	32
48	Monthly RUSLE soil erosion risk of Swiss grasslands. Journal of Maps, 2019, 15, 247-256.	1.0	31
49	Plutonium aided reconstruction of caesium atmospheric fallout in European topsoils. Scientific Reports, 2020, 10, 11858.	1.6	31
50	Estimation of soil redistribution rates due to snow cover related processes in a mountainous area (Valle d'Aosta, NW Italy). Hydrology and Earth System Sciences, 2012, 16, 517-528.	1.9	30
51	Excess Lead-210 and Plutonium-239+240: Two suitable radiogenic soil erosion tracers for mountain grassland sites. Environmental Research, 2018, 160, 195-202.	3.7	29
52	The effect of permafrost on time-split soil erosion using radionuclides (137Cs, 239â€‰+â€‰240Pu, meteoric) Tj ETQq0 0 0 rgBT /Over 1400-1419.	1.5	27
53	Modelling Deposition and Erosion rates with RadioNuclides (MODERN) â€“ Part 2: A comparison of different models to convert 239+240 Pu inventories into soil redistribution rates at unploughed sites. Journal of Environmental Radioactivity, 2016, 162-163, 97-106.	0.9	25
54	Droneâ€based physiological index reveals longâ€term acclimation and drought stress responses in trees. Plant, Cell and Environment, 2021, 44, 3552-3570.	2.8	25

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55	Reply to â€œThe new assessment of soil loss by water erosion in Europe. Panagos P. et al., 2015 Environ. Sci. Policy 54, 438â€“447â€”A responseâ€•by Evans and Boardman [Environ. Sci. Policy 58, 11â€“15]. Environmental Science and Policy, 2016, 59, 53-57.	2.4	24
56	Application of in-situ measurement to determine 137Cs in the Swiss Alps. Journal of Environmental Radioactivity, 2010, 101, 369-376.	0.9	20
57	Soil erosion by snow gliding â€“ a first quantification attempt in a subalpine area in Switzerland. Hydrology and Earth System Sciences, 2014, 18, 3763-3775.	1.9	20
58	Reply to the comment on â€œRainfall erosivity in Europeâ€•by Auerswald et al.. Science of the Total Environment, 2015, 532, 853-857.	3.9	19
59	Spatio-temporal pattern of soil degradation in a Swiss Alpine grassland catchment. Remote Sensing of Environment, 2019, 235, 111441.	4.6	17
60	Soil erosion in an avalanche release site (Valle d'Aosta: Italy): towards a winter factor for RUSLE in the Alps. Natural Hazards and Earth System Sciences, 2014, 14, 1761-1771.	1.5	17
61	Reply to the comment on â€œThe new assessment of soil loss by water erosion in Europeâ€•by Fiener & Auerswald. Environmental Science and Policy, 2016, 57, 143-150.	2.4	16
62	Advancing simulations of water fluxes, soil moisture and drought stress by using the LWF-Brook90 hydrological model in R. Agricultural and Forest Meteorology, 2020, 291, 108023.	1.9	16
63	Modelling Hot Spots of Soil Loss by Wind Erosion (<scp>SoLoWind</scp>) in Western Saxony, Germany. Land Degradation and Development, 2017, 28, 1100-1112.	1.8	15
64	Assessing soil redistribution of forest and cropland sites in wet tropical Africa using ²³⁹⁺²⁴⁰Pu fallout radionuclides. Soil, 2021, 7, 399-414.	2.2	15
65	Lessons learned from a longâ€term irrigation experiment in a dry Scots pine forest: Impacts on traits and functioning. Ecological Monographs, 2022, 92, e1507.	2.4	15
66	Sampling soil and sediment depth profiles at a fine resolution with a new device for determining physical, chemical and biological properties: the Fine Increment Soil Collector (FISC). Journal of Soils and Sediments, 2014, 14, 630-636.	1.5	14
67	Plants or bacteria? 130 years of mixed imprints in Lake Baldegg sediments (Switzerland), as revealed by compound-specific isotope analysis (CSIA) and biomarker analysis. Biogeosciences, 2019, 16, 2131-2146.	1.3	14
68	Fate of 137 Cs, 90 Sr and 239+240 Pu in soil profiles at a water recharge site in Basel, Switzerland. Journal of Environmental Radioactivity, 2018, 182, 85-94.	0.9	13
69	Soilâ€“plant interactions modulated water availability of Swiss forests during the 2015 and 2018 droughts. Global Change Biology, 2022, 28, 5928-5944.	4.2	13
70	Photosynthetic acclimation and sensitivity to short- and long-term environmental changes in a drought-prone forest. Journal of Experimental Botany, 2022, 73, 2576-2588.	2.4	12
71	Soil fauna drives vertical redistribution of soil organic carbon in a longâ€term irrigated dry pine forest. Global Change Biology, 2022, 28, 3145-3160.	4.2	12
72	Filling the European blank spotâ€”Swiss soil erodibility assessment with topsoil samples. Journal of Plant Nutrition and Soil Science, 2018, 181, 737-748.	1.1	11

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73	Decision support for the selection of reference sites using ¹³⁷Cs as a soil erosion tracer. Soil, 2017, 3, 113-122.	2.2	6
74	Spatial evaluation of snow gliding in the Alps. Catena, 2018, 165, 567-575.	2.2	6
75	Advances in soil erosion modelling through remote sensing data availability at European scale. Proceedings of SPIE, 2014, , .	0.8	5
76	Investigating causal factors of shallow landslides in grassland regions of Switzerland. Natural Hazards and Earth System Sciences, 2021, 21, 3421-3437.	1.5	4
77	Documenting soil redistribution on livestockâ€poached pasture using caesiumâ€134 and cobaltâ€60 as tracers. Land Degradation and Development, 2019, 30, 315-327.	1.8	3
78	Change of permanent grasslands extent (1996-2015) and national grassland dataset of Switzerland. Data in Brief, 2018, 20, 1992-1998.	0.5	2
79	Modelling Long-Term Storm Erosivity Time-Series: A Case Study in the Western Swiss Plateau. Advances in Natural and Technological Hazards Research, 2014, , 149-164.	1.1	1
80	Occurrence and erosion susceptibility of German Pelosols and international equivalents [#]. Journal of Plant Nutrition and Soil Science, 0, , .	1.1	1