

Michel Bechtold

List of Publications by Year in descending order

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Version: 2024-02-01

35
papers

1,236
citations

394286

19
h-index

377752

34
g-index

60
all docs

60
docs citations

60
times ranked

1931
citing authors

#	ARTICLE	IF	CITATIONS
1	Expert assessment of future vulnerability of the global peatland carbon sink. <i>Nature Climate Change</i> , 2021, 11, 70-77.	8.1	167
2	High emissions of greenhouse gases from grasslands on peat and other organic soils. <i>Global Change Biology</i> , 2016, 22, 4134-4149.	4.2	144
3	A new methodology for organic soils in national greenhouse gas inventories: Data synthesis, derivation and application. <i>Ecological Indicators</i> , 2020, 109, 105838.	2.6	84
4	On the applicability of unimodal and bimodal van Genuchten-Mualem based models to peat and other organic soils under evaporation conditions. <i>Journal of Hydrology</i> , 2014, 515, 103-115.	2.3	62
5	Does water repellency of pyrochars and hydrochars counter their positive effects on soil hydraulic properties?. <i>Geoderma</i> , 2015, 245-246, 31-39.	2.3	60
6	Using boosted regression trees to explore key factors controlling saturated and near-saturated hydraulic conductivity. <i>European Journal of Soil Science</i> , 2015, 66, 744-756.	1.8	59
7	Efficient random walk particle tracking algorithm for advective-dispersive transport in media with discontinuous dispersion coefficients and water contents. <i>Water Resources Research</i> , 2011, 47, .	1.7	58
8	Infiltration from the Pedon to Global Grid Scales: An Overview and Outlook for Land Surface Modeling. <i>Vadose Zone Journal</i> , 2019, 18, 1-53.	1.3	56
9	Estimation of Soil Hydraulic Parameters in the Field by Integrated Hydrogeophysical Inversion of Time-Lapse Ground-Penetrating Radar Data. <i>Vadose Zone Journal</i> , 2012, 11, vzj2011.0177.	1.3	40
10	PEAT-CLSM: A Specific Treatment of Peatland Hydrology in the NASA Catchment Land Surface Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 2130-2162.	1.3	40
11	Mapping peat layer properties with multi-coil offset electromagnetic induction and laser scanning elevation data. <i>Geoderma</i> , 2016, 261, 178-189.	2.3	36
12	Inferring Water Table Depth Dynamics from ENVISAT-ASAR C-Band Backscatter over a Range of Peatlands from Deeply-Drained to Natural Conditions. <i>Remote Sensing</i> , 2018, 10, 536.	1.8	34
13	Large-scale regionalization of water table depth in peatlands optimized for greenhouse gas emission upscaling. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 3319-3339.	1.9	27
14	Near-surface solute redistribution during evaporation. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	26
15	Water Flow Monitored by Tracer Transport in Natural Porous Media Using Magnetic Resonance Imaging. <i>Vadose Zone Journal</i> , 2010, 9, 835-845.	1.3	25
16	Drained organic soils under agriculture – The more degraded the soil the higher the specific basal respiration. <i>Geoderma</i> , 2019, 355, 113911.	2.3	25
17	On the Potential of Sentinel-1 for High Resolution Monitoring of Water Table Dynamics in Grasslands on Organic Soils. <i>Remote Sensing</i> , 2019, 11, 1659.	1.8	24
18	Deriving Effective Soil Water Retention Characteristics from Shallow Water Table Fluctuations in Peatlands. <i>Vadose Zone Journal</i> , 2016, 15, 1-13.	1.3	23

#	ARTICLE	IF	CITATIONS
19	Constraints on the active tectonics of the Friuli/NW Slovenia area from CGPS measurements and three-dimensional kinematic modeling. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	20
20	One-dimensional expression to calculate specific yield for shallow groundwater systems with microrelief. <i>Hydrological Processes</i> , 2016, 30, 334-340.	1.1	19
21	Improved groundwater table and L-band brightness temperature estimates for Northern Hemisphere peatlands using new model physics and SMOS observations in a global data assimilation framework. <i>Remote Sensing of Environment</i> , 2020, 246, 111805.	4.6	19
22	Upward Transport in a Three-dimensional Heterogeneous Laboratory Soil under Evaporation Conditions. <i>Vadose Zone Journal</i> , 2012, 11, vj2011.0066.	1.3	18
23	Solute Transport in Heterogeneous Soil with Time-dependent Boundary Conditions. <i>Vadose Zone Journal</i> , 2016, 15, 1-17.	1.3	18
24	Effect of past peat cultivation practices on present dynamics of dissolved organic carbon. <i>Science of the Total Environment</i> , 2017, 574, 1243-1253.	3.9	17
25	Satellite Determination of Peatland Water Table Temporal Dynamics by Localizing Representative Pixels of A SWIR-Based Moisture Index. <i>Remote Sensing</i> , 2020, 12, 2936.	1.8	16
26	Trench investigation on the main strand of the BoconÃ³ fault in its central section, at Mesa del Caballo, MÃ©rida Andes, Venezuela. <i>Tectonophysics</i> , 2008, 459, 38-53.	0.9	15
27	Advancing Global and Regional Reanalyses. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, ES139-ES144.	1.7	15
28	Evaluating Commercial Moisture Probes in Reference Solutions Covering Mineral to Peat Soil Conditions. <i>Vadose Zone Journal</i> , 2018, 17, 170208.	1.3	14
29	A Comparison of Three Trapezoid Models Using Optical and Thermal Satellite Imagery for Water Table Depth Monitoring in Estonian Bogs. <i>Remote Sensing</i> , 2020, 12, 1980.	1.8	14
30	Accurate Determination of the Bulk Electrical Conductivity with the TDR100 Cable Tester. <i>Soil Science Society of America Journal</i> , 2010, 74, 495-501.	1.2	12
31	Evaporation experiments for the determination of hydraulic properties of peat and other organic soils: An evaluation of methods based on a large dataset. <i>Journal of Hydrology</i> , 2019, 575, 933-944.	2.3	12
32	Comparing Methods for Measuring Water Retention of Peat Near Permanent Wilting Point. <i>Soil Science Society of America Journal</i> , 2018, 82, 601-605.	1.2	11
33	Tropical Peatland Hydrology Simulated With a Global Land Surface Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2022, 14, .	1.3	9
34	Towards Monitoring Groundwater Table Depth in Peatlands from Sentinel-1 Radar Data. , 2018, , .		1
35	Accounting for Static and Dynamic Open Water in the Modeling of SMAP Brightness Temperatures Over Peatlands. , 2018, , .		0