Steffen Zacharias

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6140097/publications.pdf

Version: 2024-02-01

45 papers	2,412 citations	257450 24 h-index	254184 43 g-index
75 all docs	75 docs citations	75 times ranked	3764 citing authors

#	Article	IF	Citations
1	A Network of Terrestrial Environmental Observatories in Germany. Vadose Zone Journal, 2011, 10, 955-973.	2.2	401
2	Pedotransfer Functions in Earth System Science: Challenges and Perspectives. Reviews of Geophysics, 2017, 55, 1199-1256.	23.0	316
3	Footprint characteristics revised for fieldâ€scale soil moisture monitoring with cosmicâ€ray neutrons. Water Resources Research, 2015, 51, 5772-5790.	4.2	189
4	The next generation of site-based long-term ecological monitoring: Linking essential biodiversity variables and ecosystem integrity. Science of the Total Environment, 2018, 613-614, 1376-1384.	8.0	143
5	Excluding Organic Matter Content from Pedotransfer Predictors of Soil Water Retention. Soil Science Society of America Journal, 2007, 71, 43-50.	2.2	95
6	The Bode hydrological observatory: a platform for integrated, interdisciplinary hydro-ecological research within the TERENO Harz/Central German Lowland Observatory. Environmental Earth Sciences, 2017, 76, 1.	2.7	93
7	Improving calibration and validation of cosmic-ray neutron sensors in the light of spatial sensitivity. Hydrology and Earth System Sciences, 2017, 21, 5009-5030.	4.9	93
8	Development and analysis of the Soil Water Infiltration Global database. Earth System Science Data, 2018, 10, 1237-1263.	9.9	85
9	TERENO-SOILCan: a lysimeter-network in Germany observing soil processes and plant diversity influenced by climate change. Environmental Earth Sciences, 2016, 75, 1.	2.7	73
10	Understanding Forest Health with Remote Sensing, Part III: Requirements for a Scalable Multi-Source Forest Health Monitoring Network Based on Data Science Approaches. Remote Sensing, 2018, 10, 1120.	4.0	63
11	Cosmicâ€ray Neutron Rover Surveys of Field Soil Moisture and the Influence of Roads. Water Resources Research, 2018, 54, 6441-6459.	4.2	53
12	Repeated electromagnetic induction measurements for mapping soil moisture at the field scale: validation with data from a wireless soil moisture monitoring network. Hydrology and Earth System Sciences, 2017, 21, 495-513.	4.9	52
13	Spatial and Temporal Dynamics of Hillslopeâ€Scale Soil Moisture Patterns: Characteristic States and Transition Mechanisms. Vadose Zone Journal, 2015, 14, 1-16.	2.2	51
14	The SCALEX Campaign: Scale-Crossing Land Surface and Boundary Layer Processes in the TERENO-preAlpine Observatory. Bulletin of the American Meteorological Society, 2017, 98, 1217-1234.	3.3	49
15	Linking Remote Sensing and Geodiversity and Their Traits Relevant to Biodiversityâ€”Part I: Soil Characteristics. Remote Sensing, 2019, 11, 2356.	4.0	46
16	Long-term environmental monitoring infrastructures in Europe: observations, measurements, scales, and socio-ecological representativeness. Science of the Total Environment, 2018, 624, 968-978.	8.0	45
17	A new multiscale approach for monitoring vegetation using remote sensing-based indicators in laboratory, field, and landscape. Environmental Monitoring and Assessment, 2013, 185, 1215-1235.	2.7	44
18	Intercomparison of cosmic-ray neutron sensors and water balance monitoring in an urban environment. Geoscientific Instrumentation, Methods and Data Systems, 2018, 7, 83-99.	1.6	44

#	Article	IF	Citations
19	A dense network of cosmic-ray neutron sensors for soil moisture observation in a highly instrumented pre-Alpine headwater catchment in Germany. Earth System Science Data, 2020, 12, 2289-2309.	9.9	44
20	Using long-term ecosystem service and biodiversity data to study the impacts and adaptation options in response to climate change: insights from the global ILTER sites network. Current Opinion in Environmental Sustainability, 2013, 5, 53-66.	6.3	39
21	Mapping the Spectral Soil Quality Index (SSQI) Using Airborne Imaging Spectroscopy. Remote Sensing, 2015, 7, 15748-15781.	4.0	36
22	COSMOS-Europe: a European network of cosmic-ray neutron soil moisture sensors. Earth System Science Data, 2022, 14, 1125-1151.	9.9	33
23	Analysis of Vegetation and Soil Patterns using Hyperspectral Remote Sensing, EMI, and Gammaâ€Ray Measurements. Vadose Zone Journal, 2013, 12, 1-15.	2.2	28
24	Steering operational synergies in terrestrial observation networks: opportunity for advancing Earth system dynamics modelling. Earth System Dynamics, 2018, 9, 593-609.	7.1	28
25	Reanalysis in Earth System Science: Toward Terrestrial Ecosystem Reanalysis. Reviews of Geophysics, 2021, 59, e2020RG000715.	23.0	24
26	Attempt of a fluxâ€based evaluation of field capacity. Journal of Plant Nutrition and Soil Science, 2008, 171, 399-408.	1.9	22
27	Can Drip Irrigation be Scheduled with Cosmicâ€Ray Neutron Sensing?. Vadose Zone Journal, 2019, 18, 190053.	2.2	22
28	Linking the Remote Sensing of Geodiversity and Traits Relevant to Biodiversityâ€”Part II: Geomorphology, Terrain and Surfaces. Remote Sensing, 2020, 12, 3690.	4.0	20
29	International viewpoint and news. Environmental Earth Sciences, 2012, 66, 1279-1284.	2.7	18
30	Auswirkungen des Anbaus vonMiscanthus x giganteus auf chemische und physikalische Bodeneigenschaften. Journal of Plant Nutrition and Soil Science, 1999, 162, 27-32.	1.9	17
31	Assessing the biogeographical and socio-ecological representativeness of the ILTER site network. Ecological Indicators, 2021, 127, 107785.	6.3	17
32	Comparison of approaches for the characterization of contamination at rural megasites. Environmental Earth Sciences, 2011, 63, 1239-1249.	2.7	14
33	Neutrons on Rails: Transregional Monitoring of Soil Moisture and Snow Water Equivalent. Geophysical Research Letters, 2021, 48, .	4.0	14
34	Remote Sensing of Geomorphodiversity Linked to Biodiversityâ€”Part III: Traits, Processes and Remote Sensing Characteristics. Remote Sensing, 2022, 14, 2279.	4.0	13
35	Monitoring Environmental Water with Ground Albedo Neutrons from Cosmic Rays. , 2016, , .		11
36	Scale-specific Hyperspectral Remote Sensing Approach in Environmental Research. Photogrammetrie, Fernerkundung, Geoinformation, 2012, 2012, 589-601.	1.2	10

#	Article	IF	Citations
37	Principal Component Analysis of the Spatiotemporal Pattern of Soil Moisture and Apparent Electrical Conductivity. Vadose Zone Journal, 2017, 16, 1-12.	2.2	10
38	Building a Global Ecosystem Research Infrastructure to Address Global Grand Challenges for Macrosystem Ecology. Earth's Future, 2022, 10, .	6.3	10
39	Soil moisture observation in a forested headwater catchment: combining a dense cosmic-ray neutron sensor network with roving and hydrogravimetry at the TERENO site WÃ¼stebach. Earth System Science Data, 2022, 14, 2501-2519.	9.9	9
40	Near-surface soil moisture estimation by combining airborne L-band brightness temperature observations and imaging hyperspectral data at the field scale. Journal of Applied Remote Sensing, 2012, 6, 063516.	1.3	7
41	Digital Soil Mapping: Approaches to Integrate Sensing Techniques to the Prediction of Key Soil Properties. Vadose Zone Journal, 2013, 12, 1-4.	2.2	7
42	PrÃ¼fung von 3 Verfahren zur Vorhersage der hydraulischen LeitfÃhigkeit ungesÃttigter BÃ¶den aus Wasserretentionsdaten oder aus der Bodenart. Journal of Plant Nutrition and Soil Science, 2000, 163, 7-12.	1.9	4
43	Orientierende untersuchungen zum einfluss des miscanthusanbaus auf ausgewÃhlte eigenschaften verschiedener bÃ¶den. Archives of Agronomy and Soil Science, 1996, 40, 163-174.	2.6	3
44	<i>STH-net:</i> a soil monitoring network for process-based hydrological modelling from the pedon to the hillslope scale. Earth System Science Data, 2021, 13, 2529-2539.	9.9	2
45	Title is missing!. Journal of Plant Nutrition and Soil Science, 1999, 162, 27-32.	1.9	0