

# Steffen Zacharias

## List of Publications by Year in descending order

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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	COSMOS-Europe: a European network of cosmic-ray neutron soil moisture sensors. <i>Earth System Science Data</i> , 2022, 14, 1125-1151.	9.9	33
2	Remote Sensing of Geomorphodiversity Linked to Biodiversityâ€™Part III: Traits, Processes and Remote Sensing Characteristics. <i>Remote Sensing</i> , 2022, 14, 2279.	4.0	13
3	Building a Global Ecosystem Research Infrastructure to Address Global Grand Challenges for Macrosystem Ecology. <i>Earth's Future</i> , 2022, 10, .	6.3	10
4	Soil moisture observation in a forested headwater catchment: combining a dense cosmic-ray neutron sensor network with roving and hydrogravimetry at the TERENO site WA¼stebach. <i>Earth System Science Data</i> , 2022, 14, 2501-2519.	9.9	9
5	&lt;i&gt;STH-net:&lt;/i&gt; a soil monitoring network for process-based hydrological modelling from the pedon to the hillslope scale. <i>Earth System Science Data</i> , 2021, 13, 2529-2539.	9.9	2
6	Assessing the biogeographical and socio-ecological representativeness of the ILTER site network. <i>Ecological Indicators</i> , 2021, 127, 107785.	6.3	17
7	Reanalysis in Earth System Science: Toward Terrestrial Ecosystem Reanalysis. <i>Reviews of Geophysics</i> , 2021, 59, e2020RG000715.	23.0	24
8	Neutrons on Rails: Transregional Monitoring of Soil Moisture and Snow Water Equivalent. <i>Geophysical Research Letters</i> , 2021, 48, .	4.0	14
9	Linking the Remote Sensing of Geodiversity and Traits Relevant to Biodiversityâ€™Part II: Geomorphology, Terrain and Surfaces. <i>Remote Sensing</i> , 2020, 12, 3690.	4.0	20
10	A dense network of cosmic-ray neutron sensors for soil moisture observation in a highly instrumented pre-Alpine headwater catchment in Germany. <i>Earth System Science Data</i> , 2020, 12, 2289-2309.	9.9	44
11	Can Drip Irrigation be Scheduled with Cosmicâ€™Ray Neutron Sensing?. <i>Vadose Zone Journal</i> , 2019, 18, 190053.	2.2	22
12	Linking Remote Sensing and Geodiversity and Their Traits Relevant to Biodiversityâ€™Part I: Soil Characteristics. <i>Remote Sensing</i> , 2019, 11, 2356.	4.0	46
13	Long-term environmental monitoring infrastructures in Europe: observations, measurements, scales, and socio-ecological representativeness. <i>Science of the Total Environment</i> , 2018, 624, 968-978.	8.0	45
14	The next generation of site-based long-term ecological monitoring: Linking essential biodiversity variables and ecosystem integrity. <i>Science of the Total Environment</i> , 2018, 613-614, 1376-1384.	8.0	143
15	Intercomparison of cosmic-ray neutron sensors and water balance monitoring in an urban environment. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , 2018, 7, 83-99.	1.6	44
16	Steering operational synergies in terrestrial observation networks: opportunity for advancing Earth system dynamics modelling. <i>Earth System Dynamics</i> , 2018, 9, 593-609.	7.1	28
17	Cosmicâ€™ray Neutron Rover Surveys of Field Soil Moisture and the Influence of Roads. <i>Water Resources Research</i> , 2018, 54, 6441-6459.	4.2	53
18	Understanding Forest Health with Remote Sensing, Part III: Requirements for a Scalable Multi-Source Forest Health Monitoring Network Based on Data Science Approaches. <i>Remote Sensing</i> , 2018, 10, 1120.	4.0	63

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19	Development and analysis of the Soil Water Infiltration Global database. <i>Earth System Science Data</i> , 2018, 10, 1237-1263.	9.9	85
20	The Bode hydrological observatory: a platform for integrated, interdisciplinary hydro-ecological research within the TERENO Harz/Central German Lowland Observatory. <i>Environmental Earth Sciences</i> , 2017, 76, 1.	2.7	93
21	Pedotransfer Functions in Earth System Science: Challenges and Perspectives. <i>Reviews of Geophysics</i> , 2017, 55, 1199-1256.	23.0	316
22	Principal Component Analysis of the Spatiotemporal Pattern of Soil Moisture and Apparent Electrical Conductivity. <i>Vadose Zone Journal</i> , 2017, 16, 1-12.	2.2	10
23	Repeated electromagnetic induction measurements for mapping soil moisture at the field scale: validation with data from a wireless soil moisture monitoring network. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 495-513.	4.9	52
24	The SCALEX Campaign: Scale-Crossing Land Surface and Boundary Layer Processes in the TERENO-preAlpine Observatory. <i>Bulletin of the American Meteorological Society</i> , 2017, 98, 1217-1234.	3.3	49
25	Improving calibration and validation of cosmic-ray neutron sensors in the light of spatial sensitivity. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 5009-5030.	4.9	93
26	TERENO-SOILCan: a lysimeter-network in Germany observing soil processes and plant diversity influenced by climate change. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	2.7	73
27	Monitoring Environmental Water with Ground Albedo Neutrons from Cosmic Rays. , 2016, , .		11
28	Footprint characteristics revised for field-scale soil moisture monitoring with cosmic-ray neutrons. <i>Water Resources Research</i> , 2015, 51, 5772-5790.	4.2	189
29	Spatial and Temporal Dynamics of Hillslope-scale Soil Moisture Patterns: Characteristic States and Transition Mechanisms. <i>Vadose Zone Journal</i> , 2015, 14, 1-16.	2.2	51
30	Mapping the Spectral Soil Quality Index (SSQI) Using Airborne Imaging Spectroscopy. <i>Remote Sensing</i> , 2015, 7, 15748-15781.	4.0	36
31	A new multiscale approach for monitoring vegetation using remote sensing-based indicators in laboratory, field, and landscape. <i>Environmental Monitoring and Assessment</i> , 2013, 185, 1215-1235.	2.7	44
32	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. <i>Current Opinion in Environmental Sustainability</i> , 2013, 5, 53-66.	6.3	39
33	Digital Soil Mapping: Approaches to Integrate Sensing Techniques to the Prediction of Key Soil Properties. <i>Vadose Zone Journal</i> , 2013, 12, 1-4.	2.2	7
34	Analysis of Vegetation and Soil Patterns using Hyperspectral Remote Sensing, EMI, and Gamma-ray Measurements. <i>Vadose Zone Journal</i> , 2013, 12, 1-15.	2.2	28
35	Near-surface soil moisture estimation by combining airborne L-band brightness temperature observations and imaging hyperspectral data at the field scale. <i>Journal of Applied Remote Sensing</i> , 2012, 6, 063516.	1.3	7
36	Scale-specific Hyperspectral Remote Sensing Approach in Environmental Research. <i>Photogrammetrie, Fernerkundung, Geoinformation</i> , 2012, 2012, 589-601.	1.2	10

#	ARTICLE	IF	CITATIONS
37	International viewpoint and news. Environmental Earth Sciences, 2012, 66, 1279-1284.	2.7	18
38	Comparison of approaches for the characterization of contamination at rural megasites. Environmental Earth Sciences, 2011, 63, 1239-1249.	2.7	14
39	A Network of Terrestrial Environmental Observatories in Germany. Vadose Zone Journal, 2011, 10, 955-973.	2.2	401
40	Attempt of a flux-based evaluation of field capacity. Journal of Plant Nutrition and Soil Science, 2008, 171, 399-408.	1.9	22
41	Excluding Organic Matter Content from Pedotransfer Predictors of Soil Water Retention. Soil Science Society of America Journal, 2007, 71, 43-50.	2.2	95
42	Prüfung von 3 Verfahren zur Vorhersage der hydraulischen Leitfähigkeit ungesättigter Böden aus Wasserretentionsdaten oder aus der Bodenart. Journal of Plant Nutrition and Soil Science, 2000, 163, 7-12.	1.9	4
43	Auswirkungen des Anbaus von Miscanthus x giganteus auf chemische und physikalische Bodeneigenschaften. Journal of Plant Nutrition and Soil Science, 1999, 162, 27-32.	1.9	17
44	Title is missing!. Journal of Plant Nutrition and Soil Science, 1999, 162, 27-32.	1.9	0
45	Orientierende untersuchungen zum einfluss des miscanthusanbaus auf ausgewählte eigenschaften verschiedener böden. Archives of Agronomy and Soil Science, 1996, 40, 163-174.	2.6	3