Timo Heimovaara

List of Publications by Year
in descending order

38	1,651	430442	360668
papers	citations	18 h-index	35 g-index

39	39	39	1243
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design of Tripleâ€Wire Time Domain Reflectometry Probes in Practice and Theory. Soil Science Society of America Journal, 1993, 57, 1410-1417.	1.2	178
2	Frequency domain analysis of time domain reflectometry waveforms: 1. Measurement of the complex dielectric permittivity of soils. Water Resources Research, 1994, 30, 189-199.	1.7	177
3	Assessing Temporal Variations in Soil Water Composition with Time Domain Reflectometry. Soil Science Society of America Journal, 1995, 59, 689-698.	1.2	174
4	A computer controlled 36-channel time domain reflectometry system for monitoring soil water contents. Water Resources Research, 1990, 26, 2311-2316.	1.7	136
5	Spatial patterns of throughfall and soil water dynamics in a Douglas fir stand. Water Resources Research, 1992, 28, 3227-3233.	1.7	114
6	Frequency domain analysis of time domain reflectometry waveforms: 2. A four-component complex dielectric mixing model for soils. Water Resources Research, 1994, 30, 201-209.	1.7	101
7	A computerâ€controlled 36â€channel time domain reflectometry system for monitoring soil water contents. Water Resources Research, 1990, 26, 2311-2316.	1.7	81
8	Frequency-Dependent Dielectric Permittivity from 0 to 1 GHz: Time Domain Reflectometry Measurements Compared with Frequency Domain Network Analyzer Measurements. Water Resources Research, 1996, 32, 3603-3610.	1.7	80
9	Nonequilibrium capillarity effects in twoâ€phase flow through porous media at different scales. Water Resources Research, 2011, 47, .	1.7	62
10	TDR calibration of organic forest floor media. Soil and Tillage Research, 1997, 11, 205-217.	0.4	61
11	Biofilm development and the dynamics of preferential flow paths in porous media. Biofouling, 2013, 29, 1069-1086.	0.8	60
12	Applying MICP by denitrification in soils: a process analysis. Environmental Geotechnics, 2018, 5, 79-93.	1.3	58
13	Obtaining the Spatial Distribution of Water Content along a TDR Probe Using the SCEMâ€UA Bayesian Inverse Modeling Scheme. Vadose Zone Journal, 2004, 3, 1128-1145.	1.3	45
14	Unconventional gas research initiative for clean energy transition in Europe. Journal of Natural Gas Science and Engineering, 2011, 3, 402-412.	2.1	40
15	Comparison of travel time analysis and inverse modeling for soil water content determination with time domain reflectometry. Water Resources Research, 2002, 38, 13-1-13-8.	1.7	39
16	Characterization of a heterogeneous landfill using seismic and electrical resistivity data. Geophysics, 2015, 80, EN13-EN25.	1.4	36
17	Obtaining the Spatial Distribution of Water Content along a TDR Probe Using the SCEM-UA Bayesian Inverse Modeling Scheme. Vadose Zone Journal, 2004, 3, 1128-1145.	1.3	36
18	Comments on â€œTime Domain Reflectometry Measurements of Water Content and Electrical Conductivity of Layered Soil Columnsâ€• Soil Science Society of America Journal, 1992, 56, 1657-1658.	1.2	19

#	Article	IF	Citations
19	Dielectric spectroscopy by inverse modelling of time domain reflectometry wave forms. Journal of Food Engineering, 1996, 30, 351-362.	2.7	17
20	Theoretical analysis of municipal solid waste treatment by leachate recirculation under anaerobic and aerobic conditions. Waste Management, 2018, 71, 246-254.	3.7	17
21	Spatial variability of organic matter degradability in tidal Elbe sediments. Journal of Soils and Sediments, 2020, 20, 2573-2587.	1.5	14
22	Do CSIA data from aquifers inform on natural degradation of chlorinated ethenes in aquitards?. Journal of Contaminant Hydrology, 2019, 226, 103520.	1.6	13
23	Imaging scatterers in landfills using seismic interferometry. Geophysics, 2013, 78, EN107-EN116.	1.4	12
24	The application of TDR in laboratory column experiments. Soil and Tillage Research, 1993, 6, 261-272.	0.4	10
25	Naphthalene Sorption to Organic Soil Materials Studied with Continuous Stirred Flow Experiments. Soil Science Society of America Journal, 1999, 63, 297-306.	1.2	10
26	Wet and gassy zones in a municipal landfill from P- and S-wave velocity fields. Geophysics, 2016, 81, EN75-EN86.	1.4	10
27	Waste barriers in environmental geotechnics. Environmental Geotechnics, 2017, 4, 390-392.	1.3	10
28	A toolbox to find the best mechanistic model to predict the behavior of environmental systems. Environmental Modelling and Software, 2016, 83, 344-355.	1.9	7
29	Variation in the availability of metals in surface water, an evaluation based on the dissolved, the freely dissolved and Biotic Ligand Model bioavailable concentration. Catena, 2018, 166, 260-270.	2.2	6
30	Organic matter pools in sediments of the tidal Elbe river. Limnologica, 2022, 96, 125997.	0.7	6
31	Applying aluminum-organic matter precipitates to reduce soil permeability in-situ: A field and modeling study. Science of the Total Environment, 2019, 662, 99-109.	3.9	5
32	Quantitative inverse modelling of a cylindrical object in the laboratory using ERT: An error analysis. Journal of Applied Geophysics, 2015, 114, 101-115.	0.9	4
33	Quantification of soil water retention parameters using multi-section TDR-waveform analysis. Journal of Hydrology, 2017, 549, 404-415.	2.3	4
34	Optimizing landfill aeration strategy with a 3-D multiphase model. Waste Management, 2020, 102, 499-509.	3.7	3
35	Geophysical tomography as a tool to estimate the geometry of soil layers: relevance for the reliability assessment of dikes. Georisk, 0, , 1-21.	2.6	3
36	SPATIAL VARIABILITY OF GAS COMPOSITION AND FLOW IN A LANDFILL UNDER IN-SITU AERATION. Detritus, 2022, , 104-113.	0.4	2

#	Article	IF	Citations
37	Sensitivity of Seismic Interferometry and Conventional Reflection Seismics at a Landfil to Processing and Survey Errors. , 2013, , .		1
38	Development of an Optical Sensor for BTEX and Chlorinated Solvents. , 2002, , 151-155.		0