Michal Dohnal

List of Publications by Year
in descending order

40 papers	864 citations	516710 16 h-index	501196 28 g-index
51 all docs	51 docs citations	51 times ranked	1192 citing authors

#	Article	IF	Citations
1	Trees never rest: the multiple facets of hydraulic redistribution. Ecohydrology, 2010, 3, 431-444.	2.4	121
2	Improving Hydraulic Conductivity Estimates from Minidisk Infiltrometer Measurements for Soils with Wide Poreâ€Size Distributions. Soil Science Society of America Journal, 2010, 74, 804-811.	2.2	65
3	Global transpiration data from sap flow measurements: the SAPFLUXNET database. Earth System Science Data, 2021, 13, 2607-2649.	9.9	65
4	Using Oxygenâ€18 to Study the Role of Preferential Flow in the Formation of Hillslope Runoff. Vadose Zone Journal, 2010, 9, 252-259.	2.2	56
5	Physical and Numerical Coupling in Dualâ€Continuum Modeling of Preferential Flow. Vadose Zone Journal, 2010, 9, 260-267.	2.2	37
6	Combining dual-continuum approach with diffusion wave model to include a preferential flow component in hillslope scale modeling of shallow subsurface runoff. Advances in Water Resources, 2012, 44, 113-125.	3.8	36
7	Gauge-adjusted rainfall estimates from commercial microwave links. Hydrology and Earth System Sciences, 2017, 21, 617-634.	4.9	35
8	Rainfall interception and spatial variability of throughfall in spruce stand. Journal of Hydrology and Hydromechanics, 2014, 62, 277-284.	2.0	31
9	Atmospheric observations with E-band microwave links â€" challenges and opportunities. Atmospheric Measurement Techniques, 2020, 13, 6559-6578.	3.1	28
10	Macroscopic Modeling of Plant Water Uptake in a Forest Stand Involving Rootâ€Mediated Soil Water Redistribution. Vadose Zone Journal, 2013, 12, 1-12.	2.2	26
11	Transport of bromide and pesticides through an undisturbed soil column: A modeling study with global optimization analysis. Journal of Contaminant Hydrology, 2015, 175-176, 1-16.	3.3	24
12	Uncertainty Analysis of a Dual-Continuum Model Used to Simulate Subsurface Hillslope Runoff Involving Oxygen-18 as Natural Tracer. Journal of Hydrology and Hydromechanics, 2012, 60, 194-205.	2.0	24
13	Modeling heat fluxes in macroporous soil under sparse young forest of temperate humid climate. Journal of Hydrology, 2011, 402, 367-376.	5.4	23
14	Simulated cadmium transport in macroporous soil during heavy rainstorm using dual-permeability approach. Biologia (Poland), 2006, 61, S251-S254.	1.5	22
15	Dynamics of dissolved organic carbon in hillslope discharge: Modeling and challenges. Journal of Hydrology, 2017, 546, 309-325.	5.4	19
16	Ponded infiltration into soil with biopores â€" field experiment and modeling. Biologia (Poland), 2009, 64, 580-584.	1.5	17
17	Interpretation of ponded infiltration data using numerical experiments. Journal of Hydrology and Hydromechanics, 2016, 64, 289-299.	2.0	17
18	A green roof segment for monitoring the hydrological and thermal behaviour of anthropogenic soil systems. Soil and Water Research, 2015, 10, 262-270.	1.7	16

#	ARTICLE	IF	CITATIONS
19	Estimates of Tillage and Rainfall Effects on Unsaturated Hydraulic Conductivity in a Small Central European Agricultural Catchment. Water (Switzerland), 2019, 11, 740.	2.7	15
20	Hydrological and thermal regime of a thin green roof system evaluated by physically-based model. Urban Forestry and Urban Greening, 2020, 48, 126582.	5.3	15
21	Thermal and water regime studied in a thin soil layer of green roof systems at early stage of pedogenesis. Journal of Soils and Sediments, 2016, 16, 2568-2579.	3.0	14
22	Modelling multiseasonal preferential transport of dissolved organic carbon in a shallow forest soil: Equilibrium versus kinetic sorption. Hydrological Processes, 2019, 33, 2898-2917.	2.6	14
23	Treeâ€Dimensional Numerical Analysis of Water Flow Affected by Entrapped Air: Application of Noninvasive Imaging Techniques. Vadose Zone Journal, 2013, 12, 1-12.	2.2	12
24	Hillslope Runoff Generation - Comparing Different Modeling Approaches. Journal of Hydrology and Hydromechanics, 2012, 60, .	2.0	11
25	The use of simple hydrological models to assess outflow of two green roofs systems. Soil and Water Research, 2019, 14, 94-103.	1.7	11
26	Moisture regime of historical sandstone masonryÂâ€"ÂA numerical study. Journal of Cultural Heritage, 2020, 42, 99-107.	3.3	11
27	Field leaching of pesticides at five test sites in Hawaii: modeling flow and transport. Pest Management Science, 2011, 67, 1571-1582.	3.4	10
28	New automatic minidisk infiltrometer: design and testing. Journal of Hydrology and Hydromechanics, 2015, 63, 110-116.	2.0	10
29	Mesoscopic aspects of root water uptake modeling â€" Hydraulic resistances and root geometry interpretations in plant transpiration analysis. Advances in Water Resources, 2016, 88, 86-96.	3.8	10
30	Episodic runoff generation at Central European headwater catchments studied using water isotope concentration signals. Journal of Hydrology and Hydromechanics, 2017, 65, 114-122.	2.0	10
31	A Simple Representation of Plant Water Storage Effects in Coupled Soil Water Flow and Transpiration Stream Modeling. Vadose Zone Journal, 2017, 16, 1-10.	2.2	9
32	Simulation of soil water dynamics in structured heavy soils with respect to root water uptake. Biologia (Poland), 2006, 61, S320-S323.	1.5	7
33	Determination of hydraulic properties of a tropical soil of Hawaii using column experiments and inverse modeling. Revista Brasileira De Ciencia Do Solo, 2011, 35, 1229-1239.	1.3	7
34	Root Function: In Situ Studies Through Sap Flow Research. , 2012, , 267-290.		7
35	Ponded infiltration in a grid of permanent single-ring infiltrometers: Spatial versus temporal variability. Journal of Hydrology and Hydromechanics, 2017, 65, 244-253.	2.0	7
36	Retrieving Water Vapor From an Eâ€Band Microwave Link With an Empirical Model Not Requiring In Situ Calibration. Earth and Space Science, 2021, 8, .	2.6	7

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37	Soil water freezing model with non-iterative energy balance accounting. Journal of Hydrology, 2019, 578, 124071.	5.4	3
38	Inter-annual variability of catchment water balance in a montane spruce forest. Hydrological Sciences Journal, 2022, 67, 1546-1560.	2.6	1
39	Correspondence between theory and practice of a Beerkan infiltration experiment. Vadose Zone Journal, 2022, 21, .	2.2	1
40	Use of autonomous transmission line-type electromagnetic sensors for classification of dry and wet periods at sub-hourly time intervals. Environmental Monitoring and Assessment, 2018, 190, 684.	2.7	0