Insa Neuweiler

List of Publications by Year in descending order

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471509 501196 47 860 17 28 citations h-index g-index papers 55 55 55 1198 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Performance of nearest neighbour metrics for pluvial flood nowcasts in urban catchments. Journal of Hydrology, 2022, 604, 127225.	5.4	1
2	Numerical modeling of the mechanical response of bacterial biofilm to flow by using an SPH poroviscoelastic model. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000214.	0.2	0
3	Modeling of Symbiotic Bacterial Biofilm Growth with an Example of the Streptococcus–Veillonella sp. System. Bulletin of Mathematical Biology, 2021, 83, 48.	1.9	5
4	Coupling saturated and unsaturated flow: comparing the iterative and the non-iterative approach. Hydrology and Earth System Sciences, 2021, 25, 4041-4059.	4.9	6
5	Presentation and discussion of the high-resolution atmosphere–land-surface–subsurface simulation dataset of the simulated Neckar catchment for the period 2007–2015. Earth System Science Data, 2021, 13, 4437-4464.	9.9	4
6	Modeling Overpotentials Related to Mass Transport Through Porous Transport Layers of PEM Water Electrolysis Cells. Journal of the Electrochemical Society, 2020, 167, 114511.	2.9	31
7	A time-space flux-corrected transport finite element formulation for solving multi-dimensional advection-diffusion-reaction equations. Journal of Computational Physics, 2019, 396, 31-53.	3.8	9
8	An ensemble neural network model for real-time prediction of urban floods. Journal of Hydrology, 2019, 575, 743-754.	5.4	128
9	Physically based modeling of stormwater pipe leakage in an urban catchment. Journal of Hydrology, 2019, 573, 778-793.	5.4	19
10	Modeling Immiscible Twoâ€Phase Flow in Rough Fractures From Capillary to Viscous Fingering. Water Resources Research, 2019, 55, 2033-2056.	4.2	28
11	Generation of Stormwater Drainage Networks Using Spatial Data. Green Energy and Technology, 2019, , 576-581.	0.6	1
12	Modeling of contaminant transport during an urban pluvial flood event – The importance of surface flow. Journal of Hydrology, 2019, 568, 301-310.	5.4	19
13	A new approach to determine the relative importance of DLVO and non-DLVO colloid retention mechanisms in porous media. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 560, 330-335.	4.7	24
14	Forecasting Pollution Transport in Drainage Water. Green Energy and Technology, 2019, , 701-705.	0.6	0
15	A timeâ€space FCTâ€FE formulation for 1D time dependent advectionâ€diffusion equation. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800244.	0.2	O
16	A Deeper Insight of a Multi-dimensional Continuum Biofilm Growth Model: Experimental Observation and Parameter Studies. Lecture Notes in Applied and Computational Mechanics, 2018, , 257-272.	2.2	1
17	Debates—Hypothesis testing in hydrology: A subsurface perspective. Water Resources Research, 2017, 53, 1784-1791.	4.2	9
18	Effects of flow interruption on transport and retention of iron oxide colloids in quartz sand. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 520, 532-543.	4.7	27

#	Article	IF	Citations
19	A coupled approach for the three-dimensional simulation of pipe leakage in variably saturated soil. Journal of Hydrology, 2017, 555, 569-585.	5.4	24
20	Biofilm formation by the oral pioneer colonizer Streptococcus gordonii: an experimental and numerical study. FEMS Microbiology Ecology, 2017, 93, .	2.7	31
21	Joint Editorial—Fostering Innovation and Improving Impact Assessment for Journal Publications in Hydrology. Vadose Zone Journal, 2016, 15, 1-4.	2.2	1
22	Joint editorial: Fostering innovation and improving impact assessment for journal publications in hydrology. Water Resources Research, 2016, 52, 2399-2402.	4.2	9
23	Fluid trapping during capillary displacement in fractures. Advances in Water Resources, 2016, 95, 264-275.	3.8	24
24	Multi-rate mass transfer modeling of two-phase flow in highly heterogeneous fractured and porous media. Advances in Water Resources, 2016, 91, 63-77.	3.8	22
25	Solute Transport in Heterogeneous Soil with Timeâ€Dependent Boundary Conditions. Vadose Zone Journal, 2016, 15, 1-17.	2.2	18
26	Noise-driven interfaces and their macroscopic representation. Physical Review E, 2016, 94, 052802.	2.1	2
27	Experimental and Numerical Analysis of Air Trapping in a Porous Medium with Coarse Textured Inclusions. Acta Geophysica, 2016, 64, 2487-2509.	2.0	5
28	Joint Editorial: Fostering innovation and improving impact assessment for journal publications in hydrology. Hydrology and Earth System Sciences, 2016, 20, 1081-1084.	4.9	2
29	Influence of heterogeneous air entry pressure on large scale unsaturated flow in porous media. Acta Geophysica, 2014, 62, 1179-1191.	2.0	5
30	A non-local two-phase flow model for immiscible displacement in highly heterogeneous porous media and its parametrization. Advances in Water Resources, 2013, 62, 475-487.	3.8	23
31	A Non-Local Richards Equation to Model Unsaturated Flow in Highly Heterogeneous Media under Nonequilibrium Pressure Conditions. Vadose Zone Journal, 2012, 11, vzj2011.0132.	2.2	13
32	Upscaling unsaturated flow in binary porous media with air entry pressure effects. Water Resources Research, 2012, 48, .	4.2	13
33	The impact of buoyancy on front spreading in heterogeneous porous media in twoâ€phase immiscible flow. Water Resources Research, 2011, 47, .	4.2	9
34	Estimation of effective parameters for a two-phase flow problem in non-Gaussian heterogeneous porous media. Journal of Contaminant Hydrology, 2011, 120-121, 141-156.	3.3	17
35	Simulation of Solute Transport Through Fractured Rock: A Higher-Order Accurate Finite-Element Finite-Volume Method Permitting Large Time Steps. Transport in Porous Media, 2010, 83, 289-318.	2.6	51
36	Modeling gasâ€water processes in fractures with fracture flow properties obtained through upscaling. Water Resources Research, 2010, 46, .	4.2	11

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#	Article	IF	CITATIONS
37	Quantitative links between porous media structures and flow behavior across scales. Advances in Water Resources, 2008, 31, 1127-1128.	3.8	3
38	Probability density functions of hydraulic head and velocity in threeâ€dimensional heterogeneous porous media. Water Resources Research, 2008, 44, .	4.2	44
39	Impact of sampling volume on the probability density function of steady state concentration. Water Resources Research, 2008, 44, .	4.2	49
40	Sequential Coupling of Models for Contaminant Spreading in the Vadose Zone. Vadose Zone Journal, 2008, 7, 721-731.	2.2	11
41	Upscaling for unsaturated flow for non-Gaussian heterogeneous porous media. Water Resources Research, 2007, 43, .	4.2	39
42	Effective Parameter Functions for the Richards Equation in Layered Porous Media. Vadose Zone Journal, 2006, 5, 963-977.	2.2	18
43	Upscaling of Two-Phase Flow Processes in Porous Media. , 2005, , 237-257.		17
44	Homogenization of Richards equation in permeability fields with different connectivities. Water Resources Research, 2005, 41, .	4.2	47
45	Experimental and theoretical investigations of drainage in horizontal rough-walled fractures with different correlation structures. Advances in Water Resources, 2004, 27, 1217-1231.	3.8	29
46	Infiltration of DNAPL into heterogeneous water-saturated soil with different connectivity properties. Developments in Water Science, 2004, 55, 313-324.	0.1	0
47	Joint editorial – Fostering innovation and improving impact assessment for journal publications in hydrology. Hydrological Sciences Journal, 0, , 1-4.	2.6	8