Gerardo Severino

List of Publications by Year
in descending order

65	935	361413	526287
papers	citations	20 h-index	27 g-index

67	67	67	550
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Methodological approach for evaluating the response of soil hydrological behavior to irrigation with treated municipal wastewater. Journal of Hydrology, 2004, 292, 114-134.	5.4	79
2	Using Bimodal Lognormal Functions to Describe Soil Hydraulic Properties. Soil Science Society of America Journal, 2011, 75, 468-480.	2.2	52
3	Darcian preferential water flow and solute transport through bimodal porous systems: Experiments and modelling. Journal of Contaminant Hydrology, 2009, 104, 74-83.	3.3	46
4	Stochastic analysis of a field-scale unsaturated transport experiment. Advances in Water Resources, 2010, 33, 1188-1198.	3.8	37
5	Stochastic analysis of wellâ€type flows in randomly heterogeneous porous formations. Water Resources Research, 2011, 47, .	4.2	33
6	Steady flows driven by sources of random strength in heterogeneous aquifers with application to partially penetrating wells. Stochastic Environmental Research and Risk Assessment, 2008, 22, 567-582.	4.0	31
7	Identification of the hydraulic conductivity using a global optimization method. Agricultural Water Management, 2009, 96, 504-510.	5.6	31
8	An indirect assessment on the impact of connectivity of conductivity classes upon longitudinal asymptotic macrodispersivity. Water Resources Research, 2010, 46, .	4.2	31
9	On the local concentration probability density function of solutes reacting upon mixing. Water Resources Research, 2011, 47, .	4.2	30
10	Determining the soil hydraulic conductivity by means of a field scale internal drainage. Journal of Hydrology, 2003, 273, 234-248.	5.4	29
11	State-space approach to evaluate spatial variability of field measured soil water status along a line transect in a volcanic-vesuvian soil. Hydrology and Earth System Sciences, 2010, 14, 2455-2463.	4.9	28
12	On the effective hydraulic conductivity in mean vertical unsaturated steady flows. Advances in Water Resources, 2005, 28, 964-974.	3.8	26
13	Macrodispersion by diverging radial flows in randomly heterogeneous porous media. Journal of Contaminant Hydrology, 2011, 123, 40-49.	3.3	26
14	On the dependence of the saturated hydraulic conductivity upon the effective porosity through a power law model at different scales. Hydrological Processes, 2016, 30, 2366-2372.	2.6	26
15	Spatial moments for colloid-enhanced radionuclide transport in heterogeneous aquifers. Advances in Water Resources, 2007, 30, 101-112.	3.8	24
16	Macrodispersion by Point-Like Source Flows in Randomly Heterogeneous Porous Media. Transport in Porous Media, 2011, 89, 121-134.	2.6	24
17	Travel time approach to kinetically sorbing solute by diverging radial flows through heterogeneous porous formations. Water Resources Research, 2012, 48, .	4.2	24
18	A Note on the Apparent Conductivity of Stratified Porous Media in Unsaturated Steady Flow Above a Water Table. Transport in Porous Media, 2012, 91, 733-740.	2.6	24

#	Article	IF	Citations
19	Unsaturated Transport with Linear Kinetic Sorption Under Unsteady Vertical Flow. Transport in Porous Media, 2006, 63, 147-174.	2.6	23
20	Lagrangian models of reactive transport in heterogeneous porous media with uncertain properties. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 1154-1174.	2.1	22
21	The IoT as a tool to combine the scheduling of the irrigation with the geostatistics of the soils. Future Generation Computer Systems, 2018, 82, 268-273.	7.5	22
22	Uncertainty quantification of unsteady source flows in heterogeneous porous media. Journal of Fluid Mechanics, 2019, 870, 5-26.	3.4	17
23	Dielectric properties of a tilled sandy volcanic-vesuvian soil with moderate andic features. Soil and Tillage Research, 2013, 133, 93-100.	5.6	15
24	Stochastic analysis of steady seepage underneath a water-retaining wall through highly anisotropic porous media. Journal of Fluid Mechanics, 2015, 778, 253-272.	3.4	15
25	Analytical solutions for reactive transport under an infiltrationâ€“redistribution cycle. Journal of Contaminant Hydrology, 2004, 70, 89-115.	3.3	14
26	A note on transport of a pulse of nonlinearly reactive solute in a heterogeneous formation. Annals of Software Engineering, 2000, 4, 275-286.	0.5	13
27	Modelling Water Flow and Solute Transport in Heterogeneous Unsaturated Porous Media. Springer Optimization and Its Applications, 2009, , 361-383.	0.9	13
28	On the velocity covariance for steady flows in heterogeneous porous formations and its application to contaminants transport. Computational Geosciences, 2006, 9, 155-177.	2.4	12
29	Stochastic analysis of unsaturated steady flows above the water table. Water Resources Research, 2017, 53, 6687-6708.	4.2	12
30	Spatial dependence of the hydraulic conductivity in a wellâ€type configuration at the mesoscale. Hydrological Processes, 2018, 32, 590-595.	2.6	12
31	Use of fractal models to define the scaling behavior of the aquifersâ€™ parameters at the mesoscale. Stochastic Environmental Research and Risk Assessment, 2021, 35, 971-984.	4.0	12
32	A fractal analysis of the water retention curve. Hydrological Processes, 2018, 32, 1401-1405.	2.6	11
33	A boundary-layer solution for flow at the soil-root interface. Journal of Mathematical Biology, 2015, 70, 1645-1668.	1.9	10
34	Interpreting TDR Signal Propagation through Soils with Distinct Layers of Nonaqueousâ€Phase Liquid and Water Content. Vadose Zone Journal, 2017, 16, 1-11.	2.2	9
35	Effective conductivity in steady well-type flows through porous formations. Stochastic Environmental Research and Risk Assessment, 2019, 33, 827-835.	4.0	9
36	A stable meshfree PDE solver for source-type flows in porous media. Applied Numerical Mathematics, 2020, 149, 30-42.	2.1	8

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37	Mining Geostatistics to Quantify the Spatial Variability of Certain Soil Flow Properties. Procedia Computer Science, 2016, 98, 419-424.	2.0	7
38	On the Longitudinal Dispersion in Conservative Transport Through Heterogeneous Porous Formations at Finite Peclet Numbers. Water Resources Research, 2017, 53, 8614-8625.	4.2	7
39	Surface measurements of hydraulic properties in an irrigated soil using a disc permeameter. WIT Transactions on Ecology and the Environment, 2006, , .	0.0	7
40	Effects of Hydraulic Soil Properties on Vegetation Pattern Formation in Sloping Landscapes. Bulletin of Mathematical Biology, 2017, 79, 2773-2784.	1.9	6
41	A Semi-Automatic Numerical Algorithm for Turing Patterns Formation in a Reaction-Diffusion Model. IEEE Access, 2018, 6, 4720-4724.	4.2	6
42	Scaling Analysis of Water Retention Curves: A Multi-fractal Approach. Procedia Environmental Sciences, 2013, 19, 618-622.	1.4	5
43	Experimental evidence of the stochastic behavior of the conductivity in radial flow configurations. Stochastic Environmental Research and Risk Assessment, 2019, 33, 1651-1657.	4.0	5
44	Analytical Model for Gravity-Driven Drainage. , 2005, , 209-217.		4
45	On the regularization of generalized eigenvalues classifiers. AIP Conference Proceedings, 2016, , .	0.4	4
46	Uncertainty Quantification of Unsteady Flows Generated by Line-Sources Through Heterogeneous Geological Formations. SIAM-ASA Journal on Uncertainty Quantification, 2020, 8, 807-825.	2.0	4
47	Remarks on the numerical approximation of Dirac delta functions. Results in Applied Mathematics, 2021, 12, 100200.	1.3	4
48	Dispersion in doublet-type flows through highly anisotropic porous formations. Journal of Fluid Mechanics, 2022, 931, .	3.4	4
49	An analytical model for carrier-facilitated solute transport in weakly heterogeneous porous media. Applied Mathematical Modelling, 2017, 44, 261-273.	4.2	3
50	A scaleâ€invariant property of the water retention curve in weakly heterogeneous vadose zones. Hydrological Processes, 2019, 33, 1032-1039.	2.6	3
51	Wellâ€type steady flow in strongly heterogeneous porous media: an experimental study. Water Resources Research, 0, , .	4.2	3
52	Scaling behaviour of braided active channels: a Taylorâ€™s power law approach. European Physical Journal Plus, 2022, 137, .	2.6	3
53	The frequency domain approach to analyse field-scale miscible flow transport experiments in the soils. Biosystems Engineering, 2018, 168, 96-104.	4.3	2
54	On a Class of Integrals Useful to Solve Wellâ€Type Flows in Heterogeneous Porous Formations. Water Resources Research, 2019, 55, 5147.	4.2	2

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55	Experimental investigation to characterize simple versus multi scaling analysis of hydraulic conductivity at a mesoscale. Stochastic Environmental Research and Risk Assessment, 2022, 36, 1131-1142.	4.0	2
56	Dipole-flow disturbed by a circular inclusion of conductivity different from the background: From deterministic to a self-consistent analytical solution. Physical Review Fluids, 2022, 7, .	2.5	2
57	Solving 3-D Grayâ€“Scott Systems with Variable Diffusion Coefficients on Surfaces by Closest Point Method with RBF-FD. Mathematics, 2021, 9, 924.	2.2	1
58	Local-scale solute transport in variously structured soils under continuous flood irrigation. WIT Transactions on Ecology and the Environment, 2006, , .	0.0	1
59	BEHAVIOUR OF SALT DISTRIBUTION IN DRY SOILS. Journal of Agricultural Engineering, 2007, 38, 21.	1.5	0
60	Contribution of the â€œPortici Groupâ€•to the Development of Agricultural Hydraulics. Procedia Environmental Sciences, 2013, 19, 3-14.	1.4	0
61	The HPC ReCaS Infrastructure towards the Simulation of Subsurface Hydrological Processes. , 2017, , 371-387.		0
62	Some remarks on the numerical solution of parabolic partial differential equations. AIP Conference Proceedings, 2017, , .	0.4	0
63	Average steady flow toward a drain through a randomly heterogeneous porous formation. Applied Mathematical Modelling, 2020, 84, 106-115.	4.2	0
64	A Travelling Wave Solution for Nonlinear Colloid Facilitated Mass Transport in Porous Media. Lecture Notes in Computer Science, 2020, , 103-108.	1.3	0
65	Solute transport in a doubletâ€type flow configuration through a weakly heterogeneous porous formation. Water Resources Research, 0, , .	4.2	0