Martinus van Genuchten

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

229 papers	15,604 citations	61 h-index	120 g-index
233 ext. papers	17,104 ext. citations	4.2 avg, IF	6.63 L-index

#	Paper	IF	Citations
229	Closed-form hydraulic conductivity equations for multimodal unsaturated soil hydraulic properties. *Vadose Zone Journal*, **2022**, 21, e20168	2.7	2
228	Effects of carbonated water injection on the pore system of a carbonate rock (coquina). *Journal of Hydrology and Hydromechanics*, **2022**, 70, 257-268	2.1	
227	Field-scale assessment of the unsaturated hydraulic properties of residual soils in southeastern Brazil. *Journal of Hydrology and Hydromechanics*, **2022**, 70, 244-256	2.1	0
226	Effect of soil textural characteristics on longitudinal dispersion in saturated porous media. *Journal of Hydrology and Hydromechanics*, **2021**, 69, 161-170	2.1	0
225	Unsaturated flow effects on solute transport in porous media. *Journal of Hydrology*, **2021**, 598, 126301	6	6
224	Predicting the hydraulic properties of compacted soils: model validation **2021**,		2
223	Borage (Borago officinalis L.) response to salinity at early growth stages as influenced by seed pre-treatment. *Agricultural Water Management*, **2021**, 253, 106925	5.9	2
222	Simple functions for describing soil water retention and the unsaturated hydraulic conductivity from saturation to complete dryness. *Journal of Hydrology*, **2020**, 588, 125041	6	9
221	Integral transform analysis of radionuclide transport in variably saturated media using a physical non-equilibrium model: application to solid waste leaching at a uranium mining installation. *Anais Da Academia Brasileira De Ciencias*, **2020**, 92, e20190427	1.4	1
220	A control volume scheme using compact integrated radial basis function stencils for solving the Richards equation. *Journal of Hydrology*, **2020**, 580, 124240	6	4
219	HYPROP measurements of the unsaturated hydraulic properties of a carbonate rock sample. *Journal of Hydrology*, **2020**, 591, 125706	6	6
218	Quasi-Saturated Layer: Implications for Estimating Recharge and Groundwater Modeling. *Ground Water*, **2020**, 58, 432-440	2.4	11
217	Effects of Biological Stabilization on the Water Retention Properties of Unsaturated Soils. *Journal of Geotechnical and Geoenvironmental Engineering - ASCE*, **2019**, 145, 04019028	3.4	14
216	HYDRUS-2D simulations of water and potassium movement in drip irrigated tropical soil container cultivated with sugarcane. *Agricultural Water Management*, **2019**, 221, 334-347	5.9	19
215	Capillary pressureâ□saturation curves of thin hydrophilic fibrous layers: effects of overburden pressure, number of layers, and multiple imbibitionâ□rainage cycles. *Textile Reseach Journal*, **2019**, 89, 4906-4915	1.7	3
214	Determination of specific LNAPL volumes in soils having a multimodal pore-size distribution. *Journal of Environmental Management*, **2019**, 237, 576-584	7.9	1
213	Comparison of alternative soil particle-size distribution models and their correlation with soil physical attributes. *Journal of Hydrology and Hydromechanics*, **2019**, 67, 179-190	2.1	4

212	Computational and experimental pore-scale studies of a carbonate rock sample. *Journal of Hydrology and Hydromechanics*, **2019**, 67, 372-383	2.1	3
211	Further tests of the HYPROP evaporation method for estimating the unsaturated soil hydraulic properties. *Journal of Hydrology and Hydromechanics*, **2018**, 66, 161-169	2.1	24
210	New features of version 3 of the HYDRUS (2D/3D) computer software package. *Journal of Hydrology and Hydromechanics*, **2018**, 66, 133-142	2.1	39
209	Effect of temporal averaging of meteorological data on predictions of groundwater recharge. *Journal of Hydrology and Hydromechanics*, **2018**, 66, 143-152	2.1	15
208	Unsaturated hydraulic properties of heterogeneously packed sands: A pore-scale computational study. *Journal of Hydrology*, **2018**, 565, 570-580	6	5
207	Theoretical bounds for the exponent in the empirical power-law advance-time curve for surface flow. *Agricultural Water Management*, **2018**, 210, 208-216	5.9	1
206	Reassessment of the Goiânia radioactive waste repository in Brazil using HYDRUS-1D. *Journal of Hydrology and Hydromechanics*, **2018**, 66, 202-210	2.1	1
205	The HPx software for multicomponent reactive transport during variably-saturated flow: Recent developments and applications. *Journal of Hydrology and Hydromechanics*, **2018**, 66, 211-226	2.1	14
204	Thematic Issue on HYDRUS Software Applications to Subsurface Fluid Flow and Contaminant Transport. *Journal of Hydrology and Hydromechanics*, **2018**, 66, 129-132	2.1	5
203	Water Distribution in an Arid Zone Soil: Numerical Analysis of Data from a Large Weighing Lysimeter. *Vadose Zone Journal*, **2018**, 17, 1-17	2.7	17
202	The Root Zone: Soil Physics and Beyond. *Vadose Zone Journal*, **2018**, 17, 180002	2.7	12
201	Effects of Porosity and Water Saturation on the Effective Diffusivity of a Cathode Catalyst Layer. *Journal of the Electrochemical Society*, **2017**, 164, F298-F305	3.9	20
200	Multiscale modelling of dual-porosity porous media; a computational pore-scale study for flow and solute transport. *Advances in Water Resources*, **2017**, 105, 82-95	4.7	40
199	Analysis of the Hysteretic Hydraulic Properties of Unsaturated Soil. *Vadose Zone Journal*, **2017**, 16, vzj2016.11.0115	3.7	17
198	The role of uncertainty in bedrock depth and hydraulic properties on the stability of a variably-saturated slope. *Computers and Geotechnics*, **2017**, 88, 222-241	4.4	14
197	Characterizing the hydraulic properties of paper coating layer using FIB-SEM tomography and 3D pore-scale modeling. *Chemical Engineering Science*, **2017**, 160, 275-280	4.4	34
196	Dissolution kinetics of volatile organic compound vapors in water: An integrated experimental and computational study. *Journal of Contaminant Hydrology*, **2017**, 196, 43-51	3.9	4
195	Fractal-based models for the unsaturated soil hydraulic functions. *Geoderma*, **2017**, 306, 144-151	6.7	20

194	Revisiting the horizontal redistribution of water in soils: Experiments and numerical modeling. *Water Resources Research*, **2017**, 53, 7576-7589	5.4	9
193	Simulating the Fate and Transport of Coal Seam Gas Chemicals in Variably-Saturated Soils Using HYDRUS. *Water (Switzerland)*, **2017**, 9, 385	3	8
192	A Mathematical View of Water Table Fluctuations in a Shallow Aquifer in Brazil. *Ground Water*, **2016**, 54, 82-91	2.4	28
191	Effects of Sand Compaction and Mixing on Pore Structure and the Unsaturated Soil Hydraulic Properties. *Vadose Zone Journal*, **2016**, 15, vzj2015.10.0136	2.7	24
190	Soil moisture prediction of bare soil profiles using diffuse spectral reflectance information and vadose zone flow modeling. *Remote Sensing of Environment*, **2016**, 187, 218-229	13.2	20
189	Bayesian estimation of the hydraulic and solute transport properties of a small-scale unsaturated soil column. *Journal of Hydrology and Hydromechanics*, **2016**, 64, 30-44	2.1	12
188	Recent Developments and Applications of the HYDRUS Computer Software Packages. *Vadose Zone Journal*, **2016**, 15, 1-25	2.7	437
187	Alternate furrow irrigation can radically improve water productivity of okra. *Agricultural Water Management*, **2016**, 173, 55-60	5.9	17
186	Modeling of Horizontal Water Redistribution in an Unsaturated Soil. *Vadose Zone Journal*, **2016**, 15, vzj2015.08.0109	2.7	7
185	Optimal parameters for the Green-Ampt infiltration model under rainfall conditions. *Journal of Hydrology and Hydromechanics*, **2015**, 63, 93-101	2.1	16
184	Evaluation of a horizontal permeable reactive barrier for preventing upward diffusion of volatile organic compounds through the unsaturated zone. *Journal of Environmental Management*, **2015**, 163, 204-13	7.9	9
183	Inverse estimation of soil hydraulic properties under oil palm trees. *Geoderma*, **2015**, 241-242, 306-312	6.7	19
182	A complete soil hydraulic model accounting for capillary and adsorptive water retention, capillary and film conductivity, and hysteresis. *Water Resources Research*, **2015**, 51, 8757-8772	5.4	39
181	A Comparative Study of Multiple Approaches for Predicting the Soil–Water Retention Curve: Hyperspectral Information vs. Basic Soil Properties. *Soil Science Society of America Journal*, **2015**, 79, 1043-1058	2.5	43
180	Nonequilibrium and Multicomponent Transport Models. *Agronomy*, **2015**, 405-430	0.8	
179	Optimizing landfill site selection by using land classification maps. *Environmental Science and Pollution Research*, **2015**, 22, 7754-65	5.1	58
178	Evaluation of mulched drip irrigation for cotton in arid Northwest China. *Irrigation Science*, **2014**, 32, 15-27	3.1	76
177	The Use of Numerical Flow and Transport Models in Environmental Analyses **2014**, 349-376		1

176	Environmental Impact Assessment of Liquid Waste Ponds in Uranium Milling Installations. *Waste and Biomass Valorization*, **2013**, 4, 197-211	3.2	5
175	Analytical solutions of the one-dimensional advectionâDispersion solute transport equation subject to time-dependent boundary conditions. *Chemical Engineering Journal*, **2013**, 221, 487-491	14.7	57
174	Bacteriophage PRD1 batch experiments to study attachment, detachment and inactivation processes. *Journal of Contaminant Hydrology*, **2013**, 152, 12-7	3.9	12
173	Author's reply: To PMID 20113362. *Ground Water*, **2013**, 51, 9-13	2.4	1
172	Vadose Zone Journal: A Decade of Multidisciplinary Research. *Vadose Zone Journal*, **2013**, 12, vzj2013.08.0150	2.7	1
171	Solute transport in a loamy soil under subsurface porous clay pipe irrigation. *Agricultural Water Management*, **2013**, 121, 73-80	5.9	23
170	Exact analytical solutions for contaminant transport in rivers 1. The equilibrium advection-dispersion equation. *Journal of Hydrology and Hydromechanics*, **2013**, 61, 146-160	2.1	43
169	Exact Analytical Solutions for Contaminant Transport in Rivers. *Journal of Hydrology and Hydromechanics*, **2013**, 61, 250-259	2.1	15
168	Scaling the Dependency of Soil Penetration Resistance on Water Content and Bulk Density of Different Soils. *Soil Science Society of America Journal*, **2013**, 77, 1488-1495	2.5	24
167	HYDRUS: Model Use, Calibration, and Validation. *Transactions of the ASABE*, **2012**, 55, 1263-1276	0.9	55
166	STANMOD: Model Use, Calibration, and Validation. *Transactions of the ASABE*, **2012**, 55, 1355-1368	0.9	27
165	Modeling Virus Transport and Remobilization during Transient Partially Saturated Flow. *Vadose Zone Journal*, **2012**, 11, vzj2011.0090	2.7	17
164	Alternative Analytical Expressions for the General van Genuchtenâ Mualem and van Genuchtenâ Burdine Hydraulic Conductivity Models. *Vadose Zone Journal*, **2011**, 10, 618-623	2.7	9
163	Groundwater recharge at five representative sites in the Hebei Plain, China. *Ground Water*, **2011**, 49, 286-94	2.4	73
162	Deriving and validating pedotransfer functions for some calcareous soils. *Journal of Hydrology*, **2011**, 399, 93-99	6	42
161	Leaching of Contaminants to Groundwater **2011**, 787-850		9
160	Soil Water Content Distributions between Two Emitters of a Subsurface Drip Irrigation System. *Soil Science Society of America Journal*, **2011**, 75, 488-497	2.5	58
159	Kirkham's Legacy and Contemporary Challenges in Soil Physics Research. *Soil Science Society of America Journal*, **2011**, 75, 1589-1601	2.5	39

158	Potential Impact of a Seepage Face on Solute Transport to a Pumping Well. *Vadose Zone Journal*, **2010**, 9, 686-696	2.7	9
157	Reclamation of Saline Soils by Partial Ponding: Simulations for Different Soils. *Vadose Zone Journal*, **2010**, 9, 486-495	2.7	12
156	Inverse modeling of vadose zone flow processes using squared Insensitivity loss function. *Journal of Hydrology and Hydromechanics*, **2010**, 58,	2.1	2
155	Using Pedotransfer Functions to Estimate the van Genuchtenâ€Mualem Soil Hydraulic Properties: A Review. *Vadose Zone Journal*, **2010**, 9, 795-820	2.7	267
154	Estimation of the van Genuchten Soil Water Retention Properties from Soil Textural Data. *Pedosphere*, **2010**, 20, 456-465	5	106
153	The effects of preferential flow and soil texture on risk assessments of a NORM waste disposal site. *Journal of Hazardous Materials*, **2010**, 174, 648-55	12.8	20
152	Analytical Solution for Multi-Species Contaminant Transport in Finite Media with Time-Varying Boundary Conditions. *Transport in Porous Media*, **2010**, 85, 171-188	3.1	27
151	A root zone modelling approach to estimating groundwater recharge from irrigated areas. *Journal of Hydrology*, **2009**, 367, 138-149	6	113
150	Analytical Solution for Multi-Species Contaminant Transport Subject to Sequential First-Order Decay Reactions in Finite Media. *Transport in Porous Media*, **2009**, 80, 373-387	3.1	39
149	Analytical solution of the advectionâ€diffusion transport equation using a change-of-variable and integral transform technique. *International Journal of Heat and Mass Transfer*, **2009**, 52, 3297-3304	4.9	84
148	Selected HYDRUS modules for modeling subsurface flow and contaminant transport as influenced by biological processes at various scales. *Biologia (Poland)*, **2009**, 64, 465-469	1.5	13
147	Modeling the coupled effects of pore space geometry and velocity on colloid transport and retention. *Water Resources Research*, **2009**, 45,	5.4	44
146	Multimodel Simulation of Water Flow in a Field Soil Using Pedotransfer Functions. *Vadose Zone Journal*, **2009**, 8, 1-10	2.7	51
145	Performance of Pitcher Irrigation System. *Soil Science*, **2009**, 174, 312-320	0.9	22
144	Colloid transport in unsaturated porous media: the role of water content and ionic strength on particle straining. *Journal of Contaminant Hydrology*, **2008**, 96, 113-27	3.9	143
143	Development and Applications of the HYDRUS and STANMOD Software Packages and Related Codes. *Vadose Zone Journal*, **2008**, 7, 587-600	2.7	787
142	Modeling Coupled Hydrologic and Chemical Processes: Long-Term Uranium Transport following Phosphorus Fertilization. *Vadose Zone Journal*, **2008**, 7, 698-711	2.7	49
141	Modelling coupled water flow, solute transport and geochemical reactions affecting heavy metal migration in a podzol soil. *Geoderma*, **2008**, 145, 449-461	6.7	77

140	Temporal stability in soil water content patterns across agricultural fields. *Catena*, **2008**, 73, 125-133	5.8	111
139	Modeling Nonequilibrium Flow and Transport Processes Using HYDRUS. *Vadose Zone Journal*, **2008**, 7, 782-797	2.7	362
138	USING THE TRANSPIRATION REGIME TO ESTIMATE BIOMASS PRODUCTION. *Soil Science*, **2008**, 173, 401-407	0.9	12
137	A New Approach to Estimate Soil Hydraulic Parameters Using Only Soil Water Retention Data. *Soil Science Society of America Journal*, **2008**, 72, 471-479	2.5	13
136	Performance Evaluation of Models That Describe the Soil Water Retention Curve between Saturation and Oven Dryness. *Vadose Zone Journal*, **2008**, 7, 87-96	2.7	49
135	Software to estimate â33 and â1500 kPa soil water retention using the non-parametric k-Nearest Neighbor technique. *Environmental Modelling and Software*, **2008**, 23, 254-255	5.2	26
134	Modeling the water flow in unsaturated waste rock pile: an important step in the overall closure planning of the first uranium mining site in Brazil **2008**, 177-186		1
133	Organic acids enhance the uptake of lead by wheat roots. *Planta*, **2007**, 225, 1483-94	4.7	31
132	Analytical AdvectionâDispersion Model for Transport and Plant Uptake of Contaminants in the Root Zone. *Vadose Zone Journal*, **2007**, 6, 890-898	2.7	8
131	Upscaling Schemes and Relationships for the Gardner and van Genuchten Hydraulic Functions for Heterogeneous Soils. *Vadose Zone Journal*, **2007**, 6, 186-195	2.7	20
130	Operator-splitting errors in coupled reactive transport codes for transient variably saturated flow and contaminant transport in layered soil profiles. *Journal of Contaminant Hydrology*, **2006**, 88, 197-218	3.9	48
129	A Modified Mualemâ€van Genuchten Formulation for Improved Description of the Hydraulic Conductivity Near Saturation. *Vadose Zone Journal*, **2006**, 5, 27-34	2.7	141
128	Field-Scale Water Flow Simulations Using Ensembles of Pedotransfer Functions for Soil Water Retention. *Vadose Zone Journal*, **2006**, 5, 234-247	2.7	62
127	Estimation of Soil Hydraulic Properties from Numerical Inversion of Tension Disk Infiltrometer Data. *Vadose Zone Journal*, **2006**, 5, 684-696	2.7	49
126	Modelling uranium leaching from agricultural soils to groundwater as a criterion for comparison with complementary safety indicators. *Materials Research Society Symposia Proceedings*, **2006**, 932, 1		5
125	Measurement modeling of soil-water dynamics evapotranspiration of drained peatland soils. *Journal of Plant Nutrition and Soil Science*, **2006**, 169, 762-774	2.3	38
124	Hydropedology: Synergistic integration of pedology and hydrology. *Water Resources Research*, **2006**, 42,	5.4	123
123	Significance of straining in colloid deposition: Evidence and implications. *Water Resources Research*, **2006**, 42,	5.4	177

122	Macroscopic approaches to root water uptake as a function of water and salinity stress. *Agricultural Water Management*, **2006**, 86, 140-149	5.9	136
121	Information content and complexity of simulated soil water fluxes. *Geoderma*, **2006**, 134, 253-266	6.7	42
120	Two-dimensional modelling of preferential water flow and pesticide transport from a tile-drained field. *Journal of Hydrology*, **2006**, 329, 647-660	6	95
119	Estimation of the Unsaturated Hydraulic Conductivity of Peat Soils: Laboratory versus Field Data. *Vadose Zone Journal*, **2006**, 5, 628-640	2.7	55
118	Simulating the Gas Diffusion Coefficient in Macropore Network Images: Influence of Soil Pore Morphology. *Soil Science Society of America Journal*, **2006**, 70, 1252-1261	2.5	19
117	Sensitivity Analysis of the Nonparametric Nearest Neighbor Technique to Estimate Soil Water Retention. *Vadose Zone Journal*, **2006**, 5, 1222-1235	2.7	28
116	Comparison of Pesticide Transport Processes in Three Tile-Drained Field Soils Using HYDRUS-2D. *Vadose Zone Journal*, **2006**, 5, 838-849	2.7	30
115	Impacts of the 2004 tsunami on groundwater resources in Sri Lanka. *Water Resources Research*, **2006**, 42,	5.4	86
114	MILESTONES IN SOIL PHYSICS. *Soil Science*, **2006**, 171, S21-S28	0.9	8
113	MULTICOMPONENT GEOCHEMICAL TRANSPORT MODELING USING HYDRUS-1D AND HP11. *Journal of the American Water Resources Association*, **2006**, 42, 1537-1547	2.1	60
112	Contaminant Transport in the Unsaturated Zone **2006**, 22-1-22-46		1
111	2,4-Dichlorophenoxyacetic acid (2,4-D) sorption and degradation dynamics in three agricultural soils. *Environmental Pollution*, **2005**, 138, 92-9	9.3	122
110	Straining of colloids at textural interfaces. *Water Resources Research*, **2005**, 41,	5.4	108
109	Water and Solute Transport in a Cultivated Silt Loam Soil: 2. Numerical Analysis. *Vadose Zone Journal*, **2005**, 4, 587-601	2.7	23
108	Analysis of Temperature Effects on Tension Infiltrometry of Low Permeability Materials. *Vadose Zone Journal*, **2005**, 4, 481-487	2.7	1
107	Improved Tension Infiltrometer for Measuring Low Fluid Flow Rates in Unsaturated Fractured Rock. *Vadose Zone Journal*, **2005**, 4, 885-890	2.7	10
106	Water and Solute Transport in a Cultivated Silt Loam Soil: 1. Field Observations. *Vadose Zone Journal*, **2005**, 4, 573-586	2.7	36
105	Straining and Attachment of Colloids in Physically Heterogeneous Porous Media. *Vadose Zone Journal*, **2004**, 3, 384-394	2.7	38

104	Water Flow and Heat Transport in Frozen Soil: Numerical Solution and Freezeâ€thaw Applications. *Vadose Zone Journal*, **2004**, 3, 693-704	2.7	256
103	Straining and Attachment of Colloids in Physically Heterogeneous Porous Media. *Vadose Zone Journal*, **2004**, 3, 384-394	2.7	142
102	Comparison of Models for Indirect Estimation of Water Retention and Available Water in Surface Soils. *Vadose Zone Journal*, **2004**, 3, 1455-1463	2.7	43
101	Correspondence and Upscaling of Hydraulic Functions for Steady-State Flow in Heterogeneous Soils. *Vadose Zone Journal*, **2004**, 3, 527-533	2.7	33
100	Estimating the water retention curve from soil properties: comparison of linear, nonlinear and concomitant variable methods. *Soil and Tillage Research*, **2004**, 79, 145-152	6.5	51
99	Two-dimensional simulation of water flow and solute transport below furrows: model calibration and validation. *Journal of Hydrology*, **2004**, 290, 63-79	6	66
98	. *Vadose Zone Journal*, **2004**, 3, 693-704	2.7	66
97	Comparison of Models for Indirect Estimation of Water Retention and Available Water in Surface Soils. *Vadose Zone Journal*, **2004**, 3, 1455-1463	2.7	5
96	ANALYSIS OF UNSATURATED WATER FLOW IN A LARGE SAND TANK. *Soil Science*, **2003**, 168, 3-14	0.9	9
95	SIMULTANEOUS INVERSE ESTIMATION OF SOIL HYDRAULIC AND SOLUTE TRANSPORT PARAMETERS FROM TRANSIENT FIELD EXPERIMENTS: HOMOGENEOUS SOIL. *Transactions of the American Society of Agricultural Engineers*, **2003**, 46, 1085		21
94	INVERSE ESTIMATION OF SOIL HYDRAULIC AND SOLUTE TRANSPORT PARAMETERS FROM TRANSIENT FIELD EXPERIMENTS: HETEROGENEOUS SOIL. *Transactions of the American Society of Agricultural Engineers*, **2003**, 46, 1097		23
93	Water flow and solute transport in furrow-irrigated fields. *Irrigation Science*, **2003**, 22, 57-65	3.1	20
92	Software for pest-management science: computer models and databases from the United States Department of Agriculture-Agricultural Research Service. *Pest Management Science*, **2003**, 59, 691-8	4.6	10
91	Effects of Flow Depth on Water Flow and Solute Transport in Furrow Irrigation: Field Data Analysis. *Journal of Irrigation and Drainage Engineering - ASCE*, **2003**, 129, 237-246	1.1	27
90	Review and comparison of models for describing non-equilibrium and preferential flow and transport in the vadose zone. *Journal of Hydrology*, **2003**, 272, 14-35	6	675
89	Overland Water Flow and Solute Transport: Model Development and Field-Data Analysis. *Journal of Irrigation and Drainage Engineering - ASCE*, **2003**, 129, 71-81	1.1	56
88	Modeling colloid attachment, straining, and exclusion in saturated porous media. *Environmental Science & Technology*, **2003**, 37, 2242-50	10.3	544
87	Multicomponent transport model for variably-saturated porous media: application to the transport of heavy metals in soils. *Developments in Water Science*, **2002**, 47, 555-562		3

86	Letter to the Editor on A National Strategy for Vadose Zone Science and Technology. *Vadose Zone Journal*, **2002**, 1, 197	2.7	1
85	Economic, Environmental, and Natural Resource Benefits of Plastic Shelters in Vegetable Production in a Humid Tropical Environment. *Agroecology and Sustainable Food Systems*, **2001**, 17, 123-143		5
84	Non-equilibrium water flow characterized by means of upward infiltration experiments. *European Journal of Soil Science*, **2001**, 52, 13-24	3.4	60
83	Estimating unsaturated soil hydraulic parameters using ant colony optimization. *Advances in Water Resources*, **2001**, 24, 827-841	4.7	155
82	Evaluating non-equilibrium solute transport in small soil columns. *Journal of Contaminant Hydrology* , **2001**, 48, 189-212	3.9	86
81	rosetta: a computer program for estimating soil hydraulic parameters with hierarchical pedotransfer functions. *Journal of Hydrology*, **2001**, 251, 163-176	6	1613
80	Simulating unsaturated flow and transport in a macroporous soil to tile drains subject to an entrance head: model development and preliminary evaluation. *Journal of Hydrology*, **2001**, 254, 67-81	6	31
79	Aging effects on cadmium transport in undisturbed contaminated sandy soil columns. *Journal of Environmental Quality*, **2001**, 30, 1040-50	3.4	51
78	Solute Transport **2001**, 189-248		4
77	Effect of the shape of the soil hydraulic functions near saturation on variably-saturated flow predictions. *Advances in Water Resources*, **2000**, 24, 133-144	4.7	269
76	RETMCL: Incorporating maximum-likelihood estimation principles in the RETC soil hydraulic parameter estimation code. *Computers and Geosciences*, **2000**, 26, 319-327	4.5	17
75	Analytical Modeling of Nonaqueous Phase Liquid Dissolution with Green's Functions. *Transport in Porous Media*, **2000**, 38, 141-166	3.1	28
74	Infiltration of Water into Soil with Cracks. *Journal of Irrigation and Drainage Engineering - ASCE*, **2000**, 126, 41-47	1.1	69
73	Modeling flow and transport in a two-dimensional dual-permeability system with spatially variable hydraulic properties. *Journal of Hydrology*, **2000**, 238, 78-89	6	153
72	WATER AND CHLORIDE TRANSPORT IN A FINE-TEXTURED SOIL: FIELD EXPERIMENTS AND MODELING. *Soil Science*, **2000**, 165, 624-631	0.9	26
71	HORIZONTAL INFILTRATION REVISITED USING PARAMETER ESTIMATION. *Soil Science*, **2000**, 165, 708-717	0.9	14
70	Estimating unsaturated soil hydraulic properties from laboratory tension disc infiltrometer experiments. *Water Resources Research*, **1999**, 35, 2965-2979	5.4	43
69	Numerical simulation of transport and sequential biodegradation of chlorinated aliphatic hydrocarbons using CHAIN_2D. *Hydrological Processes*, **1999**, 13, 2847-2859	3.3	26

68	Scaling Parameter to Predict the Soil Water Characteristic from Particle-Size Distribution Data. *Soil Science Society of America Journal*, **1999**, 63, 510-519	2.5	163
67	Relationship between the Hydraulic Conductivity Function and the Particle-Size Distribution. *Soil Science Society of America Journal*, **1999**, 63, 1063-1070	2.5	126
66	Estimating hysteresis in the soil water retention function from cone permeameter experiments. *Water Resources Research*, **1999**, 35, 1329-1345	5.4	54
65	An Agenda for Land Surface Hydrology Research and a Call for the Second International Hydrological Decade. *Bulletin of the American Meteorological Society*, **1999**, 80, 2043-2058	6.1	160
64	SIGNIFICANCE OF MACROPOROSITY AND HYDROLOGY FOR SOIL MANAGEMENT AND SUSTAINABILITY OF AGRICULTURAL PRODUCTION IN A HUMID-TROPICAL ENVIRONMENT. *Soil Science*, **1999**, 164, 586-601	0.9	4
63	Spatio-temporal dynamics of water and heat in a field soil. *Soil and Tillage Research*, **1998**, 47, 133-143	6.5	18
62	Parameter estimation of unsaturated soil hydraulic properties from transient flow processes. *Soil and Tillage Research*, **1998**, 47, 27-36	6.5	53
61	Solution of the nonlinear transport equation using modified Picard iteration. *Advances in Water Resources*, **1998**, 21, 237-249	4.7	16
60	Using an inverse method to estimate the hydraulic properties of crusted soils from tension-disc infiltrometer data. *Geoderma*, **1998**, 86, 61-81	6.7	104
59	Air entrapment effects on infiltration rate and flow instability. *Water Resources Research*, **1998**, 34, 213-222	5.4	124
58	Preferential transport of nitrate to a tile drain in an intermittent-flood-irrigated field: Model development and experimental evaluation. *Water Resources Research*, **1998**, 34, 1061-1076	5.4	52
57	Neural Network Analysis for Hierarchical Prediction of Soil Hydraulic Properties. *Soil Science Society of America Journal*, **1998**, 62, 847-855	2.5	459
56	Parameter Estimation Analysis of the Evaporation Method for Determining Soil Hydraulic Properties. *Soil Science Society of America Journal*, **1998**, 62, 894-905	2.5	159
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54	Solute Transport in Simulated Conductivity Fields under Different Irrigations. *Journal of Irrigation and Drainage Engineering - ASCE*, **1997**, 123, 336-343	1.1	11
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