

Martinus van Genuchten

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229
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233
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17,104
ext. citations

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#	Paper	IF	Citations
229	rosetta: a computer program for estimating soil hydraulic parameters with hierarchical pedotransfer functions. <i>Journal of Hydrology</i> , 2001 , 251, 163-176	6	1613
228	Development and Applications of the HYDRUS and STANMOD Software Packages and Related Codes. <i>Vadose Zone Journal</i> , 2008 , 7, 587-600	2.7	787
227	Review and comparison of models for describing non-equilibrium and preferential flow and transport in the vadose zone. <i>Journal of Hydrology</i> , 2003 , 272, 14-35	6	675
226	Modeling colloid attachment, straining, and exclusion in saturated porous media. <i>Environmental Science & Technology</i> , 2003 , 37, 2242-50	10.3	544
225	Neural Network Analysis for Hierarchical Prediction of Soil Hydraulic Properties. <i>Soil Science Society of America Journal</i> , 1998 , 62, 847-855	2.5	459
224	Recent Developments and Applications of the HYDRUS Computer Software Packages. <i>Vadose Zone Journal</i> , 2016 , 15, 1-25	2.7	437
223	Modeling Nonequilibrium Flow and Transport Processes Using HYDRUS. <i>Vadose Zone Journal</i> , 2008 , 7, 782-797	2.7	362
222	Effect of the shape of the soil hydraulic functions near saturation on variably-saturated flow predictions. <i>Advances in Water Resources</i> , 2000 , 24, 133-144	4.7	269
221	Using Pedotransfer Functions to Estimate the van Genuchten-Mualem Soil Hydraulic Properties: A Review. <i>Vadose Zone Journal</i> , 2010 , 9, 795-820	2.7	267
220	Parameter estimation for unsaturated flow and transport models – A review. <i>Journal of Hydrology</i> , 1987 , 91, 255-293	6	265
219	Water Flow and Heat Transport in Frozen Soil: Numerical Solution and Freeze-Thaw Applications. <i>Vadose Zone Journal</i> , 2004 , 3, 693-704	2.7	256
218	Evaluation of a first-order water transfer term for variably saturated dual-porosity flow models. <i>Water Resources Research</i> , 1993 , 29, 1225-1238	5.4	253
217	Analytical solutions for chemical transport with simultaneous adsorption, zero-order production and first-order decay. <i>Journal of Hydrology</i> , 1981 , 49, 213-233	6	234
216	Estimating Unsaturated Soil Hydraulic Properties from Tension Disc Infiltrometer Data by Numerical Inversion. <i>Water Resources Research</i> , 1996 , 32, 2683-2696	5.4	209
215	Modeling the Nonequilibrium Transport of Linearly Interacting Solutes in Porous Media: A Review. <i>Water Resources Research</i> , 1991 , 27, 2287-2307	5.4	195
214	Models for simulating salt movement in aggregated field soils. <i>Geoderma</i> , 1986 , 38, 165-183	6.7	183
213	Significance of straining in colloid deposition: Evidence and implications. <i>Water Resources Research</i> , 2006 , 42,	5.4	177

212	Macroscopic representation of structural geometry for simulating water and solute movement in dual-porosity media. <i>Advances in Water Resources</i> , 1996 , 19, 343-357	4.7	177
211	Scaling Parameter to Predict the Soil Water Characteristic from Particle-Size Distribution Data. <i>Soil Science Society of America Journal</i> , 1999 , 63, 510-519	2.5	163
210	An Agenda for Land Surface Hydrology Research and a Call for the Second International Hydrological Decade. <i>Bulletin of the American Meteorological Society</i> , 1999 , 80, 2043-2058	6.1	160
209	Parameter Estimation Analysis of the Evaporation Method for Determining Soil Hydraulic Properties. <i>Soil Science Society of America Journal</i> , 1998 , 62, 894-905	2.5	159
208	The time-domain reflectometry method for measuring soil water content and salinity. <i>Geoderma</i> , 1986 , 38, 237-250	6.7	156
207	Estimating unsaturated soil hydraulic parameters using ant colony optimization. <i>Advances in Water Resources</i> , 2001 , 24, 827-841	4.7	155
206	Modeling flow and transport in a two-dimensional dual-permeability system with spatially variable hydraulic properties. <i>Journal of Hydrology</i> , 2000 , 238, 78-89	6	153
205	Convective-dispersive transport of solutes involved in sequential first-order decay reactions. <i>Computers and Geosciences</i> , 1985 , 11, 129-147	4.5	153
204	A comprehensive set of analytical solutions for nonequilibrium solute transport with first-order decay and zero-order production. <i>Water Resources Research</i> , 1993 , 29, 2167-2182	5.4	152
203	Colloid transport in unsaturated porous media: the role of water content and ionic strength on particle straining. <i>Journal of Contaminant Hydrology</i> , 2008 , 96, 113-27	3.9	143
202	Straining and Attachment of Colloids in Physically Heterogeneous Porous Media. <i>Vadose Zone Journal</i> , 2004 , 3, 384-394	2.7	142
201	A Modified Mualem-Van Genuchten Formulation for Improved Description of the Hydraulic Conductivity Near Saturation. <i>Vadose Zone Journal</i> , 2006 , 5, 27-34	2.7	141
200	Macroscopic approaches to root water uptake as a function of water and salinity stress. <i>Agricultural Water Management</i> , 2006 , 86, 140-149	5.9	136
199	Parameter Equivalence for the Brooks-Corey and Van Genuchten Soil Characteristics: Preserving the Effective Capillary Drive. <i>Water Resources Research</i> , 1996 , 32, 1251-1258	5.4	132
198	Analytical Solutions for Solute Transport in Three-Dimensional Semi-infinite Porous Media. <i>Water Resources Research</i> , 1991 , 27, 2719-2733	5.4	131
197	Relationship between the Hydraulic Conductivity Function and the Particle-Size Distribution. <i>Soil Science Society of America Journal</i> , 1999 , 63, 1063-1070	2.5	126
196	Air entrapment effects on infiltration rate and flow instability. <i>Water Resources Research</i> , 1998 , 34, 213-222	5.4	124
195	Hydropedology: Synergistic integration of pedology and hydrology. <i>Water Resources Research</i> , 2006 , 42,	5.4	123

194	2,4-Dichlorophenoxyacetic acid (2,4-D) sorption and degradation dynamics in three agricultural soils. <i>Environmental Pollution</i> , 2005 , 138, 92-9	9.3	122
193	A root zone modelling approach to estimating groundwater recharge from irrigated areas. <i>Journal of Hydrology</i> , 2009 , 367, 138-149	6	113
192	Temporal stability in soil water content patterns across agricultural fields. <i>Catena</i> , 2008 , 73, 125-133	5.8	111
191	Straining of colloids at textural interfaces. <i>Water Resources Research</i> , 2005 , 41,	5.4	108
190	Estimation of the van Genuchten Soil Water Retention Properties from Soil Textural Data. <i>Pedosphere</i> , 2010 , 20, 456-465	5	106
189	Using an inverse method to estimate the hydraulic properties of crusted soils from tension-disc infiltrometer data. <i>Geoderma</i> , 1998 , 86, 61-81	6.7	104
188	A comparison of numerical solutions of the one-dimensional unsaturated-saturated flow and mass transport equations. <i>Advances in Water Resources</i> , 1982 , 5, 47-55	4.7	100
187	Experimental investigation of solute transport in large, homogeneous and heterogeneous, saturated soil columns. <i>Transport in Porous Media</i> , 1995 , 18, 283-302	3.1	97
186	ESTIMATING UNSATURATED SOIL HYDRAULIC PROPERTIES FROM MULTIPLE TENSION DISC INFILTRMETER DATA. <i>Soil Science</i> , 1997 , 162, 383-398	0.9	96
185	Two-dimensional modelling of preferential water flow and pesticide transport from a tile-drained field. <i>Journal of Hydrology</i> , 2006 , 329, 647-660	6	95
184	A new convergence criterion for the modified Picard iteration method to solve the variably saturated flow equation. <i>Journal of Hydrology</i> , 1996 , 178, 69-91	6	87
183	Impacts of the 2004 tsunami on groundwater resources in Sri Lanka. <i>Water Resources Research</i> , 2006 , 42,	5.4	86
182	Evaluating non-equilibrium solute transport in small soil columns. <i>Journal of Contaminant Hydrology</i> , 2001 , 48, 189-212	3.9	86
181	Analytical solution of the advection-diffusion transport equation using a change-of-variable and integral transform technique. <i>International Journal of Heat and Mass Transfer</i> , 2009 , 52, 3297-3304	4.9	84
180	An experimental study of solute transport in a stony field soil. <i>Water Resources Research</i> , 1987 , 23, 1785-1794	5.1	83
179	Modelling coupled water flow, solute transport and geochemical reactions affecting heavy metal migration in a podzol soil. <i>Geoderma</i> , 2008 , 145, 449-461	6.7	77
178	Water and solute movement in a coarse-textured water-repellent field soil. <i>Journal of Hydrology</i> , 1990 , 120, 359-379	6	77
177	Evaluation of mulched drip irrigation for cotton in arid Northwest China. <i>Irrigation Science</i> , 2014 , 32, 15-27	3.1	76

176	Groundwater recharge at five representative sites in the Hebei Plain, China. <i>Ground Water</i> , 2011 , 49, 286-94	2.4	73
175	Two-phase flow infiltration equations accounting for air entrapment effects. <i>Water Resources Research</i> , 1997 , 33, 2759-2767	5.4	70
174	Infiltration of Water into Soil with Cracks. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2000 , 126, 41-47	1.1	69
173	Analytical solutions for non-equilibrium solute transport in three-dimensional porous media. <i>Journal of Hydrology</i> , 1993 , 151, 193-228	6	67
172	Two-dimensional simulation of water flow and solute transport below furrows: model calibration and validation. <i>Journal of Hydrology</i> , 2004 , 290, 63-79	6	66
171	. <i>Vadose Zone Journal</i> , 2004 , 3, 693-704	2.7	66
170	A physically based model for predicting solute transfer from soil solution to rainfall-induced runoff water. <i>Water Resources Research</i> , 1990 , 26, 2119-2126	5.4	64
169	Field-Scale Water Flow Simulations Using Ensembles of Pedotransfer Functions for Soil Water Retention. <i>Vadose Zone Journal</i> , 2006 , 5, 234-247	2.7	62
168	MULTICOMPONENT GEOCHEMICAL TRANSPORT MODELING USING HYDRUS-1D AND HP11. <i>Journal of the American Water Resources Association</i> , 2006 , 42, 1537-1547	2.1	60
167	Non-equilibrium water flow characterized by means of upward infiltration experiments. <i>European Journal of Soil Science</i> , 2001 , 52, 13-24	3.4	60
166	Optimizing landfill site selection by using land classification maps. <i>Environmental Science and Pollution Research</i> , 2015 , 22, 7754-65	5.1	58
165	Soil Water Content Distributions between Two Emitters of a Subsurface Drip Irrigation System. <i>Soil Science Society of America Journal</i> , 2011 , 75, 488-497	2.5	58
164	Analytical solutions of the one-dimensional advectionâdispersion solute transport equation subject to time-dependent boundary conditions. <i>Chemical Engineering Journal</i> , 2013 , 221, 487-491	14.7	57
163	Overland Water Flow and Solute Transport: Model Development and Field-Data Analysis. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2003 , 129, 71-81	1.1	56
162	HYDRUS: Model Use, Calibration, and Validation. <i>Transactions of the ASABE</i> , 2012 , 55, 1263-1276	0.9	55
161	Estimation of the Unsaturated Hydraulic Conductivity of Peat Soils: Laboratory versus Field Data. <i>Vadose Zone Journal</i> , 2006 , 5, 628-640	2.7	55
160	Estimating hysteresis in the soil water retention function from cone permeameter experiments. <i>Water Resources Research</i> , 1999 , 35, 1329-1345	5.4	54
159	Parameter estimation of unsaturated soil hydraulic properties from transient flow processes. <i>Soil and Tillage Research</i> , 1998 , 47, 27-36	6.5	53

158	Preferential transport of nitrate to a tile drain in an intermittent-flood-irrigated field: Model development and experimental evaluation. <i>Water Resources Research</i> , 1998 , 34, 1061-1076	5.4	52
157	Multimodel Simulation of Water Flow in a Field Soil Using Pedotransfer Functions. <i>Vadose Zone Journal</i> , 2009 , 8, 1-10	2.7	51
156	Estimating the water retention curve from soil properties: comparison of linear, nonlinear and concomitant variable methods. <i>Soil and Tillage Research</i> , 2004 , 79, 145-152	6.5	51
155	Aging effects on cadmium transport in undisturbed contaminated sandy soil columns. <i>Journal of Environmental Quality</i> , 2001 , 30, 1040-50	3.4	51
154	Modeling Coupled Hydrologic and Chemical Processes: Long-Term Uranium Transport following Phosphorus Fertilization. <i>Vadose Zone Journal</i> , 2008 , 7, 698-711	2.7	49
153	Performance Evaluation of Models That Describe the Soil Water Retention Curve between Saturation and Oven Dryness. <i>Vadose Zone Journal</i> , 2008 , 7, 87-96	2.7	49
152	Estimation of Soil Hydraulic Properties from Numerical Inversion of Tension Disk Infiltration Data. <i>Vadose Zone Journal</i> , 2006 , 5, 684-696	2.7	49
151	Operator-splitting errors in coupled reactive transport codes for transient variably saturated flow and contaminant transport in layered soil profiles. <i>Journal of Contaminant Hydrology</i> , 2006 , 88, 197-218	3.9	48
150	Modeling the coupled effects of pore space geometry and velocity on colloid transport and retention. <i>Water Resources Research</i> , 2009 , 45,	5.4	44
149	Exact solutions for one-dimensional transport with asymptotic scale-dependent dispersion. <i>Applied Mathematical Modelling</i> , 1996 , 20, 298-308	4.5	44
148	Experimental and theoretical analysis of solute transport from a diffuse source of pollution. <i>Journal of Hydrology</i> , 1989 , 105, 225-251	6	44
147	A Comparative Study of Multiple Approaches for Predicting the Soil Water Retention Curve: Hyperspectral Information vs. Basic Soil Properties. <i>Soil Science Society of America Journal</i> , 2015 , 79, 1043-1058	3.5	43
146	Exact analytical solutions for contaminant transport in rivers 1. The equilibrium advection-dispersion equation. <i>Journal of Hydrology and Hydromechanics</i> , 2013 , 61, 146-160	2.1	43
145	Comparison of Models for Indirect Estimation of Water Retention and Available Water in Surface Soils. <i>Vadose Zone Journal</i> , 2004 , 3, 1455-1463	2.7	43
144	Estimating unsaturated soil hydraulic properties from laboratory tension disc infiltration experiments. <i>Water Resources Research</i> , 1999 , 35, 2965-2979	5.4	43
143	Deriving and validating pedotransfer functions for some calcareous soils. <i>Journal of Hydrology</i> , 2011 , 399, 93-99	6	42
142	Information content and complexity of simulated soil water fluxes. <i>Geoderma</i> , 2006 , 134, 253-266	6.7	42
141	Isotherm nonlinearity and nonequilibrium sorption effects on transport of fenuron and monuron in soil columns. <i>Environmental Science & Technology</i> , 1995 , 29, 1000-7	10.3	42

140	Multiscale modelling of dual-porosity porous media; a computational pore-scale study for flow and solute transport. <i>Advances in Water Resources</i> , 2017 , 105, 82-95	4.7	40
139	New features of version 3 of the HYDRUS (2D/3D) computer software package. <i>Journal of Hydrology and Hydromechanics</i> , 2018 , 66, 133-142	2.1	39
138	A complete soil hydraulic model accounting for capillary and adsorptive water retention, capillary and film conductivity, and hysteresis. <i>Water Resources Research</i> , 2015 , 51, 8757-8772	5.4	39
137	Analytical Solution for Multi-Species Contaminant Transport Subject to Sequential First-Order Decay Reactions in Finite Media. <i>Transport in Porous Media</i> , 2009 , 80, 373-387	3.1	39
136	Kirkham's Legacy and Contemporary Challenges in Soil Physics Research. <i>Soil Science Society of America Journal</i> , 2011 , 75, 1589-1601	2.5	39
135	Comparison of three hydraulic property measurement methods. <i>Journal of Hydrology</i> , 1997 , 199, 295-318		38
134	Measurement modeling of soil-water dynamics evapotranspiration of drained peatland soils. <i>Journal of Plant Nutrition and Soil Science</i> , 2006 , 169, 762-774	2.3	38
133	Straining and Attachment of Colloids in Physically Heterogeneous Porous Media. <i>Vadose Zone Journal</i> , 2004 , 3, 384-394	2.7	38
132	Approximate analytical solutions for solute transport in two-layer porous media. <i>Transport in Porous Media</i> , 1995 , 18, 65-85	3.1	37
131	Water and Solute Transport in a Cultivated Silt Loam Soil: 1. Field Observations. <i>Vadose Zone Journal</i> , 2005 , 4, 573-586	2.7	36
130	Progress in unsaturated flow and transport modeling. <i>Reviews of Geophysics</i> , 1987 , 25, 135	23.1	35
129	Characterizing the hydraulic properties of paper coating layer using FIB-SEM tomography and 3D pore-scale modeling. <i>Chemical Engineering Science</i> , 2017 , 160, 275-280	4.4	34
128	Analysing problems in describing field and laboratory measured soil hydraulic properties. <i>Geoderma</i> , 1994 , 64, 93-110	6.7	34
127	Correspondence and Upscaling of Hydraulic Functions for Steady-State Flow in Heterogeneous Soils. <i>Vadose Zone Journal</i> , 2004 , 3, 527-533	2.7	33
126	Organic acids enhance the uptake of lead by wheat roots. <i>Planta</i> , 2007 , 225, 1483-94	4.7	31
125	Simulating unsaturated flow and transport in a macroporous soil to tile drains subject to an entrance head: model development and preliminary evaluation. <i>Journal of Hydrology</i> , 2001 , 254, 67-81	6	31
124	Comparison of Pesticide Transport Processes in Three Tile-Drained Field Soils Using HYDRUS-2D. <i>Vadose Zone Journal</i> , 2006 , 5, 838-849	2.7	30
123	Parameter Determination for Chloride and Tritium Transport in Undisturbed Lysimeters during Steady Flow 1992 , 23, 89-104		30

122	A Mathematical View of Water Table Fluctuations in a Shallow Aquifer in Brazil. <i>Ground Water</i> , 2016 , 54, 82-91	2.4	28
121	Sensitivity Analysis of the Nonparametric Nearest Neighbor Technique to Estimate Soil Water Retention. <i>Vadose Zone Journal</i> , 2006 , 5, 1222-1235	2.7	28
120	Analytical Modeling of Nonaqueous Phase Liquid Dissolution with Green's Functions. <i>Transport in Porous Media</i> , 2000 , 38, 141-166	3.1	28
119	STANMOD: Model Use, Calibration, and Validation. <i>Transactions of the ASABE</i> , 2012 , 55, 1355-1368	0.9	27
118	Analytical Solution for Multi-Species Contaminant Transport in Finite Media with Time-Varying Boundary Conditions. <i>Transport in Porous Media</i> , 2010 , 85, 171-188	3.1	27
117	Effects of Flow Depth on Water Flow and Solute Transport in Furrow Irrigation: Field Data Analysis. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2003 , 129, 237-246	1.1	27
116	Modeling Nonwetting-Phase Relative Permeability Accounting for a Discontinuous Nonwetting Phase. <i>Soil Science Society of America Journal</i> , 1997 , 61, 1348-1354	2.5	26
115	Software to estimate θ_{33} and θ_{500} kPa soil water retention using the non-parametric k-Nearest Neighbor technique. <i>Environmental Modelling and Software</i> , 2008 , 23, 254-255	5.2	26
114	Numerical simulation of transport and sequential biodegradation of chlorinated aliphatic hydrocarbons using CHAIN_2D. <i>Hydrological Processes</i> , 1999 , 13, 2847-2859	3.3	26
113	Simulation of two-dimensional contaminant transport with isoparametric Hermitian finite elements. <i>Water Resources Research</i> , 1977 , 13, 451-458	5.4	26
112	WATER AND CHLORIDE TRANSPORT IN A FINE-TEXTURED SOIL: FIELD EXPERIMENTS AND MODELING. <i>Soil Science</i> , 2000 , 165, 624-631	0.9	26
111	Analysis of Water Flow under Trickle Irrigation: I. Theory and Numerical Solution. <i>Soil Science Society of America Journal</i> , 1989 , 53, 1310-1318	2.5	25
110	Further tests of the HYPROP evaporation method for estimating the unsaturated soil hydraulic properties. <i>Journal of Hydrology and Hydromechanics</i> , 2018 , 66, 161-169	2.1	24
109	Effects of Sand Compaction and Mixing on Pore Structure and the Unsaturated Soil Hydraulic Properties. <i>Vadose Zone Journal</i> , 2016 , 15, vjz2015.10.0136	2.7	24
108	Scaling the Dependency of Soil Penetration Resistance on Water Content and Bulk Density of Different Soils. <i>Soil Science Society of America Journal</i> , 2013 , 77, 1488-1495	2.5	24
107	First- and third-type boundary conditions in two-dimensional solute transport modeling. <i>Water Resources Research</i> , 1990 , 26, 339-350	5.4	24
106	Solute transport in a loamy soil under subsurface porous clay pipe irrigation. <i>Agricultural Water Management</i> , 2013 , 121, 73-80	5.9	23
105	INVERSE ESTIMATION OF SOIL HYDRAULIC AND SOLUTE TRANSPORT PARAMETERS FROM TRANSIENT FIELD EXPERIMENTS: HETEROGENEOUS SOIL. <i>Transactions of the American Society of Agricultural Engineers</i> , 2003 , 46, 1097		23

104	Water and Solute Transport in a Cultivated Silt Loam Soil: 2. Numerical Analysis. <i>Vadose Zone Journal</i> , 2005 , 4, 587-601	2.7	23
103	An Eulerian-Lagrangian approach with an adaptively corrected method of characteristics to simulate variably saturated water flow. <i>Water Resources Research</i> , 1994 , 30, 499-507	5.4	23
102	An improved analysis of gravity drainage experiments for estimating the unsaturated soil hydraulic functions. <i>Water Resources Research</i> , 1991 , 27, 569-575	5.4	23
101	Performance of Pitcher Irrigation System. <i>Soil Science</i> , 2009 , 174, 312-320	0.9	22
100	An efficient Eulerian-Lagrangian Method for solving solute transport problems in steady and transient flow fields. <i>Water Resources Research</i> , 1993 , 29, 4131-4138	5.4	22
99	A Semidiscrete Model for Water and Solute Movement in Tile-Drained Soils: 1. Governing Equations and Solution. <i>Water Resources Research</i> , 1991 , 27, 2439-2447	5.4	22
98	SIMULTANEOUS INVERSE ESTIMATION OF SOIL HYDRAULIC AND SOLUTE TRANSPORT PARAMETERS FROM TRANSIENT FIELD EXPERIMENTS: HOMOGENEOUS SOIL. <i>Transactions of the American Society of Agricultural Engineers</i> , 2003 , 46, 1085		21
97	Effects of Porosity and Water Saturation on the Effective Diffusivity of a Cathode Catalyst Layer. <i>Journal of the Electrochemical Society</i> , 2017 , 164, F298-F305	3.9	20
96	Soil moisture prediction of bare soil profiles using diffuse spectral reflectance information and vadose zone flow modeling. <i>Remote Sensing of Environment</i> , 2016 , 187, 218-229	13.2	20
95	Fractal-based models for the unsaturated soil hydraulic functions. <i>Geoderma</i> , 2017 , 306, 144-151	6.7	20
94	The effects of preferential flow and soil texture on risk assessments of a NORM waste disposal site. <i>Journal of Hazardous Materials</i> , 2010 , 174, 648-55	12.8	20
93	Upscaling Schemes and Relationships for the Gardner and van Genuchten Hydraulic Functions for Heterogeneous Soils. <i>Vadose Zone Journal</i> , 2007 , 6, 186-195	2.7	20
92	Water flow and solute transport in furrow-irrigated fields. <i>Irrigation Science</i> , 2003 , 22, 57-65	3.1	20
91	HYDRUS-2D simulations of water and potassium movement in drip irrigated tropical soil container cultivated with sugarcane. <i>Agricultural Water Management</i> , 2019 , 221, 334-347	5.9	19
90	Inverse estimation of soil hydraulic properties under oil palm trees. <i>Geoderma</i> , 2015 , 241-242, 306-312	6.7	19
89	Simulating the Gas Diffusion Coefficient in Macropore Network Images: Influence of Soil Pore Morphology. <i>Soil Science Society of America Journal</i> , 2006 , 70, 1252-1261	2.5	19
88	Spatio-temporal dynamics of water and heat in a field soil. <i>Soil and Tillage Research</i> , 1998 , 47, 133-143	6.5	18
87	Analysis of the Hysteretic Hydraulic Properties of Unsaturated Soil. <i>Vadose Zone Journal</i> , 2017 , 16, vj2016.11.0115		15

86	Modeling Virus Transport and Remobilization during Transient Partially Saturated Flow. <i>Vadose Zone Journal</i> , 2012 , 11, vj2011.0090	2.7	17
85	RETMCL: Incorporating maximum-likelihood estimation principles in the RETC soil hydraulic parameter estimation code. <i>Computers and Geosciences</i> , 2000 , 26, 319-327	4.5	17
84	Alternate furrow irrigation can radically improve water productivity of okra. <i>Agricultural Water Management</i> , 2016 , 173, 55-60	5.9	17
83	Water Distribution in an Arid Zone Soil: Numerical Analysis of Data from a Large Weighing Lysimeter. <i>Vadose Zone Journal</i> , 2018 , 17, 1-17	2.7	17
82	Optimal parameters for the Green-Ampt infiltration model under rainfall conditions. <i>Journal of Hydrology and Hydromechanics</i> , 2015 , 63, 93-101	2.1	16
81	Solution of the nonlinear transport equation using modified Picard iteration. <i>Advances in Water Resources</i> , 1998 , 21, 237-249	4.7	16
80	SALTDATA: A Database of Plant Yield Response to Salinity. <i>Agronomy Journal</i> , 1998 , 90, 556-562	2.2	16
79	An Hermitian finite element solution of the two-dimensional saturated-unsaturated flow equation. <i>Advances in Water Resources</i> , 1983 , 6, 106-111	4.7	16
78	Effect of temporal averaging of meteorological data on predictions of groundwater recharge. <i>Journal of Hydrology and Hydromechanics</i> , 2018 , 66, 143-152	2.1	15
77	Exact Analytical Solutions for Contaminant Transport in Rivers. <i>Journal of Hydrology and Hydromechanics</i> , 2013 , 61, 250-259	2.1	15
76	The role of uncertainty in bedrock depth and hydraulic properties on the stability of a variably-saturated slope. <i>Computers and Geotechnics</i> , 2017 , 88, 222-241	4.4	14
75	Effects of Biological Stabilization on the Water Retention Properties of Unsaturated Soils. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2019 , 145, 04019028	3.4	14
74	The HPx software for multicomponent reactive transport during variably-saturated flow: Recent developments and applications. <i>Journal of Hydrology and Hydromechanics</i> , 2018 , 66, 211-226	2.1	14
73	HORIZONTAL INFILTRATION REVISITED USING PARAMETER ESTIMATION. <i>Soil Science</i> , 2000 , 165, 708-717	7.9	14
72	Selected HYDRUS modules for modeling subsurface flow and contaminant transport as influenced by biological processes at various scales. <i>Biologia (Poland)</i> , 2009 , 64, 465-469	1.5	13
71	A THIRD-ORDER NUMERICAL SCHEME WITH UPWIND WEIGHTING FOR SOLVING THE SOLUTE TRANSPORT EQUATION. <i>International Journal for Numerical Methods in Engineering</i> , 1997 , 40, 1623-1637	2.4	13
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