JiÅÃ- Å imÅ¯nek

List of Publications by Year
in descending order

223 papers	15,790 citations	20759 60 h-index	19136 118 g-index
224 all docs	224 docs citations	224 times ranked	9567 citing authors

#	Article	IF	Citations
1	Development and Applications of the HYDRUS and STANMOD Software Packages and Related Codes. Vadose Zone Journal, 2008, 7, 587-600.	1.3	962
2	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.	2.3	785
3	Modeling Colloid Attachment, Straining, and Exclusion in Saturated Porous Media. Environmental Science & Technology, 2003, 37, 2242-2250.	4.6	654
4	Recent Developments and Applications of the HYDRUS Computer Software Packages. Vadose Zone Journal, 2016, 15, 1-25.	1.3	629
5	Physical factors affecting the transport and fate of colloids in saturated porous media. Water Resources Research, 2002, 38, 63-1-63-12.	1.7	599
6	Reactive transport codes for subsurface environmental simulation. Computational Geosciences, 2015, 19, 445-478.	1.2	566
7	Modeling Nonequilibrium Flow and Transport Processes Using HYDRUS. Vadose Zone Journal, 2008, 7, 782-797.	1.3	458
8	Numerical Analysis of Coupled Water, Vapor, and Heat Transport in the Vadose Zone. Vadose Zone Journal, 2006, 5, 784-800.	1.3	400
9	Modeling compensated root water and nutrient uptake. Ecological Modelling, 2009, 220, 505-521.	1.2	344
10	Water Flow and Heat Transport in Frozen Soil: Numerical Solution and Freezeâ€“Thaw Applications. Vadose Zone Journal, 2004, 3, 693-704.	1.3	286
11	One-, two-, and three-dimensional root water uptake functions for transient modeling. Water Resources Research, 2001, 37, 2457-2470.	1.7	282
12	Physicochemical Factors Influencing the Preferential Transport of Escherichia coli in Soils. Vadose Zone Journal, 2014, 13, 1-10.	1.3	245
13	Calibration of a Twoâ€Dimensional Root Water Uptake Model. Soil Science Society of America Journal, 2001, 65, 1027-1037.	1.2	237
14	Comparison of HYDRUS-2D Simulations of Drip Irrigation with Experimental Observations. Journal of Irrigation and Drainage Engineering - ASCE, 2004, 130, 304-310.	0.6	227
15	Two-dimensional modeling of nitrate leaching for various fertigation scenarios under micro-irrigation. Agricultural Water Management, 2005, 74, 219-242.	2.4	225
16	Evaluation of ureaâ€“ammoniumâ€“nitrate fertigation with drip irrigation using numerical modeling. Agricultural Water Management, 2006, 86, 102-113.	2.4	214
17	Significance of straining in colloid deposition: Evidence and implications. Water Resources Research, 2006, 42, .	1.7	209
18	Straining and Attachment of Colloids in Physically Heterogeneous Porous Media. Vadose Zone Journal, 2004, 3, 384-394.	1.3	185

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19	Parameter Estimation Analysis of the Evaporation Method for Determining Soil Hydraulic Properties. Soil Science Society of America Journal, 1998, 62, 894-905.	1.2	184
20	Leaching requirement for soil salinity control: Steady-state versus transient models. Agricultural Water Management, 2007, 90, 165-180.	2.4	182
21	Sensitivity of the transport and retention of stabilized silver nanoparticles to physicochemical factors. Water Research, 2013, 47, 2572-2582.	5.3	177
22	Two-dimensional modeling of water and nitrogen fate from sweet sorghum irrigated with fresh and blended saline waters. Agricultural Water Management, 2012, 111, 87-104.	2.4	162
23	Transport and straining ofE. coliO157:H7 in saturated porous media. Water Resources Research, 2006, 42, .	1.7	160
24	Transport and retention of multi-walled carbon nanotubes in saturated porous media: Effects of input concentration and grain size. Water Research, 2013, 47, 933-944.	5.3	160
25	Indirect estimation of soil thermal properties and water flux using heat pulse probe measurements: Geometry and dispersion effects. Water Resources Research, 2002, 38, 7-1-7-14.	1.7	156
26	Leaching and reclamation of a biochar and compost amended salineâ€“sodic soil with moderate SAR reclaimed water. Agricultural Water Management, 2015, 158, 255-265.	2.4	151
27	Field evaluation of a multicomponent solute transport model in soils irrigated with saline waters. Journal of Hydrology, 2011, 407, 129-144.	2.3	145
28	Two-dimensional transport model for variably saturated porous media with major ion chemistry. Water Resources Research, 1994, 30, 1115-1133.	1.7	143
29	Numerical simulations of water movement in a subsurface drip irrigation system under field and laboratory conditions using HYDRUS-2D. Agricultural Water Management, 2010, 97, 1070-1076.	2.4	138
30	Retention and Remobilization of Stabilized Silver Nanoparticles in an Undisturbed Loamy Sand Soil. Environmental Science & Technology, 2013, 47, 12229-12237.	4.6	118
31	Two-dimensional modelling of preferential water flow and pesticide transport from a tile-drained field. Journal of Hydrology, 2006, 329, 647-660.	2.3	112
32	A comparison of numerical and machine-learning modeling of soil water content with limited input data. Journal of Hydrology, 2016, 543, 892-909.	2.3	109
33	Leaching with Subsurface Drip Irrigation under Saline, Shallow Groundwater Conditions. Vadose Zone Journal, 2008, 7, 810-818.	1.3	107
34	Water and Vapor Movement with Condensation and Evaporation in a Sandy Column. Soil Science Society of America Journal, 2009, 73, 707-717.	1.2	107
35	Evaluation of nitrogen balance in a direct-seeded-rice field experiment using Hydrus-1D. Agricultural Water Management, 2015, 148, 213-222.	2.4	104
36	Impact of rainfall intensity on the transport of two herbicides in undisturbed grassed filter strip soil cores. Journal of Contaminant Hydrology, 2005, 81, 63-88.	1.6	102

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37	Modeling colloid transport and retention in saturated porous media under unfavorable attachment conditions. Water Resources Research, 2011, 47, .	1.7	102
38	Evaluation of mulched drip irrigation for cotton in arid Northwest China. Irrigation Science, 2014, 32, 15-27.	1.3	102
39	A comprehensive numerical analysis of the hydraulic behavior of a permeable pavement. Journal of Hydrology, 2016, 540, 1146-1161.	2.3	98
40	Comparison of numerical, analytical, and empirical models to estimate wetting patterns for surface and subsurface drip irrigation. Irrigation Science, 2010, 28, 435-444.	1.3	96
41	Seasonal simulation of water, salinity and nitrate dynamics under drip irrigated mandarin (Citrus) Tj ETQq1 1 0.784314 rgBT /Overloc Hydrology, 2014, 513, 504-516.	2.3	92
42	Calibration of Richards' and convectionâ€“dispersion equations to field-scale water flow and solute transport under rainfall conditions. Journal of Hydrology, 2002, 259, 15-31.	2.3	91
43	Fluid Flow and Solute Migration Within the Capillary Fringe. Ground Water, 2002, 40, 76-84.	0.7	88
44	Evaluation of water movement and water losses in a direct-seeded-rice field experiment using Hydrus-1D. Agricultural Water Management, 2014, 142, 38-46.	2.4	86
45	Effects of the shallow water table on water use of winter wheat and ecosystem health: Implications for unlocking the potential of groundwater in the Fergana Valley (Central Asia). Agricultural Water Management, 2014, 131, 57-69.	2.4	85
46	Soil Water Content Distributions between Two Emitters of a Subsurface Drip Irrigation System. Soil Science Society of America Journal, 2011, 75, 488-497.	1.2	84
47	Multi-process herbicide transport in structured soil columns: Experiments and model analysis. Journal of Contaminant Hydrology, 2006, 85, 1-32.	1.6	82
48	Numerical investigation of irrigation scheduling based on soil water status. Irrigation Science, 2013, 31, 27-36.	1.3	78
49	Evaluating the impact of groundwater on cotton growth and root zone water balance using Hydrus-1D coupled with a crop growth model. Agricultural Water Management, 2015, 160, 64-75.	2.4	77
50	Spatial distribution of soil water, soil temperature, and plant roots in a drip-irrigated intercropping field with plastic mulch. European Journal of Agronomy, 2017, 83, 47-56.	1.9	76
51	Multicomponent solute transport in soil lysimeters irrigated with waters of different quality. Water Resources Research, 2006, 42, .	1.7	74
52	Dissolution and Transport of TNT, RDX, and Composition B in Saturated Soil Columns. Journal of Environmental Quality, 2006, 35, 2043-2054.	1.0	72
53	Evaluation of subsurface drip irrigation design and management parameters for alfalfa. Agricultural Water Management, 2012, 109, 81-93.	2.4	72
54	Modeling Microorganism Transport and Survival in the Subsurface. Journal of Environmental Quality, 2014, 43, 421-440.	1.0	71

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55	Transport and fate of microorganisms in soils with preferential flow under different solution chemistry conditions. Water Resources Research, 2013, 49, 2424-2436.	1.7	70
56	Sodic Soil Reclamation Using Multicomponent Transport Modeling. Journal of Irrigation and Drainage Engineering - ASCE, 1997, 123, 367-376.	0.6	68
57	System-Dependent Boundary Condition for Water Flow from Subsurface Source. Soil Science Society of America Journal, 2005, 69, 46.	1.2	67
58	Overland Water Flow and Solute Transport: Model Development and Field-Data Analysis. Journal of Irrigation and Drainage Engineering - ASCE, 2003, 129, 71-81.	0.6	66
59	Two-dimensional modeling of nitrogen and water dynamics for various N-managed water-saving irrigation strategies using HYDRUS. Agricultural Water Management, 2017, 193, 174-190.	2.4	66
60	The effects of biodegradable and plastic film mulching on nitrogen uptake, distribution, and leaching in a drip-irrigated sandy field. Agriculture, Ecosystems and Environment, 2020, 292, 106817.	2.5	65
61	Can textureâ€based classification optimally classify soils with respect to soil hydraulics?. Water Resources Research, 2010, 46, .	1.7	62
62	Minimizing nitrogen leaching from furrow irrigation through novel fertilizer placement and soil surface management strategies. Agricultural Water Management, 2012, 115, 242-251.	2.4	62
63	Limited transport of functionalized multi-walled carbon nanotubes in two natural soils. Environmental Pollution, 2013, 180, 152-158.	3.7	62
64	Evaluation of water movement and nitrate dynamics in a lysimeter planted with an orange tree. Agricultural Water Management, 2013, 127, 74-84.	2.4	61
65	A comparison of the HYDRUS (2D/3D) and SALTMED models to investigate the influence of various water-saving irrigation strategies on the maize water footprint. Agricultural Water Management, 2019, 213, 809-820.	2.4	61
66	Evaluating equilibrium and non-equilibrium transport of bromide and isoproturon in disturbed and undisturbed soil columns. Journal of Contaminant Hydrology, 2007, 94, 261-276.	1.6	60
67	Implementation and evaluation of permeability-porosity and tortuosity-porosity relationships linked to mineral dissolution-precipitation. Computational Geosciences, 2015, 19, 655-671.	1.2	60
68	Coupling DSSAT and HYDRUS-1D for simulations of soil water dynamics in the soil-plant-atmosphere system. Journal of Hydrology and Hydromechanics, 2018, 66, 232-245.	0.7	59
69	New features of version 3 of the HYDRUS (2D/3D) computer software package. Journal of Hydrology and Hydromechanics, 2018, 66, 133-142.	0.7	58
70	Management of soil salinity associated with irrigation of protected crops. Agricultural Water Management, 2020, 227, 105845.	2.4	57
71	HYDRUS simulations of the effects of dual-drip subsurface irrigation and a physical barrier on water movement and solute transport in soils. Irrigation Science, 2014, 32, 111-125.	1.3	55
72	The effects of rock fragment shapes and positions on modeled hydraulic conductivities of stony soils. Geoderma, 2016, 281, 39-48.	2.3	55

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73	On the use of surrogate-based modeling for the numerical analysis of Low Impact Development techniques. Journal of Hydrology, 2017, 548, 263-277.	2.3	55
74	A Comprehensive Analysis of the Variably Saturated Hydraulic Behavior of a Green Roof in a Mediterranean Climate. Vadose Zone Journal, 2016, 15, 1-17.	1.3	54
75	Equilibrium and kinetic models for colloid release under transient solution chemistry conditions. Journal of Contaminant Hydrology, 2015, 181, 141-152.	1.6	53
76	A Modified HYDRUS Model for Simulating PFAS Transport in the Vadose Zone. Water (Switzerland), 2020, 12, 2758.	1.2	52
77	Assessing salinity leaching efficiency in three soils by the HYDRUS-1D and -2D simulations. Soil and Tillage Research, 2019, 194, 104342.	2.6	50
78	Subsurface Water Distribution from Drip Irrigation Described by Moment Analyses. Vadose Zone Journal, 2007, 6, 116-123.	1.3	49
79	Modeling soil water dynamics in a drip-irrigated intercropping field under plastic mulch. Irrigation Science, 2015, 33, 289-302.	1.3	49
80	Roles of cation valance and exchange on the retention and colloid-facilitated transport of functionalized multi-walled carbon nanotubes in a natural soil. Water Research, 2017, 109, 358-366.	5.3	49
81	Evaluation of crop coefficients, water productivity, and water balance components for wine grapes irrigated at different deficit levels by a sub-surface drip. Agricultural Water Management, 2017, 180, 22-34.	2.4	48
82	Do Goethite Surfaces Really Control the Transport and Retention of Multi-Walled Carbon Nanotubes in Chemically Heterogeneous Porous Media?. Environmental Science & Technology, 2016, 50, 12713-12721.	4.6	47
83	Numerical simulation of water flow in tile and mole drainage systems. Agricultural Water Management, 2014, 146, 105-114.	2.4	45
84	Modelling soil water balance and root water uptake in cotton grown under different soil conservation practices in the Indo-Gangetic Plain. Agriculture, Ecosystems and Environment, 2017, 240, 287-299.	2.5	45
85	Transport of silver nanoparticles in intact columns of calcareous soils: The role of flow conditions and soil texture. Geoderma, 2018, 322, 89-100.	2.3	45
86	Evaluation of Spatial and Temporal Root Water Uptake Patterns of a Flood-Irrigated Pecan Tree Using the HYDRUS (2D/3D) Model. Journal of Irrigation and Drainage Engineering - ASCE, 2013, 139, 599-611.	0.6	42
87	Implementation and Application of a Root Growth Module in HYDRUS. Vadose Zone Journal, 2018, 17, 1-16.	1.3	42
88	An application of the water footprint assessment to optimize production of crops irrigated with saline water: A scenario assessment with HYDRUS. Agricultural Water Management, 2018, 208, 67-82.	2.4	41
89	Drip irrigation provides the salinity control needed for profitable irrigation of tomatoes in the San Joaquin Valley. California Agriculture, 2009, 63, 131-136.	0.5	41
90	Evaluating the effects of biodegradable film mulching on soil water dynamics in a drip-irrigated field. Agricultural Water Management, 2019, 226, 105788.	2.4	40

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91	Parameter estimation of soil hydraulic and thermal property functions for unsaturated porous media using the HYDRUS-2D code. Journal of Hydrology and Hydromechanics, 2014, 62, 7-15.	0.7	39
92	New Analytical Model for Cumulative Infiltration into Dual-Permeability Soils. Vadose Zone Journal, 2014, 13, vzj2013.10.0181.	1.3	38
93	Identifying the future water and salinity risks to irrigated viticulture in the Murray-Darling Basin, South Australia. Agricultural Water Management, 2018, 201, 107-117.	2.4	38
94	Spatial and diurnal below canopy evaporation in a desert vineyard: Measurements and modeling. Water Resources Research, 2014, 50, 7035-7049.	1.7	37
95	Comparison of Pesticide Transport Processes in Three Tileâ€Drained Field Soils Using HYDRUSâ€2D. Vadose Zone Journal, 2006, 5, 838-849.	1.3	36
96	Soil water and salinity dynamics under sprinkler irrigated almond exposed to a varied salinity stress at different growth stages. Agricultural Water Management, 2018, 201, 70-82.	2.4	36
97	Soil tillage to reduce surface metal contamination â€“ model development and simulations of zinc and copper concentration profiles in a pig slurry-amended soil. Agriculture, Ecosystems and Environment, 2014, 196, 59-68.	2.5	35
98	An estimation of the main wetting branch of the soil water retention curve based on its main drying branch using the machine learning method. Water Resources Research, 2017, 53, 1539-1552.	1.7	35
99	Modeling the effects of saline water use in wheat-cultivated lands using the UNSATCHEM model. Irrigation Science, 2013, 31, 1009-1024.	1.3	34
100	Coupled simulation of surface runoff and soil water flow using multi-objective parameter estimation. Journal of Hydrology, 2011, 403, 141-156.	2.3	33
101	Soil salinization in very high-density olive orchards grown in southern Portugal: Current risks and possible trends. Agricultural Water Management, 2019, 217, 265-281.	2.4	33
102	Dissolution and transport of 2,4-DNT and 2,6-DNT from M1 propellant in soil. Chemosphere, 2009, 77, 597-603.	4.2	32
103	A computationally efficient pseudo-3D model for the numerical analysis of borehole heat exchangers. Applied Energy, 2017, 208, 1113-1127.	5.1	32
104	Modeling the release of E. coli D21g with transients in water content. Water Resources Research, 2015, 51, 3303-3316.	1.7	31
105	A field-modeling study for assessing temporal variations of soil-water-crop interactions under water-saving irrigation strategies. Agricultural Water Management, 2016, 178, 291-303.	2.4	31
106	Co-transport of chlordecone and sulfadiazine in the presence of functionalized multi-walled carbon nanotubes in soils. Environmental Pollution, 2017, 221, 470-479.	3.7	31
107	Evaluating drywells for stormwater management and enhanced aquifer recharge. Advances in Water Resources, 2018, 116, 167-177.	1.7	31
108	Mechanisms of graphene oxide aggregation, retention, and release in quartz sand. Science of the Total Environment, 2019, 656, 70-79.	3.9	30

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109	Experimental and numerical evaluation of a ring-shaped emitter for subsurface irrigation. Agricultural Water Management, 2019, 211, 111-122.	2.4	30
110	Improving the estimation of evaporation by the FAO-56 dual crop coefficient approach under subsurface drip irrigation. Agricultural Water Management, 2016, 178, 189-200.	2.4	29
111	Infiltration in layered loessial deposits: Revised numerical simulations and recharge assessment. Journal of Hydrology, 2016, 538, 339-354.	2.3	29
112	On the Information Content of Cosmicâ€Ray Neutron Data in the Inverse Estimation of Soil Hydraulic Properties. Vadose Zone Journal, 2019, 18, 1-24.	1.3	29
113	Evidence for the critical role of nanoscale surface roughness on the retention and release of silver nanoparticles in porous media. Environmental Pollution, 2020, 258, 113803.	3.7	29
114	Evaluating soil nitrate dynamics in an intercropping dripped ecosystem using HYDRUS-2D. Science of the Total Environment, 2020, 718, 137314.	3.9	29
115	Determining water quality requirements of coal seam gas produced water for sustainable irrigation. Agricultural Water Management, 2017, 189, 52-69.	2.4	28
116	Physics-Informed Data-Driven Models to Predict Surface Runoff Water Quantity and Quality in Agricultural Fields. Water (Switzerland), 2019, 11, 200.	1.2	28
117	Impact of long-term recycled water irrigation on crop yield and soil chemical properties. Agricultural Water Management, 2020, 237, 106167.	2.4	28
118	Evaluating soil salt dynamics in a field drip-irrigated with brackish water and leached with freshwater during different crop growth stages. Agricultural Water Management, 2021, 244, 106601.	2.4	28
119	Co-transport of multi-walled carbon nanotubes and sodium dodecylbenzenesulfonate in chemically heterogeneous porous media. Environmental Pollution, 2019, 247, 907-916.	3.7	28
120	Modeling the Translocation and Transformation of Chemicals in the Soilâ€Plant Continuum: A Dynamic Plant Uptake Module for the HYDRUS Model. Water Resources Research, 2019, 55, 8967-8989.	1.7	27
121	Drywell infiltration and hydraulic properties in heterogeneous soil profiles. Journal of Hydrology, 2019, 570, 598-611.	2.3	27
122	Evaluating the effects of biodegradable and plastic film mulching on soil temperature in a drip-irrigated field. Soil and Tillage Research, 2021, 213, 105116.	2.6	27
123	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.	0.9	26
124	Estimation and upscaling of dual-permeability model parameters for the transport of E. coli D21g in soils with preferential flow. Journal of Contaminant Hydrology, 2014, 159, 57-66.	1.6	26
125	Batch soil adsorption and column transport studies of 2,4-dinitroanisole (DNAN) in soils. Journal of Contaminant Hydrology, 2017, 199, 14-23.	1.6	26
126	Column transport studies of 3-nitro-1,2,4-triazol-5-one (NTO) in soils. Chemosphere, 2017, 171, 427-434.	4.2	26

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127	On the use of global sensitivity analysis for the numerical analysis of permeable pavements. Urban Water Journal, 2018, 15, 269-275.	1.0	26
128	3.6.2. Inverse Methods. Soil Science Society of America Book Series, 0, , 963-1008.	0.3	26
129	Development of the Hydrus-1D freezing module and its application in simulating the coupled movement of water, vapor, and heat. Journal of Hydrology, 2021, 598, 126250.	2.3	26
130	Implementation of quadratic upstream interpolation schemes for solute transport into HYDRUS-1D. Environmental Modelling and Software, 2011, 26, 1298-1308.	1.9	25
131	Updating the Coupling Algorithm between HYDRUS and MODFLOW in the HYDRUS Package for MODFLOW. Vadose Zone Journal, 2018, 17, 1-8.	1.3	25
132	Estimation of vineyard soil structure and preferential flow using dye tracer, X-ray tomography, and numerical simulations. Geoderma, 2020, 380, 114699.	2.3	25
133	Application of a two-dimensional model to simulate flow and transport in a macroporous agricultural soil with tile drains. European Journal of Soil Science, 2001, 52, 433-447.	1.8	24
134	Simulations of freshwater lens recharge and salt/freshwater interfaces using the HYDRUS and SWI2 packages for MODFLOW. Journal of Hydrology and Hydromechanics, 2018, 66, 246-256.	0.7	23
135	Transport and retention of surfactant- and polymer-stabilized engineered silver nanoparticles in silicate-dominated aquifer material. Environmental Pollution, 2018, 236, 195-207.	3.7	23
136	A hybrid finite volume-finite element model for the numerical analysis of furrow irrigation and fertigation. Computers and Electronics in Agriculture, 2018, 150, 312-327.	3.7	23
137	Sprayable Biodegradable Polymer Membrane Technology for Cropping Systems: Challenges and Opportunities. Environmental Science & Technology, 2020, 54, 4709-4711.	4.6	23
138	Modeling of Soil Water Regime and Water Balance in a Transplanted Rice Field Experiment with Reduced Irrigation. Water (Switzerland), 2017, 9, 248.	1.2	22
139	The HPx software for multicomponent reactive transport during variably-saturated flow: Recent developments and applications. Journal of Hydrology and Hydromechanics, 2018, 66, 211-226.	0.7	22
140	The effect of different fertigation strategies and furrow surface treatments on plant water and nitrogen use. Irrigation Science, 2016, 34, 53-69.	1.3	21
141	Transport and fate of viruses in sediment and stormwater from a Managed Aquifer Recharge site. Journal of Hydrology, 2017, 555, 724-735.	2.3	21
142	Dissolution and transport of insensitive munitions formulations IMX-101 and IMX-104 in saturated soil columns. Science of the Total Environment, 2018, 624, 758-768.	3.9	21
143	Implementation of Solute Transport in the Vadose Zone into the â€œHYDRUS Package for MODFLOWâ€• Ground Water, 2019, 57, 392-408.	0.7	21
144	Groundwater recharge from drywells under constant head conditions. Journal of Hydrology, 2020, 583, 124569.	2.3	19

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145	Simulation of the redistribution and fate of contaminants from soil-injected animal slurry. Agricultural Water Management, 2014, 131, 17-29.	2.4	18
146	The role of soil hydraulic properties in crop water use efficiency: A process-based analysis for some Brazilian scenarios. Agricultural Systems, 2019, 173, 364-377.	3.2	18
147	Measuring full-range soil hydraulic properties for the prediction of crop water availability using gamma-ray attenuation and inverse modeling. Agricultural Water Management, 2019, 216, 294-305.	2.4	18
148	Assessing the role of rainfall redirection techniques for arresting the land degradation under drip irrigated grapevines. Journal of Hydrology, 2020, 587, 125000.	2.3	18
149	On the Use of Mechanistic Soilâ€“Plant Uptake Models: A Comprehensive Experimental and Numerical Analysis on the Translocation of Carbamazepine in Green Pea Plants. Environmental Science & Technology, 2021, 55, 2991-3000.	4.6	18
150	Numerical modeling of soil water dynamics in subsurface drained paddies with midseason drainage or alternate wetting and drying management. Agricultural Water Management, 2018, 197, 67-78.	2.4	17
151	Numerical Evaluation of Nitrate Distributions in the Onion Root Zone under Conventional Furrow Fertigation. Journal of Hydrologic Engineering - ASCE, 2016, 21, .	0.8	16
152	Monitoring and modeling the coupled movement of water, vapor, and energy in arid areas. Journal of Hydrology, 2020, 590, 125528.	2.3	16
153	Root water uptake under heterogeneous soil moisture conditions: an experimental study for unraveling compensatory root water uptake and hydraulic redistribution. Plant and Soil, 2020, 457, 421-435.	1.8	16
154	Handling model complexity with parsimony: Numerical analysis of the nitrogen turnover in a controlled aquifer model setup. Journal of Hydrology, 2020, 584, 124681.	2.3	16
155	A macroscopic soil-water transport model to simulate root water uptake in the presence of water and disease stress. Journal of Hydrology, 2020, 587, 124940.	2.3	16
156	Analysis of rainfall infiltration effects on the stability of pyroclastic soil veneer affected by vertical drying shrinkage fractures. Bulletin of Engineering Geology and the Environment, 2013, 72, 447-455.	1.6	15
157	Water flow and multicomponent solute transport in dripâ€irrigated lysimeters. Water Resources Research, 2016, 52, 6557-6574.	1.7	15
158	Numerical Modeling of Nitrate in a Floodâ€irrigated Pecan Orchard. Soil Science Society of America Journal, 2019, 83, 555-564.	1.2	15
159	Transport and retention of engineered silver nanoparticles in carbonate-rich sediments in the presence and absence of soil organic matter. Environmental Pollution, 2019, 255, 113124.	3.7	15
160	Modeling Water Flow and Phosphorus Sorption in a Soil Amended with Sewage Sludge and Olive Pomace as Compost or Biochar. Agronomy, 2020, 10, 1163.	1.3	15
161	Numerical simulations of the effects furrow surface conditions and fertilizer locations have on plant nitrogen and water use in furrow irrigated systems. Agricultural Water Management, 2020, 232, 106044.	2.4	15
162	Balancing exploitation and exploration: A novel hybrid global-local optimization strategy for hydrological model calibration. Environmental Modelling and Software, 2022, 150, 105341.	1.9	15

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163	Simulating the Fate and Transport of Coal Seam Gas Chemicals in Variably-Saturated Soils Using HYDRUS. Water (Switzerland), 2017, 9, 385.	1.2	14
164	Soil Compaction Effects on Rootâ€Zone Hydrology and Vegetation in Boreal Forest Clearcuts. Soil Science Society of America Journal, 2019, 83, S105.	1.2	14
165	A smart capillary barrier-wick irrigation system for home gardens in arid zones. Irrigation Science, 2020, 38, 235-250.	1.3	14
166	Evaluating soil salts dynamics under biodegradable film mulching with different disintegration rates in an arid region with shallow and saline groundwater: Experimental and modeling study. Geoderma, 2022, 423, 115969.	2.3	14
167	Modeling Virus Transport and Removal during Storage and Recovery in Heterogeneous Aquifers. Journal of Hydrology, 2019, 578, 124082.	2.3	13
168	Mitigating the Impact of Irrigation With Effluent Water: Mixing With Freshwater and/or Adjusting Irrigation Management and Design. Water Resources Research, 2020, 56, e2020WR027781.	1.7	13
169	Comparison of methods to estimate air-water interfacial areas for evaluating PFAS transport in the vadose zone. Journal of Contaminant Hydrology, 2022, 247, 103984.	1.6	13
170	The role of heterogeneous lithology in a glaciofluvial deposit on unsaturated preferential flow â€“ a numerical study. Journal of Hydrology and Hydromechanics, 2017, 65, 209-221.	0.7	12
171	Investigating Atrazine Concentrations in the Zwischenscholle Aquifer Using MODFLOW with the HYDRUS-1D Package and MT3DMS. Water (Switzerland), 2020, 12, 1019.	1.2	12
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