

Yakov A Pachepsky

List of Publications by Citations

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261
papers

10,780
citations

49
h-index

94
g-index

297
ext. papers

12,134
ext. citations

4.6
avg, IF

6.27
L-index

#	Paper	IF	Citations
261	The significance of soils and soil science towards realization of the United Nations Sustainable Development Goals. <i>Soil</i> , 2016 , 2, 111-128	5.8	795
260	Pedotransfer functions: bridging the gap between available basic soil data and missing soil hydraulic characteristics. <i>Journal of Hydrology</i> , 2001 , 251, 123-150	6	648
259	Effect of soil organic carbon on soil water retention. <i>Geoderma</i> , 2003 , 116, 61-76	6.7	587
258	Modeling Soil Processes: Review, Key Challenges, and New Perspectives. <i>Vadose Zone Journal</i> , 2016 , 15, vjz2015.09.0131	2.7	311
257	On the spatio-temporal dynamics of soil moisture at the field scale. <i>Journal of Hydrology</i> , 2014 , 516, 76-96		275
256	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
255	Artificial Neural Networks to Estimate Soil Water Retention from Easily Measurable Data. <i>Soil Science Society of America Journal</i> , 1996 , 60, 727-733	2.5	242
254	Pedotransfer Functions in Earth System Science: Challenges and Perspectives. <i>Reviews of Geophysics</i> , 2017 , 55, 1199-1256	23.1	186
253	Escherichia Coli and Fecal Coliforms in Freshwater and Estuarine Sediments. <i>Critical Reviews in Environmental Science and Technology</i> , 2011 , 41, 1067-1110	11.1	180
252	Fractal models for predicting soil hydraulic properties: a review. <i>Engineering Geology</i> , 1997 , 48, 161-183	6	179
251	Transport and fate of manure-borne pathogens: Modeling perspective. <i>Agricultural Water Management</i> , 2006 , 86, 81-92	5.9	165
250	Temporal Stability of Soil Water Contents: A Review of Data and Analyses. <i>Vadose Zone Journal</i> , 2012 , 11, vjz2011.0178	2.7	142
249	Soil Water Retention as Related to Topographic Variables. <i>Soil Science Society of America Journal</i> , 2001 , 65, 1787-1795	2.5	142
248	Accuracy and Reliability of Pedotransfer Functions as Affected by Grouping Soils. <i>Soil Science Society of America Journal</i> , 1999 , 63, 1748-1757	2.5	129
247	MODELING BACTERIA FATE AND TRANSPORT IN WATERSHEDS TO SUPPORT TMDLS. <i>Transactions of the ASABE</i> , 2006 , 49, 987-1002	0.9	126
246	Hydropedology: Synergistic integration of pedology and hydrology. <i>Water Resources Research</i> , 2006 , 42,	5.4	123
245	Hydropedology and pedotransfer functions. <i>Geoderma</i> , 2006 , 131, 308-316	6.7	122

244	Survival of manure-borne E. coli in streambed sediment: effects of temperature and sediment properties. <i>Water Research</i> , 2010 , 44, 2753-62	12.5	118
243	Escherichia coli survival in waters: temperature dependence. <i>Water Research</i> , 2013 , 47, 569-78	12.5	117
242	Spatial and Temporal Variability of Corn Grain Yield on a Hillslope. <i>Soil Science Society of America Journal</i> , 1998 , 62, 764-773	2.5	113
241	Temporal stability in soil water content patterns across agricultural fields. <i>Catena</i> , 2008 , 73, 125-133	5.8	111
240	Comparison of Two Techniques to Develop Pedotransfer Functions for Water Retention. <i>Soil Science Society of America Journal</i> , 2003 , 67, 1085-1092	2.5	109
239	Generalized Richards' equation to simulate water transport in unsaturated soils. <i>Journal of Hydrology</i> , 2003 , 272, 3-13	6	100
238	Multifractal analysis of discretized X-ray CT images for the characterization of soil macropore structures. <i>Geoderma</i> , 2010 , 156, 32-42	6.7	99
237	Simulating Scale-Dependent Solute Transport in Soils with the Fractional Advective-Dispersive Equation. <i>Soil Science Society of America Journal</i> , 2000 , 64, 1234-1243	2.5	97
236	Modeling fate and transport of fecally-derived microorganisms at the watershed scale: State of the science and future opportunities. <i>Water Research</i> , 2016 , 100, 38-56	12.5	96
235	Use of the Nonparametric Nearest Neighbor Approach to Estimate Soil Hydraulic Properties. <i>Soil Science Society of America Journal</i> , 2006 , 70, 327-336	2.5	94
234	TEMPORAL PERSISTENCE IN VERTICAL DISTRIBUTIONS OF SOIL MOISTURE CONTENTS. <i>Soil Science Society of America Journal</i> , 2005 , 69, 347-352	2.5	94
233	Effect of streambed bacteria release on E. coli concentrations: Monitoring and modeling with the modified SWAT. <i>Ecological Modelling</i> , 2010 , 221, 1592-1604	3	92
232	Soil structure and pedotransfer functions. <i>European Journal of Soil Science</i> , 2003 , 54, 443-452	3.4	92
231	Influence of Organic Matter on the Estimation of Saturated Hydraulic Conductivity. <i>Soil Science Society of America Journal</i> , 2005 , 69, 1330-1337	2.5	88
230	Release of Escherichia coli from the bottom sediment in a first-order creek: Experiment and reach-specific modeling. <i>Journal of Hydrology</i> , 2010 , 391, 322-332	6	87
229	Prediction of contamination potential of groundwater arsenic in Cambodia, Laos, and Thailand using artificial neural network. <i>Water Research</i> , 2011 , 45, 5535-44	12.5	83
228	Using Support Vector Machines to Develop Pedotransfer Functions for Water Retention of Soils in Poland. <i>Soil Science Society of America Journal</i> , 2008 , 72, 1243-1247	2.5	82
227	A comparative modeling study of soil water dynamics in a desert ecosystem. <i>Water Resources Research</i> , 1997 , 33, 73-90	5.4	80

226	Fractal parameters of pore surfaces as derived from micromorphological data: effect of long-term management practices. <i>Geoderma</i> , 1996 , 74, 305-319	6.7	79
225	Reconstructing missing daily precipitation data using regression trees and artificial neural networks for SWAT streamflow simulation. <i>Journal of Hydrology</i> , 2010 , 394, 305-314	6	69
224	Fractal Parameters of Pore Surface Area as Influenced by Simulated Soil Degradation. <i>Soil Science Society of America Journal</i> , 1995 , 59, 68-75	2.5	69
223	The modified SWAT model for predicting fecal coliforms in the Wachusett Reservoir Watershed, USA. <i>Water Research</i> , 2012 , 46, 4750-60	12.5	65
222	Irrigation Waters as a Source of Pathogenic Microorganisms in Produce: A Review. <i>Advances in Agronomy</i> , 2011 , 113, 75-141	7.7	65
221	Effect of bovine manure on fecal coliform attachment to soil and soil particles of different sizes. <i>Applied and Environmental Microbiology</i> , 2007 , 73, 3363-70	4.8	63
220	Performance of TDR calibration models as affected by soil texture. <i>Journal of Hydrology</i> , 1999 , 218, 35-48		63
219	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
218	Biofilm morphology as related to the porous media clogging. <i>Water Research</i> , 2010 , 44, 1193-201	12.5	58
217	Rainfall-induced release of fecal coliforms and other manure constituents: comparison and modeling. <i>Applied and Environmental Microbiology</i> , 2006 , 72, 7531-9	4.8	56
216	USING FIELD TOPOGRAPHIC DESCRIPTORS TO ESTIMATE SOIL WATER RETENTION. <i>Soil Science</i> , 2002 , 167, 423-435	0.9	56
215	A Modified Number-based Method for Estimating Fragmentation Fractal Dimensions of Soils. <i>Soil Science Society of America Journal</i> , 1996 , 60, 1291-1297	2.5	55
214	Development and analysis of the Soil Water Infiltration Global database. <i>Earth System Science Data</i> , 2018 , 10, 1237-1263	10.5	54
213	Maximum compactibility of Argentine soils from the Proctor test: The relationship with organic carbon and water content. <i>Soil and Tillage Research</i> , 2000 , 56, 197-204	6.5	50
212	Scale and scaling in soils. <i>Geoderma</i> , 2017 , 287, 4-30	6.7	49
211	Effect of manure on Escherichia coli attachment to soil. <i>Journal of Environmental Quality</i> , 2005 , 34, 2086-90	5.4	49
210	Comparison of soil water retention at field and laboratory scales. <i>Soil Science Society of America Journal</i> , 2001 , 65, 460-462	2.5	49
209	Modeling local control effects on the temporal stability of soil water content. <i>Journal of Hydrology</i> , 2013 , 481, 106-118	6	47

208	Survival of Escherichia coli in cowpats in pasture and in laboratory conditions. <i>Journal of Applied Microbiology</i> , 2007 , 103, 1122-7	4.7	47
207	Use of Brooks-Corey Parameters to Improve Estimates of Saturated Conductivity from Effective Porosity. <i>Soil Science Society of America Journal</i> , 1999 , 63, 1086-1092	2.5	45
206	Predicting microbial water quality with models: Over-arching questions for managing risk in agricultural catchments. <i>Science of the Total Environment</i> , 2016 , 544, 39-47	10.2	44
205	Modeling seasonal variability of fecal coliform in natural surface waters using the modified SWAT. <i>Journal of Hydrology</i> , 2016 , 535, 377-385	6	43
204	Information content and complexity of simulated soil water fluxes. <i>Geoderma</i> , 2006 , 134, 253-266	6.7	42
203	Can E. coli or thermotolerant coliform concentrations predict pathogen presence or prevalence in irrigation waters?. <i>Critical Reviews in Microbiology</i> , 2016 , 42, 384-93	7.8	40
202	Predicting crop yields under climate change conditions from monthly GCM weather projections. <i>Environmental Modelling and Software</i> , 2000 , 15, 79-86	5.2	40
201	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
200	Stochastic imaging of soil parameters to assess variability and uncertainty of crop yield estimates. <i>Geoderma</i> , 1998 , 85, 213-229	6.7	39
199	Comparison of release and transport of manure-borne Escherichia coli and enterococci under grass buffer conditions. <i>Letters in Applied Microbiology</i> , 2007 , 44, 161-7	2.9	39
198	Statistical properties of soil moisture images revisited. <i>Journal of Hydrology</i> , 2002 , 255, 12-24	6	39
197	Sample dimensions effect on prediction of soil water retention curve and saturated hydraulic conductivity. <i>Journal of Hydrology</i> , 2015 , 528, 127-137	6	38
196	Transport of giardia and manure suspensions in saturated porous media. <i>Journal of Environmental Quality</i> , 2006 , 35, 749-57	3.4	38
195	Effect of climate and atmospheric change on soybean water stress: a study of Iowa. <i>Ecological Modelling</i> , 2000 , 135, 265-277	3	38
194	Effect of soil hydraulic properties on the relationship between the spatial mean and variability of soil moisture. <i>Journal of Hydrology</i> , 2014 , 516, 154-160	6	36
193	Soil Consistence and Structure as Predictors of Water Retention. <i>Soil Science Society of America Journal</i> , 2002 , 66, 1115-1126	2.5	36
192	Saturated Hydraulic Conductivity of US Soils Grouped According to Textural Class and Bulk Density. <i>Soil Science Society of America Journal</i> , 2015 , 79, 1094-1100	2.5	34
191	Sensitivity analysis of unsaturated flow and contaminant transport with correlated parameters. <i>Journal of Hydrology</i> , 2011 , 397, 238-249	6	34

190	Hydrological modeling of Fecal Indicator Bacteria in a tropical mountain catchment. <i>Water Research</i> , 2017 , 119, 102-113	12.5	33
189	Modeling transport of Escherichia coli in a creek during and after artificial high-flow events: three-year study and analysis. <i>Water Research</i> , 2013 , 47, 2676-88	12.5	33
188	Toward Improving Global Estimates of Field Soil Water Capacity. <i>Soil Science Society of America Journal</i> , 2011 , 75, 807-812	2.5	33
187	Evaluation of Global Ozone Monitoring Experiment (GOME) ozone profiles from nine different algorithms. <i>Journal of Geophysical Research</i> , 2006 , 111,		33
186	The Current Status of Pedotransfer Functions: Their Accuracy, Reliability, and Utility in Field- and Regional-Scale Modeling. <i>Geophysical Monograph Series</i> , 1999 , 223-234	1.1	33
185	Comparing temperature effects on Escherichia coli, Salmonella, and Enterococcus survival in surface waters. <i>Letters in Applied Microbiology</i> , 2014 , 59, 278-83	2.9	32
184	Modeling manure-borne bromide and fecal coliform transport with runoff and infiltration at a hillslope. <i>Journal of Environmental Management</i> , 2007 , 84, 336-46	7.9	32
183	Response of coliform populations in streambed sediment and water column to changes in nutrient concentrations in water. <i>Water Research</i> , 2014 , 59, 316-24	12.5	31
182	Temporal stability of soil water content as affected by climate and soil hydraulic properties: a simulation study. <i>Hydrological Processes</i> , 2014 , 28, 1899-1915	3.3	30
181	Depth-Dependent Survival of Escherichia coli and Enterococci in Soil after Manure Application and Simulated Rainfall. <i>Applied and Environmental Microbiology</i> , 2015 , 81, 4801-8	4.8	30
180	Uncertainty evaluation of coliform bacteria removal from vegetated filter strip under overland flow condition. <i>Journal of Environmental Quality</i> , 2009 , 38, 1636-44	3.4	30
179	FECAL COLIFORM TRANSPORT AS AFFECTED BY SURFACE CONDITION. <i>Transactions of the American Society of Agricultural Engineers</i> , 2005 , 48, 1055-1061		30
178	Using GIS in passive microwave soil moisture mapping and geostatistical analysis. <i>International Journal of Geographical Information Science</i> , 2002 , 16, 681-698	4.1	30
177	Influence of root density on the critical soil water potential. <i>Plant and Soil</i> , 1995 , 171, 351-357	4.2	30
176	A Design for a Modular, Generic Soil Simulator to Interface with Plant Models. <i>Agronomy Journal</i> , 1996 , 88, 162-169	2.2	30
175	Rainfall intensity effects on removal of fecal indicator bacteria from solid dairy manure applied over grass-covered soil. <i>Science of the Total Environment</i> , 2016 , 539, 583-591	10.2	29
174	The use of a water budget model and yield maps to characterize water availability in a landscape. <i>Soil and Tillage Research</i> , 2001 , 58, 219-231	6.5	29
173	On the role of patterns in understanding the functioning of soil-vegetation-atmosphere systems. <i>Journal of Hydrology</i> , 2016 , 542, 63-86	6	29

172	A novel water quality module of the SWMM model for assessing low impact development (LID) in urban watersheds. <i>Journal of Hydrology</i> , 2020 , 586, 124886	6	29
171	Effects of Soil Hydraulic Properties on the Spatial Variability of Soil Water Content: Evidence from Sensor Network Data and Inverse Modeling. <i>Vadose Zone Journal</i> , 2014 , 13, vzj2014.07.0099	2.7	28
170	Effect of biofilm in irrigation pipes on microbial quality of irrigation water. <i>Letters in Applied Microbiology</i> , 2012 , 54, 217-24	2.9	28
169	Uncertainty in modelling of faecal coliform overland transport associated with manure application in Maryland. <i>Hydrological Processes</i> , 2011 , 25, 2393-2404	3.3	28
168	Water transport in soils as in fractal media. <i>Journal of Hydrology</i> , 1998 , 204, 98-107	6	28
167	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
166	Estimation of viable Escherichia coli O157 in surface waters using enrichment in conjunction with immunological detection. <i>Journal of Microbiological Methods</i> , 2004 , 58, 223-31	2.8	28
165	Soil water dynamics in row and interrow positions in soybean (<i>Glycine max</i> L.). <i>Plant and Soil</i> , 2001 , 237, 25-35	4.2	28
164	Scale effects on runoff and soil erosion in rangelands: Observations and estimations with predictors of different availability. <i>Catena</i> , 2017 , 151, 161-173	5.8	27
163	Runoff transport of faecal coliforms and phosphorus released from manure in grass buffer conditions. <i>Letters in Applied Microbiology</i> , 2005 , 41, 230-4	2.9	27
162	Quasi 3D modeling of water flow in vadose zone and groundwater. <i>Journal of Hydrology</i> , 2012 , 450-451, 140-149	6	26
161	Software to estimate θ_3 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
160	Projected irrigation requirements for upland crops using soil moisture model under climate change in South Korea. <i>Agricultural Water Management</i> , 2016 , 165, 163-180	5.9	25
159	Soil pore surface properties in managed grasslands. <i>Soil and Tillage Research</i> , 2000 , 55, 63-70	6.5	25
158	Indirect estimation of soil hydraulic properties to predict soybean yield using GLYCIM. <i>Agricultural Systems</i> , 1996 , 52, 331-353	6.1	25
157	Development of a Nowcasting System Using Machine Learning Approaches to Predict Fecal Contamination Levels at Recreational Beaches in Korea. <i>Journal of Environmental Quality</i> , 2018 , 47, 1094-1102	3.4	24
156	Release and Removal of Microorganisms from Land-Deposited Animal Waste and Animal Manures: A Review of Data and Models. <i>Journal of Environmental Quality</i> , 2015 , 44, 1338-54	3.4	24
155	Using the Q10 model to simulate E. coli survival in cowpats on grazing lands. <i>Environment International</i> , 2013 , 54, 1-10	12.9	24

154	Error analysis of soil temperature simulations using measured and estimated hourly weather data with 2DSOIL. <i>Agricultural Systems</i> , 2002 , 72, 215-239	6.1	24
153	Testing soil water retention estimation with the MUUF pedotransfer model using data from the southern United States. <i>Journal of Hydrology</i> , 2001 , 251, 177-185	6	24
152	Evaluating the influence of climate change on the fate and transport of fecal coliform bacteria using the modified SWAT model. <i>Science of the Total Environment</i> , 2019 , 658, 753-762	10.2	24
151	An integrated environmental modeling framework for performing Quantitative Microbial Risk Assessments. <i>Environmental Modelling and Software</i> , 2014 , 55, 77-91	5.2	23
150	Effectiveness of vegetated filter strips in retention of Escherichia coli and Salmonella from swine manure slurry. <i>Journal of Environmental Management</i> , 2012 , 110, 1-7	7.9	23
149	Fractal modeling of airborne laser altimetry data. <i>Remote Sensing of Environment</i> , 1997 , 61, 150-161	13.2	23
148	INFILTRATION MEASUREMENT USING A VERTICAL TIME-DOMAIN REFLECTOMETRY PROBE AND A REFLECTION SIMULATION MODEL. <i>Soil Science</i> , 2002 , 167, 1-8	0.9	23
147	Estimation of Soybean Yields at County and State Levels Using GLYCIM: A Case Study for Iowa. <i>Agronomy Journal</i> , 1995 , 87, 926-931	2.2	23
146	Stressor-response modeling using the 2D water quality model and regression trees to predict chlorophyll-a in a reservoir system. <i>Journal of Hydrology</i> , 2015 , 529, 805-815	6	22
145	Rainfall-induced fecal indicator organisms transport from manured fields: model sensitivity analysis. <i>Environment International</i> , 2014 , 63, 121-9	12.9	22
144	Evaluating manure release parameters for nonpoint contaminant transport model KINEROS2/STWIR. <i>Ecological Modelling</i> , 2013 , 263, 126-138	3	22
143	Relation of lead exposure to sediment ingestion in mute swans on the Chesapeake Bay, USA. <i>Environmental Toxicology and Chemistry</i> , 1998 , 17, 2298-2301	3.8	22
142	Survival of Manure-borne and Fecal Coliforms in Soil: Temperature Dependence as Affected by Site-Specific Factors. <i>Journal of Environmental Quality</i> , 2016 , 45, 949-57	3.4	22
141	Temporal Stability of Escherichia coli Concentrations in Waters of Two Irrigation Ponds in Maryland. <i>Applied and Environmental Microbiology</i> , 2018 , 84,	4.8	22
140	Technical note: Saturated hydraulic conductivity and textural heterogeneity of soils. <i>Hydrology and Earth System Sciences</i> , 2018 , 22, 3923-3932	5.5	21
139	Concurrent temporal stability of the apparent electrical conductivity and soil water content. <i>Journal of Hydrology</i> , 2017 , 544, 319-326	6	21
138	Relationship between eae and stx virulence genes and Escherichia coli in an agricultural watershed: implications for irrigation water standards and leafy green commodities. <i>Journal of Food Protection</i> , 2011 , 74, 18-23	2.5	21
137	PREDICTION OF A PORE DISTRIBUTION FACTOR FROM SOIL TEXTURAL AND MECHANICAL PARAMETERS. <i>Soil Science</i> , 2001 , 166, 79-88	0.9	21

136	ESTIMATING SATURATED SOIL HYDRAULIC CONDUCTIVITY USING WATER RETENTION DATA AND NEURAL NETWORKS. <i>Soil Science</i> , 1999 , 164, 552-560	0.9	21
135	Spatial and temporal variation of fecal indicator organisms in two creeks in Beltsville, Maryland. <i>Water Quality Research Journal of Canada</i> , 2016 , 51, 167-179	1.7	21
134	Enrichment of stream water with fecal indicator organisms during baseflow periods. <i>Environmental Monitoring and Assessment</i> , 2017 , 189, 51	3.1	20
133	Soil Hydraulic Parameters and Surface Soil Moisture of a Tilled Bare Soil Plot Inversely Derived from L-Band Brightness Temperatures. <i>Vadose Zone Journal</i> , 2014 , 13, vzj2013.04.0075	2.7	20
132	Pedotransfer functions in soil electrical resistivity estimation. <i>Geoderma</i> , 2011 , 164, 195-202	6.7	20
131	Data Assimilation with Soil Water Content Sensors and Pedotransfer Functions in Soil Water Flow Modeling. <i>Soil Science Society of America Journal</i> , 2012 , 76, 829-844	2.5	20
130	METHANE OXIDATION POTENTIAL OF RECLAIMED GRASSLAND SOILS AS AFFECTED BY MANAGEMENT. <i>Soil Science</i> , 2006 , 171, 772-783	0.9	20
129	Effect of bovine manure on <i>Cryptosporidium parvum</i> oocyst attachment to soil. <i>Applied and Environmental Microbiology</i> , 2005 , 71, 6394-7	4.8	20
128	Release Rates of Manure-Borne Coliform Bacteria from Data on Leaching through Stony Soil. <i>Vadose Zone Journal</i> , 2003 , 2, 34-39	2.7	20
127	Single collector attachment efficiency of colloid capture by a cylindrical collector in laminar overland flow. <i>Environmental Science & Technology</i> , 2012 , 46, 8878-86	10.3	19
126	Information and complexity measures applied to observed and simulated soil moisture time series. <i>Hydrological Sciences Journal</i> , 2011 , 56, 1027-1039	3.5	19
125	LOSS OF BIOACTIVE PHOSPHORUS AND ENTERIC BACTERIA IN RUNOFF FROM DAIRY MANURE APPLIED TO SOD. <i>Soil Science</i> , 2008 , 173, 511-521	0.9	19
124	Fractal mass-size scaling of wetting soil aggregates. <i>Ecological Modelling</i> , 2005 , 182, 317-322	3	19
123	Water Budget Approach to Quantify Corn Grain Yields Under Variable Rooting Depths. <i>Soil Science Society of America Journal</i> , 2001 , 65, 1219-1226	2.5	19
122	Use of the beta distribution for parameterizing variability of soil properties at the regional level for crop yield estimation. <i>Agricultural Systems</i> , 1995 , 48, 73-86	6.1	19
121	Accuracy of sample dimension-dependent pedotransfer functions in estimation of soil saturated hydraulic conductivity. <i>Catena</i> , 2017 , 149, 374-380	5.8	18
120	Release from Streambed to Water Column during Baseflow Periods: A Modeling Study. <i>Journal of Environmental Quality</i> , 2017 , 46, 219-226	3.4	18
119	Irrigation waters and pipe-based biofilms as sources for antibiotic-resistant bacteria. <i>Environmental Monitoring and Assessment</i> , 2016 , 188, 56	3.1	18

118	Scale effects on information theory-based measures applied to streamflow patterns in two rural watersheds. <i>Journal of Hydrology</i> , 2012 , 414-415, 99-107	6	18
117	Solid Manure As a Source of Fecal Indicator Microorganisms: Release under Simulated Rainfall. <i>Environmental Science & Technology</i> , 2015 , 49, 7860-9	10.3	18
116	Continuous time random walks for analyzing the transport of a passive tracer in a single fissure. <i>Water Resources Research</i> , 2005 , 41,	5.4	18
115	Allometric Relationships in Field-grown Soybean. <i>Annals of Botany</i> , 1998 , 82, 125-131	4.1	18
114	Assessment of a green roof practice using the coupled SWMM and HYDRUS models. <i>Journal of Environmental Management</i> , 2020 , 261, 109920	7.9	17
113	Storm water pollutant removal performance of compost filter socks. <i>Journal of Environmental Quality</i> , 2009 , 38, 1233-9	3.4	17
112	Revitalizing pedology through hydrology and connecting hydrology to pedology. <i>Geoderma</i> , 2006 , 131, 255-256	6.7	17
111	Scaling, fractals and diversity in soils and ecohydrology. <i>Ecological Modelling</i> , 2005 , 182, 217-220	3	17
110	Microbial Water Quality: Monitoring and Modeling. <i>Journal of Environmental Quality</i> , 2018 , 47, 931-938	3.4	17
109	Colloid filtration in surface dense vegetation: experimental results and theoretical predictions. <i>Environmental Science & Technology</i> , 2014 , 48, 3883-90	10.3	16
108	Increase of CO ₂ and Climate Change Effects on Iowa Soybean Yield, Simulated Using GLYCIM. <i>Agronomy Journal</i> , 1997 , 89, 167-176	2.2	16
107	Developing the vegetation drought response index for South Korea (VegDRI-SKorea) to assess the vegetation condition during drought events. <i>International Journal of Remote Sensing</i> , 2018 , 39, 1548-1574 ¹	2.1	15
106	Scaling and Pedotransfer in Numerical Simulations of Flow and Transport in Soils. <i>Vadose Zone Journal</i> , 2014 , 13, vjz2014.02.0020	2.7	15
105	Multifractal modeling of soil microtopography with multiple transects data. <i>Ecological Complexity</i> , 2009 , 6, 240-245	2.6	15
104	Fractal and Multifractal Models Applied to Porous Media. <i>Vadose Zone Journal</i> , 2009 , 8, 174-176	2.7	15
103	Pedotransfer in soil physics: trends and outlook [A review] <i>Agrokemia Es Talajtan</i> , 2015 , 64, 339-360	0.1	15
102	Using convolutional neural network for predicting cyanobacteria concentrations in river water. <i>Water Research</i> , 2020 , 186, 116349	12.5	15
101	Augmentation of groundwater monitoring networks using information theory and ensemble modeling with pedotransfer functions. <i>Journal of Hydrology</i> , 2013 , 501, 13-24	6	14

100	Estimating Topsoil Water Content of Clay Soils With Data From Time-Lapse Electrical Conductivity Surveys. <i>Soil Science</i> , 2012 , 177, 369-376	0.9	14
99	Impact of sedimentation on wetland carbon sequestration in an agricultural watershed. <i>Journal of Environmental Quality</i> , 2009 , 38, 804-13	3.4	14
98	Modelling solute transport in soil columns using advective-dispersive equations with fractional spatial derivatives. <i>Advances in Engineering Software</i> , 2010 , 41, 4-8	3.6	14
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