

Kathleen M Smits

List of Publications by Year in descending order

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Version: 2024-02-01

58
papers

1,344
citations

471509

17
h-index

361022

35
g-index

59
all docs

59
docs citations

59
times ranked

1117
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of the environmental and health implications of recycling mine tailings for construction purposes in artisanal and small-scale mining communities. <i>The Extractive Industries and Society</i> , 2022, 9, 101019.	1.2	5
2	Calibration and field deployment of low-cost sensor network to monitor underground pipeline leakage. <i>Sensors and Actuators B: Chemical</i> , 2022, 355, 131276.	7.8	11
3	Remediation in developing countries: A review of previously implemented projects and analysis of stakeholder participation efforts. <i>Critical Reviews in Environmental Science and Technology</i> , 2021, 51, 1259-1280.	12.8	14
4	Effect of aggregate size distribution on soil moisture, soil-gas diffusivity, and N ₂ O emissions from a pasture soil. <i>Geoderma</i> , 2021, 383, 114737.	5.1	17
5	Study of methane migration in the shallow subsurface from a gas pipe leak. <i>Elementa</i> , 2021, 9, .	3.2	7
6	How lessons from an evolving comprehensive approach for water and sanitation can improve artisanal and small-scale mining environmental initiatives. <i>Journal of Cleaner Production</i> , 2021, 282, 124457.	9.3	4
7	20 years of <i>Vadose Zone Journal</i> . <i>Vadose Zone Journal</i> , 2021, 20, e20141.	2.2	0
8	Determination of Vapor and Momentum Roughness Lengths Above an Undulating Soil Surface Based on PIV-measured Velocity Profiles. <i>Water Resources Research</i> , 2021, 57, e2021WR029578.	4.2	1
9	Incorporating positive deviance into comprehensive remediation projects: A case study from artisanal and small-scale gold mining in the municipality of Andes, Colombia. <i>Environmental Science and Policy</i> , 2021, 123, 142-150.	4.9	4
10	Integrating scientific and local knowledge into pollution remediation planning: An iterative conceptual site model framework. <i>Environmental Development</i> , 2021, 40, 100675.	4.1	6
11	Modeling temporal variability in the surface expression above a methane leak: The ESCAPE model. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 96, 104275.	4.4	7
12	Gas diffusivity-based characterization of aggregated soils linking to methane migration in shallow subsurface. <i>Vadose Zone Journal</i> , 2021, 20, .	2.2	4
13	Voces Mineras: Clarifying the future of artisanal and small-scale mining collaborations. <i>The Extractive Industries and Society</i> , 2020, 7, 68-72.	1.2	11
14	Hydrogeochemical and microbiological effects of simulated recharge and drying within a 2D meso-scale aquifer. <i>Chemosphere</i> , 2020, 241, 125116.	8.2	7
15	Gas Diffusivity based characterization of aggregated agricultural soils. <i>Soil Science Society of America Journal</i> , 2020, 84, 387-398.	2.2	11
16	Evaporation from undulating soil surfaces under turbulent airflow through numerical and experimental approaches. <i>Vadose Zone Journal</i> , 2020, 19, e20038.	2.2	7
17	Gas Component Transport Across the Soil-Atmosphere Interface for Gases of Different Density: Experiments and Modeling. <i>Water Resources Research</i> , 2020, 56, e2020WR027600.	4.2	8
18	Estimating natural gas emissions from underground pipelines using surface concentration measurements. <i>Environmental Pollution</i> , 2020, 267, 115514.	7.5	16

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19	The effect of the top soil layer on moisture and evaporation dynamics. <i>Vadose Zone Journal</i> , 2020, 19, e20049.	2.2	12
20	Room for improvement: A review and evaluation of 24 soil thermal conductivity parameterization schemes commonly used in land-surface, hydrological, and soil-vegetation-atmosphere transfer models. <i>Earth-Science Reviews</i> , 2020, 211, 103419.	9.1	47
21	Effects of "soil" particle size on gas transport and water retention properties in aged municipal solid waste from a Sri Lankan open dumpsite. <i>Soil Science Society of America Journal</i> , 2020, 84, 1080-1093.	2.2	1
22	Natural Gas Emissions from Underground Pipelines and Implications for Leak Detection. <i>Environmental Science and Technology Letters</i> , 2019, 6, 401-406.	8.7	34
23	Evaluation of Model Concepts to Describe Water Transport in Shallow Subsurface Soil and Across the Soil-Air Interface. <i>Transport in Porous Media</i> , 2019, 128, 945-976.	2.6	17
24	Accounting for Temperature Effects on the Performance of Soil Moisture Sensors in Sandy Soils. <i>Soil Science Society of America Journal</i> , 2019, 83, 1319-1323.	2.2	3
25	Effect of varying atmospheric conditions on methane boundary layer development in a free flow domain interfaced with a porous media domain. , 2018, 8, 335-348.		6
26	Coupled Thermally-Enhanced Bioremediation and Renewable Energy Storage System: Conceptual Framework and Modeling Investigation. <i>Water (Switzerland)</i> , 2018, 10, 1288.	2.7	12
27	Experimental and Numerical Study of Evaporation From Wavy Surfaces by Coupling Free Flow and Porous Media Flow. <i>Water Resources Research</i> , 2018, 54, 9096-9117.	4.2	13
28	Characterization of Grain Size Distribution, Thermal Conductivity, and Gas Diffusivity in Variably Saturated Binary Sand Mixtures. <i>Vadose Zone Journal</i> , 2018, 17, 1-13.	2.2	4
29	Heat and water transport in soils and across the soil-atmosphere interface: 1. Theory and different model concepts. <i>Water Resources Research</i> , 2017, 53, 1057-1079.	4.2	67
30	Heat and water transport in soils and across the soil-atmosphere interface: 2. Numerical analysis. <i>Water Resources Research</i> , 2017, 53, 1080-1100.	4.2	37
31	Trace organic chemical attenuation during managed aquifer recharge: Insights from a variably saturated 2D tank experiment. <i>Journal of Hydrology</i> , 2017, 548, 641-651.	5.4	11
32	Optimal Decision Making Algorithm for Managed Aquifer Recharge and Recovery Operation Using Near Real-Time Data: Benchtop Scale Laboratory Demonstration. <i>Ground Water Monitoring and Remediation</i> , 2017, 37, 27-41.	0.8	7
33	Thermal Conductivity of Binary Sand Mixtures Evaluated through Full Water Content Range. <i>Soil Science Society of America Journal</i> , 2016, 80, 592-603.	2.2	24
34	Characterization of Thermal, Hydraulic, and Gas Diffusion Properties in Variably Saturated Sand Grades. <i>Vadose Zone Journal</i> , 2016, 15, 1-11.	2.2	12
35	Effect of subsurface soil moisture variability and atmospheric conditions on methane gas migration in shallow subsurface. <i>International Journal of Greenhouse Gas Control</i> , 2016, 55, 105-117.	4.6	40
36	Experimental and Modeling Study of Forest Fire Effect on Soil Thermal Conductivity. <i>Pedosphere</i> , 2016, 26, 462-473.	4.0	18

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37	Impact of a Thermo-Hydraulic Insulation Layer on the Long-Term Response of Soil-Borehole Thermal Energy Storage Systems. , 2016, , .		0
38	Heat Transfer in Unsaturated Soil with Application to Borehole Thermal Energy Storage. Vadose Zone Journal, 2016, 15, 1-17.	2.2	42
39	Numerical modeling of non-isothermal gas flow and NAPL vapor transport in soil. Computer Physics Communications, 2016, 202, 175-187.	7.5	3
40	Effect of Turbulence and Roughness on Coupled Porous-Medium/Free-Flow Exchange Processes. Transport in Porous Media, 2016, 114, 395-424.	2.6	27
41	Exploring the Effects of Atmospheric Forcings on Evaporation: Experimental Integration of the Atmospheric Boundary Layer and Shallow Subsurface. Journal of Visualized Experiments, 2015, , e52704.	0.3	1
42	Continuum-scale investigation of evaporation from bare soil under different boundary and initial conditions: An evaluation of nonequilibrium phase change. Water Resources Research, 2015, 51, 7630-7648.	4.2	29
43	Water Retention Characteristics and Pore Structure of Binary Mixtures. Vadose Zone Journal, 2015, 14, 1-7.	2.2	16
44	Development and application of a screening model for evaluating bioenhanced dissolution in DNAPL source zones. Journal of Contaminant Hydrology, 2015, 183, 1-15.	3.3	1
45	Effect of <scp>NAPL</scp> Source Morphology on Mass Transfer in the Vadose Zone. Ground Water, 2015, 53, 685-698.	1.3	16
46	Impact of coupled heat transfer and water flow on soil borehole thermal energy storage (SBTES) systems: Experimental and modeling investigation. Geothermics, 2015, 57, 56-72.	3.4	51
47	Study of the effect of wind speed on evaporation from soil through integrated modeling of the atmospheric boundary layer and shallow subsurface. Water Resources Research, 2014, 50, 661-680.	4.2	108
48	Sensible Heat Balance and Heatâ€Pulse Method Applicability to In Situ Soilâ€Water Evaporation. Vadose Zone Journal, 2014, 13, 1-11.	2.2	18
49	Measurement of Thermal Conductivity Function of Unsaturated Soil Using a Transient Water Release and Imbibition Method. Geotechnical Testing Journal, 2014, 37, 20140046.	1.0	14
50	Simultaneous and continuous measurements of thermal and hydrological properties of sand using Transient Release and Imbibition Method. , 2014, , 1749-1754.		0
51	Soil Moisture and Thermal Behavior in the Vicinity of Buried Objects Affecting Remote Sensing Detection: Experimental and Modeling Investigation. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 2675-2688.	6.3	14
52	Temperature Dependence of Thermal Properties of Sands across a Wide Range of Temperatures (30â€70Â°C). Vadose Zone Journal, 2013, 12, vzj2012.0033.	2.2	61
53	Reply to comment by Michael D. Novak on â€Evaporation from soils under thermal boundary conditions: Experimental and modeling investigation to compare equilibrium and nonequilibrium based approachesâ€ Water Resources Research, 2012, 48, .	4.2	7
54	An evaluation of models of bare soil evaporation formulated with different land surface boundary conditions and assumptions. Water Resources Research, 2012, 48, .	4.2	79

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55	Evaporation from soils under thermal boundary conditions: Experimental and modeling investigation to compare equilibrium and nonequilibrium based approaches. <i>Water Resources Research</i> , 2011, 47, .	4.2	112
56	Thermal Conductivity of Sands under Varying Moisture and Porosity in Drainage Wetting Cycles. <i>Vadose Zone Journal</i> , 2010, 9, 172-180.	2.2	142
57	A Screening Model for Injection-Extraction Treatment Well Recirculation System Design. <i>Ground Water Monitoring and Remediation</i> , 2008, 28, 63-71.	0.8	8
58	Empirical two-point mixing model for calibrating the ECH ₂ O EC5 soil moisture sensor in sands. <i>Water Resources Research</i> , 2008, 44, .	4.2	90