

Teamrat A Ghezzehei

List of Publications by Year in descending order

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Version: 2024-02-01

72
papers

3,489
citations

186265

28
h-index

144013

57
g-index

104
all docs

104
docs citations

104
times ranked

4423
citing authors

#	ARTICLE	IF	CITATIONS
1	Intercropping with <i>Guiera senegalensis</i> in a semi-arid area to mitigate early-season abiotic stress in <i>A. hypogea</i> and <i>P. glaucum</i> . <i>Journal of Agronomy and Crop Science</i> , 2022, 208, 158-167.	3.5	1
2	Synergy between compost and cover crops in a Mediterranean row crop system leads to increased subsoil carbon storage. <i>Soil</i> , 2022, 8, 59-83.	4.9	4
3	Confronting the water potential information gap. <i>Nature Geoscience</i> , 2022, 15, 158-164.	12.9	47
4	Long-term impact of cover crop and reduced disturbance tillage on soil pore size distribution and soil water storage. <i>Soil</i> , 2022, 8, 177-198.	4.9	7
5	Physics-Informed Neural Networks With Monotonicity Constraints for Richardson-Richards Equation: Estimation of Constitutive Relationships and Soil Water Flux Density From Volumetric Water Content Measurements. <i>Water Resources Research</i> , 2021, 57, e2020WR027642.	4.2	29
6	Advances in soil moisture retrieval from multispectral remote sensing using unoccupied aircraft systems and machine learning techniques. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 2739-2758.	4.9	18
7	An overlooked local resource: Shrub-intercropping for food production, drought resistance and ecosystem restoration in the Sahel. <i>Agriculture, Ecosystems and Environment</i> , 2021, 319, 107523.	5.3	4
8	Quantifying the Effect of Subcritical Water Repellency on Sorptivity: A Physically Based Model. <i>Water Resources Research</i> , 2020, 56, e2020WR027942.	4.2	13
9	Using Wastewater in Irrigation: The Effects on Infiltration Process in a Clayey Soil. <i>Water (Switzerland)</i> , 2020, 12, 968.	2.7	8
10	Effect of Cover Crop on Carbon Distribution in Size and Density Separated Soil Aggregates. <i>Soil Systems</i> , 2020, 4, 6.	2.6	8
11	Soil structure is an important omission in Earth System Models. <i>Nature Communications</i> , 2020, 11, 522.	12.8	138
12	Root uptake under mismatched distributions of water and nutrients in the root zone. <i>Biogeosciences</i> , 2020, 17, 6377-6392.	3.3	10
13	Using Machine Learning for Prediction of Saturated Hydraulic Conductivity and Its Sensitivity to Soil Structural Perturbations. <i>Water Resources Research</i> , 2019, 55, 5715-5737.	4.2	103
14	The role of the physical properties of soil in determining biogeochemical responses to soil warming. , 2019, , 209-244.		7
15	On the role of soil water retention characteristic on aerobic microbial respiration. <i>Biogeosciences</i> , 2019, 16, 1187-1209.	3.3	44
16	Intercropping with two native woody shrubs improves water status and development of interplanted groundnut and pearl millet in the Sahel. <i>Plant and Soil</i> , 2019, 435, 143-159.	3.7	10
17	Hydraulic Redistribution by Native Sahelian Shrubs: Bioirrigation to Resist In-Season Drought. <i>Frontiers in Environmental Science</i> , 2018, 6, .	3.3	33
18	Steering operational synergies in terrestrial observation networks: opportunity for advancing Earth system dynamics modelling. <i>Earth System Dynamics</i> , 2018, 9, 593-609.	7.1	28

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19	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.	2.2	24
20	Vulnerability of Physically Protected Soil Organic Carbon to Loss Under Low Severity Fires. <i>Frontiers in Environmental Science</i> , 2018, 6, .	3.3	15
21	Soil Structural Degradation During Lowâ€Severity Burns. <i>Geophysical Research Letters</i> , 2018, 45, 5553-5561.	4.0	18
22	Alteration of soil physical properties and processes after ten years of intercropping with native shrubs in the Sahel. <i>Soil and Tillage Research</i> , 2018, 182, 153-163.	5.6	11
23	Development and analysis of the Soil Water Infiltration Global database. <i>Earth System Science Data</i> , 2018, 10, 1237-1263.	9.9	85
24	Upward infiltrationâ€evaporation method to estimate soil hydraulic properties. <i>Hydrological Sciences Journal</i> , 2017, 62, 1683-1693.	2.6	11
25	Using National Ambient Air Quality Standards for fine particulate matter to assess regional wildland fire smoke and air quality management. <i>Journal of Environmental Management</i> , 2017, 201, 345-356.	7.8	27
26	A modified multiple tension upward infiltration method to estimate the soil hydraulic properties. <i>Hydrological Processes</i> , 2016, 30, 2991-3003.	2.6	12
27	Alteration of physical and chemical characteristics of clayey soils by irrigation with treated waste water. <i>Geoderma</i> , 2016, 276, 33-40.	5.1	40
28	Modeling Soil Processes: Review, Key Challenges, and New Perspectives. <i>Vadose Zone Journal</i> , 2016, 15, 1-57.	2.2	445
29	Water for Carbon, Carbon for Water. <i>Vadose Zone Journal</i> , 2016, 15, 1-10.	2.2	33
30	A method for characterizing desiccation-induced consolidation and permeability loss of organic soils. <i>Water Resources Research</i> , 2015, 51, 775-786.	4.2	2
31	Synchrotron X-Ray Microtomography-New Means to Quantify Root Induced Changes of Rhizosphere Physical Properties. <i>SSSA Special Publication Series</i> , 2015, , 39-67.	0.2	6
32	Spatial distribution of rhizodeposits provides built-in water potential gradient in the rhizosphere. <i>Ecological Modelling</i> , 2015, 298, 53-63.	2.5	38
33	Decomposition of distinct organic matter pools is regulated by moisture status in structured wetland soils. <i>Soil Biology and Biochemistry</i> , 2015, 81, 28-37.	8.8	25
34	Influence of Calcium Carbonate and Charcoal Applications on Organic Matter Storage in Siltâ€Sized Aggregates Formed during a Microcosm Experiment. <i>Soil Science Society of America Journal</i> , 2014, 78, 1624-1631.	2.2	29
35	Biochar can be used to capture essential nutrients from dairy wastewater and improve soil physico-chemical properties. <i>Solid Earth</i> , 2014, 5, 953-962.	2.8	84
36	Interplay between soil drying and root exudation in rhizosheath development. <i>Plant and Soil</i> , 2014, 374, 739-751.	3.7	85

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37	Quantifying coupled deformation and water flow in the rhizosphere using X-ray microtomography and numerical simulations. <i>Plant and Soil</i> , 2014, 376, 95-110.	3.7	57
38	Early Spring, Severe Frost Events, and Drought Induce Rapid Carbon Loss in High Elevation Meadows. <i>PLoS ONE</i> , 2014, 9, e106058.	2.5	19
39	Degradation of moist soil aggregates by rapid temperature rise under low intensity fire. <i>Plant and Soil</i> , 2013, 362, 335-344.	3.7	42
40	A new method for rapid determination of carbohydrate and total carbon concentrations using UV spectrophotometry. <i>Carbohydrate Polymers</i> , 2013, 97, 253-261.	10.2	482
41	Effectiveness of Biochar for Sorption of Ammonium and Phosphate from Dairy Effluent. <i>Journal of Environmental Quality</i> , 2013, 42, 1545-1554.	2.0	156
42	EXPLAINING LONGITUDINAL HYDRODYNAMIC DISPERSION USING VARIANCE OF PORE SIZE DISTRIBUTION. <i>Journal of Porous Media</i> , 2013, 16, 11-19.	1.9	6
43	Linking sub-pore scale heterogeneity of biological and geochemical deposits with changes in permeability. <i>Advances in Water Resources</i> , 2012, 39, 1-6.	3.8	16
44	Impact of Biochar Enriched with Dairy Manure Effluent on Carbon and Nitrogen Dynamics. <i>Journal of Environmental Quality</i> , 2012, 41, 1107-1114.	2.0	99
45	Heterogeneous seepage at the Nopal I natural analogue site, Chihuahua, Mexico. <i>Hydrogeology Journal</i> , 2012, 20, 155-166.	2.1	13
46	Effects of Root-Induced Compaction on Rhizosphere Hydraulic Properties - X-ray Microtomography Imaging and Numerical Simulations. <i>Environmental Science & Technology</i> , 2011, 45, 425-431.	10.0	101
47	Physicochemical controls on initiation and evolution of desiccation cracks in sand-bentonite mixtures: X-ray CT imaging and stochastic modeling. <i>Journal of Contaminant Hydrology</i> , 2011, 126, 100-112.	3.3	28
48	An Index for Degree of Hysteresis in Water Retention. <i>Soil Science Society of America Journal</i> , 2011, 75, 2122-2127.	2.2	12
49	Infiltration into fractured bedrock. <i>Water Resources Research</i> , 2008, 44, .	4.2	12
50	Evolution of unsaturated hydraulic conductivity of aggregated soils due to compressive forces. <i>Water Resources Research</i> , 2008, 44, .	4.2	27
51	Errors in determination of soil water content using time domain reflectometry caused by soil compaction around waveguides. <i>Water Resources Research</i> , 2008, 44, .	4.2	17
52	Stratigraphy of the PB-1 Well, Nopal I Uranium Deposit, Sierra Peñón Blanca, Chihuahua, Mexico. <i>International Geology Review</i> , 2008, 50, 959-974.	2.1	9
53	The drift shadow phenomenon in an unsaturated fractured environment. , 2008, , 761-764.		0
54	Correspondence of the Gardner and van Genuchten-Mualem relative permeability function parameters. <i>Water Resources Research</i> , 2007, 43, .	4.2	50

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55	On the transport of emulsions in porous media. <i>Journal of Colloid and Interface Science</i> , 2007, 313, 1-4.	9.4	33
56	Traveling liquid bridges in unsaturated fractured porous media. <i>Transport in Porous Media</i> , 2007, 68, 129-151.	2.6	28
57	Comment on "Computer simulation of two-phase immiscible fluid motion in unsaturated complex fractures using a volume of fluid method" by Hai Huang, Paul Meakin, and Moubin Liu. <i>Water Resources Research</i> , 2006, 42, .	4.2	4
58	Liquid fragmentation and intermittent flow regimes in unsaturated fractured media. <i>Water Resources Research</i> , 2005, 41, .	4.2	34
59	Flow diversion around cavities in fractured media. <i>Water Resources Research</i> , 2005, 41, .	4.2	2
60	Modeling Coupled Evaporation and Seepage in Ventilated Cavities. <i>Vadose Zone Journal</i> , 2004, 3, 806-818.	2.2	35
61	Constraints for flow regimes on smooth fracture surfaces. <i>Water Resources Research</i> , 2004, 40, .	4.2	28
62	Modeling Coupled Evaporation and Seepage in Ventilated Cavities. <i>Vadose Zone Journal</i> , 2004, 3, 806-818.	2.2	10
63	Stress-induced volume reduction of isolated pores in wet soil. <i>Water Resources Research</i> , 2003, 39, .	4.2	10
64	Pore-Space Dynamics in a Soil Aggregate Bed under a Static External Load. <i>Soil Science Society of America Journal</i> , 2003, 67, 12-19.	2.2	20
65	Pore-Space Dynamics in a Soil Aggregate Bed under a Static External Load. <i>Soil Science Society of America Journal</i> , 2003, 67, 12.	2.2	8
66	Analytical Models for Soil Pore-Size Distribution After Tillage. <i>Soil Science Society of America Journal</i> , 2002, 66, 1104-1114.	2.2	47
67	Modeling post-tillage soil structural dynamics: a review. <i>Soil and Tillage Research</i> , 2002, 64, 41-59.	5.6	129
68	Modeling the dynamics of the soil pore-size distribution. <i>Soil and Tillage Research</i> , 2002, 64, 61-78.	5.6	108
69	Rheological Properties of Wet Soils and Clays under Steady and Oscillatory Stresses. <i>Soil Science Society of America Journal</i> , 2001, 65, 624-637.	2.2	128
70	Dynamics of soil aggregate coalescence governed by capillary and rheological processes. <i>Water Resources Research</i> , 2000, 36, 367-379.	4.2	83
71	Stochastic model for posttillage soil pore space evolution. <i>Water Resources Research</i> , 2000, 36, 1641-1652.	4.2	96
72	Dripping into subterranean cavities from unsaturated fractures under evaporative conditions. <i>Water Resources Research</i> , 2000, 36, 381-393.	4.2	24