

Rony Wallach

List of Publications by Year in descending order

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Version: 2024-02-01

38
papers

1,278
citations

471509

17
h-index

377865

34
g-index

38
all docs

38
docs citations

38
times ranked

1566
citing authors

#	ARTICLE	IF	CITATIONS
1	Does biochar affect soil wettability and flow pattern?. Geoderma, 2022, 417, 115826.	5.1	5
2	Modeling Gravity-Driven Unstable Flow in Subcritical Water-Repellent Soils With a Time-Dependent Contact Angle. Water Resources Research, 2022, 58, .	4.2	2
3	Detection of Potassium Deficiency and Momentary Transpiration Rate Estimation at Early Growth Stages Using Proximal Hyperspectral Imaging and Extreme Gradient Boosting. Sensors, 2021, 21, 958.	3.8	17
4	Pepper Plants Leaf Spectral Reflectance Changes as a Result of Root Rot Damage. Remote Sensing, 2021, 13, 980.	4.0	5
5	Water infiltration into subcritical water-repellent soils with time-dependent contact angle. Journal of Hydrology, 2021, 595, 126044.	5.4	11
6	Remediating the Adverse Effects of Treated Wastewater Irrigation by Repeated On-Surface Surfactant Application. Water Resources Research, 2021, 57, e2020WR029429.	4.2	10
7	The influence of surfactant-application method on the effectiveness of water-repellent soil remediation. Geoderma, 2020, 362, 114081.	5.1	18
8	Effects of Time-Dependent Contact Angle on Wettability of Subcritically Water-Repellent Soils. Water Resources Research, 2020, 56, e2020WR027314.	4.2	7
9	The Moving-Boundary Approach for Modeling Gravity-Driven Stable and Unstable Flow in Partially Wettable Soils. Water Resources Research, 2020, 56, e2019WR025772.	4.2	12
10	A Telemetric, Gravimetric Platform for Real-Time Physiological Phenotyping of Plant–Environment Interactions. Journal of Visualized Experiments, 2020, , .	0.3	17
11	Structure and hydraulic properties in soils under long-term irrigation with treated wastewater. Geoderma, 2019, 333, 90-98.	5.1	39
12	Spatial variation of soil water repellency in a commercial orchard irrigated with treated wastewater. Geoderma, 2019, 333, 214-224.	5.1	11
13	Dynamic Physiological Phenotyping of Drought-Stressed Pepper Plants Treated With "Productivity-Enhancing" and "Survivability-Enhancing" Biostimulants. Frontiers in Plant Science, 2019, 10, 905.	3.6	48
14	ERT and salinity " A method to determine whether ERT-detected preferential pathways in brackish water-irrigated soils are water-induced or an artifact of salinity. Journal of Hydrology, 2019, 574, 35-45.	5.4	16
15	Physical Characteristics of Soilless Media. , 2019, , 33-112.		8
16	Quantitative analysis of wetting front instabilities in soil caused by treated waste water irrigation. Geoderma, 2018, 319, 132-141.	5.1	23
17	Risk-management strategies and transpiration rates of wild barley in uncertain environments. Physiologia Plantarum, 2018, 164, 412-428.	5.2	17
18	The moving-boundary approach for modeling gravity-driven stable and unstable flow in soils. Water Resources Research, 2017, 53, 344-360.	4.2	17

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19	Induced heterogeneity of soil water content and chemical properties by treated wastewater irrigation and its reclamation by freshwater irrigation. <i>Water Resources Research</i> , 2017, 53, 4756-4774.	4.2	22
20	A combination of stomata deregulation and a distinctive modulation of amino acid metabolism are associated with enhanced tolerance of wheat varieties to transient drought. <i>Metabolomics</i> , 2017, 13, 1.	3.0	6
21	High-throughput physiological phenotyping and screening system for the characterization of plant-environment interactions. <i>Plant Journal</i> , 2017, 89, 839-850.	5.7	123
22	Kinetics of gravity-driven slug flow in partially wettable capillaries of varying cross section. <i>Water Resources Research</i> , 2016, 52, 8472-8486.	4.2	3
23	Gravity-driven unsteady-state slug fall in capillaries – modeling and experimental verification. <i>Journal of Adhesion Science and Technology</i> , 2016, 30, 2146-2156.	2.6	0
24	Formation of soil-water repellency in olive orchards and its influence on infiltration pattern. <i>Geoderma</i> , 2016, 262, 1-11.	5.1	43
25	Natural variation and gene regulatory basis for the responses of asparagus beans to soil drought. <i>Frontiers in Plant Science</i> , 2015, 6, 891.	3.6	21
26	Role of aquaporins in determining transpiration and photosynthesis in water-stressed plants: crop water-use efficiency, growth and yield. <i>Plant, Cell and Environment</i> , 2015, 38, 1785-1793.	5.7	195
27	Capillary pressure overshoot for unstable wetting fronts is explained by Hoffman's velocity-dependent contact-angle relationship. <i>Water Resources Research</i> , 2014, 50, 5290-5297.	4.2	16
28	The role of contact angle on unstable flow formation during infiltration and drainage in wettable porous media. <i>Water Resources Research</i> , 2013, 49, 6508-6521.	4.2	30
29	Synergistic effects of geometry, inertia, and dynamic contact angle on wetting and dewetting of capillaries of varying cross sections. <i>Journal of Colloid and Interface Science</i> , 2013, 396, 270-277.	9.4	20
30	An extension of Miller scaling to scale sorptivity by contact angle. <i>Water Resources Research</i> , 2013, 49, 6927-6932.	4.2	5
31	Moment analysis description of wetting and redistribution plumes in wettable and water-repellent soils. <i>Journal of Hydrology</i> , 2012, 422-423, 30-42.	5.4	21
32	The Effect of Contact Angle on Saturation Overshoot. <i>Vadose Zone Journal</i> , 2011, 10, 466-468.	2.2	8
33	Development of synchronized, autonomous, and self-regulated oscillations in transpiration rate of a whole tomato plant under water stress. <i>Journal of Experimental Botany</i> , 2010, 61, 3439-3449.	4.8	22
34	Effect of soil water repellency on moisture distribution from a subsurface point source. <i>Water Resources Research</i> , 2010, 46, .	4.2	20
35	Improving plant stress tolerance and yield production: is the tonoplast aquaporin SIP2;2 a key to isohydric to anisohydric conversion?. <i>New Phytologist</i> , 2009, 181, 651-661.	7.3	302
36	Unstable finger-like flow in water-repellent soils during wetting and redistribution – The case of a point water source. <i>Journal of Hydrology</i> , 2008, 351, 26-41.	5.4	48

#	ARTICLE	IF	CITATIONS
37	Modeling the Losses of Soil-applied Chemicals in Runoff: Lateral Irrigation versus Precipitation. Soil Science Society of America Journal, 1988, 52, 605-612.	2.2	12
38	Transfer of Chemicals from Soil solution to Surface Runoff: A Diffusion-based Soil Model. Soil Science Society of America Journal, 1988, 52, 612-618.	2.2	78