Jaume Puig-BarguÃ©s

List of Publications by Year
in descending order

69 papers	1,121 citations	394421 19 h-index	454955 30 g-index
69 all docs	69 docs citations	69 times ranked	629 citing authors

#	Article	IF	Citations
1	Effect of filter, emitter and location on clogging when using effluents. Agricultural Water Management, 2009, 96, 67-79.	5.6	97
2	Artificial neural networks vs. Gene Expression Programming for estimating outlet dissolved oxygen in micro-irrigation sand filters fed with effluents. Computers and Electronics in Agriculture, 2013, 99, 176-185.	7.7	69
3	Effect of flushing frequency on emitter clogging in microirrigation with effluents. Agricultural Water Management, 2010, 97, 883-891.	5.6	63
4	Hydraulic performance of drip irrigation subunits using WWTP effluents. Agricultural Water Management, 2005, 77, 249-262.	5.6	50
5	Effectiveness of sand media filters for removing turbidity and recovering dissolved oxygen from a reclaimed effluent used for micro-irrigation. Agricultural Water Management, 2012, 111, 27-33.	5.6	49
6	Monitoring soil water status for micro-irrigation management versus modelling approach. Biosystems Engineering, 2008, 100, 286-296.	4.3	45
7	Drip-Irriwater: Computer software to simulate soil wetting patterns under surface drip irrigation. Computers and Electronics in Agriculture, 2013, 98, 183-192.	7.7	36
8	Development of Equations for calculating the Head Loss in Effluent Filtration in Microirrigation Systems using Dimensional Analysis. Biosystems Engineering, 2005, 92, 383-390.	4.3	35
9	Pressure drop across sand and recycled glass media used in micro irrigation filters. Biosystems Engineering, 2015, 137, 55-63.	4.3	35
10	Using phosphate fertilizer to reduce emitter clogging of drip fertigation systems with high salinity water. Journal of Environmental Management, 2020, 263, 110366.	7.8	34
11	Performance and backwashing efficiency of disc and screen filters in microirrigation systems. Biosystems Engineering, 2009, 103, 35-42.	4.3	29
12	Assessment of head loss equations developed with dimensional analysis for micro irrigation filters using effluents. Biosystems Engineering, 2010, 106, 521-526.	4.3	27
13	Increasing phosphorus availability by reducing clogging in drip fertigation systems. Journal of Cleaner Production, 2020, 262, 121319.	9.3	26
14	Soil water and nitrate distribution under drip irrigated corn receiving pig slurry. Agricultural Water Management, 2013, 120, 11-22.	5.6	25
15	Using Computational Fluid Dynamics to Predict Head Losses in the Auxiliary Elements of a Microirrigation Sand Filter. Transactions of the ASABE, 2011, 54, 1367-1376.	1.1	23
16	Modeling Approaches for Determining Dripline Depth and Irrigation Frequency of Subsurface Drip Irrigated Rice on Different Soil Textures. Water (Switzerland), 2020, 12, 1724.	2.7	23
17	Effect of Dripline Flushing on Subsurface Drip Irrigation Systems. Transactions of the ASABE, 2010, 53, 147-155.	1.1	22
18	Development of a new underdrain for improving the efficiency of microirrigation sand media filters. Agricultural Water Management, 2017, 179, 296-305.	5.6	22

#	Article	IF	Citations
19	Effect of underdrain design, media height and filtration velocity on the performance of microirrigation sand filters using reclaimed effluents. Biosystems Engineering, 2019, 187, 292-304.	4.3	22
20	FILTRATION OF EFFLUENTS FOR MICROIRRIGATION SYSTEMS. Transactions of the American Society of Agricultural Engineers, 2005, 48, 969-978.	0.9	21
21	Definition of a SCADA system for a microirrigation network with effluents. Computers and Electronics in Agriculture, 2008, 64, 338-342.	7.7	20
22	A new predictive model for the filtered volume and outlet parameters in micro-irrigation sand filters fed with effluents using the hybrid PSOâ€“SVM-based approach. Computers and Electronics in Agriculture, 2016, 125, 74-80.	7.7	20
23	Pressure drop modelling in sand filters in micro-irrigation using gradient boosted regression trees. Biosystems Engineering, 2018, 171, 41-51.	4.3	19
24	Reducing energy requirements for sand filtration in microirrigation: Improving the underdrain and packing. Biosystems Engineering, 2015, 140, 67-78.	4.3	18
25	Effect of different sand filter underdrain designs on emitter clogging using reclaimed effluents. Agricultural Water Management, 2019, 223, 105683.	5.6	18
26	An experimental and analytical study to analyze hydraulic behavior of nozzle-type underdrains in porous media filters. Agricultural Water Management, 2013, 126, 64-74.	5.6	17
27	Modeling pressure drop produced by different filtering media in microirrigation sand filters using the hybrid ABC-MARS-based approach, MLP neural network and M5 model tree. Computers and Electronics in Agriculture, 2017, 139, 65-74.	7.7	17
28	Prediction by neural networks of filtered volume and outlet parameters in micro-irrigation sand filters using effluents. Biosystems Engineering, 2012, 111, 126-132.	4.3	16
29	Prediction of outlet dissolved oxygen in micro-irrigation sand media filters using a Gaussian process regression. Biosystems Engineering, 2020, 195, 198-207.	4.3	16
30	Physical, chemical and biological emitter clogging behaviors in drip irrigation systems using high-sediment loaded water. Agricultural Water Management, 2022, 270, 107738.	5.6	16
31	Effluent particle removal by microirrigation system filters. Spanish Journal of Agricultural Research, 2005, 3, 182.	0.6	15
32	New mathematical model for computing head loss across sand media filter for microirrigation systems. Irrigation Science, 2013, 31, 343-349.	2.8	14
33	Using an anti-clogging relative index (CRI) to assess emitters rapidly for drip irrigation systems with multiple low-quality water sources. Agricultural Water Management, 2019, 221, 270-278.	5.6	13
34	Effects of the underdrain design on the pressure drop in sand filters. Biosystems Engineering, 2016, 150, 1-9.	4.3	12
35	Effect of magnetic field on calcium - silica fouling and interactions in brackish water distribution systems. Science of the Total Environment, 2021, 798, 148900.	8.0	10
36	Fouling of Reverse Osmosis Membranes Processing Swine Wastewater Pretreated by Mechanical Separation and Aerobic Biofiltration. Separation Science and Technology, 2014, 49, 1298-1308.	2.5	8

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37	Environmental assessment of underdrain designs for a sand media filter. Biosystems Engineering, 2018, 167, 126-136.	4.3	8
38	Effect of wand-type underdrains on the hydraulic performance of pressurised sand media filters. Biosystems Engineering, 2020, 192, 176-187.	4.3	8
39	Preliminary planning for reclaimed water reuse for agricultural irrigation in the province of Girona, Catalonia (Spain). Desalination and Water Treatment, 2010, 22, 47-55.	1.0	7
40	Effect of Flushing Velocity and Flushing Duration on Sediment Transport in Microirrigation Driplines. Transactions of the ASABE, 2013, , 1821-1828.	1.1	7
41	A new predictive model for the outlet turbidity in micro-irrigation sand filters fed with effluents using Gaussian process regression. Computers and Electronics in Agriculture, 2020, 170, 105292.	7.7	7
42	Numerical study of the effects of pod, wand and spike type underdrain systems in pressurised sand filters. Biosystems Engineering, 2020, 200, 338-352.	4.3	6
43	Clogging rate of pressure compensating emitters in irrigation with rainbow trout fish farm effluent. Irrigation Science, 2021, 39, 223-233.	2.8	6
44	Assessment of Microirrigation Field Distribution Uniformity Procedures for Pressure-Compensating Emitters under Potential Clogging Conditions. Transactions of the ASABE, 2021, 64, 1063-1071.	1.1	6
45	Assessment of Different Pressure Drop-Flow Rate Equations in a Pressurized Porous Media Filter for Irrigation Systems. Water (Switzerland), 2021, 13, 2179.	2.7	6
46	Assessment of Field Water Uniformity Distribution in a Microirrigation System using a SCADA System. Water (Switzerland), 2019, 11, 1346.	2.7	5
47	The efficiency of various chemical solutions to clean reverse osmosis membranes processing swine wastewater. Water Quality Research Journal of Canada, 2014, 49, 295-306.	2.7	4
48	Efficiency of EDTA, SDS and NaOH solutions to clean RO membranes processing swine wastewater. Separation Science and Technology, 0, , 150629134718002.	2.5	4
49	Effect of a combined filtration system and drip irrigation laterals on quality of rainbow trout farm effluent. Irrigation Science, 2020, 38, 131-145.	2.8	4
50	Media filter fouling assessment using optical coherence tomography: New methodology. Biosystems Engineering, 2021, 204, 26-35.	4.3	4
51	Private micro-irrigation costs using reclaimed water. Spanish Journal of Agricultural Research, 2011, 9, 1120.	0.6	4
52	Simplified Equations to Estimate Flushline Diameter for Subsurface Drip Irrigation Systems. Transactions of the ASABE, 2017, 60, 185-192.	1.1	3
53	Horizontal roughing filter for reducing emitter composite clogging in drip irrigation systems using high sediment water. Agricultural Water Management, 2021, 258, 107215.	5.6	3
54	Un modelo para diseÃ±ar aprendizajes mediante proyectos multidisciplinares. Revista De Docencia Universitaria, 2015, 13, 73.	0.3	3

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55	Irrigation performance and gross water productivity in furrow-irrigated ornamental tree production. Spanish Journal of Agricultural Research, 2011, 9, 627.	0.6	3
56	An approach to costs and energy consumption in private urban Spanish Mediterranean landscapes from a simplified model in sprinkle irrigation. Spanish Journal of Agricultural Research, 2013, 11, 244.	0.6	3
57	An improved design of irrigation centrifugal filter for separating water and fine sediment: appropriately increase head loss for high efficiency. Irrigation Science, 2022, 40, 151-161.	2.8	3
58	Effect of type of emitter self-cleaning mechanism and its structure on the performance of drip irrigation system using effluent of rainbow trout fish. Irrigation Science, 2022, 40, 163-175.	2.8	3
59	Effect of different filter media on emitter clogging using reclaimed effluents. Agricultural Water Management, 2022, 266, 107591.	5.6	3
60	Effects of coupling multiple factors on CaCO3 fouling in agricultural saline water distribution systems. Agricultural Water Management, 2021, 248, 106757.	5.6	2
61	Environmental Assessment of Underdrain Designs for Granular Media Filters in Drip Irrigation Systems. Agriculture (Switzerland), 2022, 12, 810.	3.1	2
62	Performance of disc, conventional and automatic screen filters under rainbow trout fish farm effluent for drip irrigation system. Environmental Science and Pollution Research, 2022, 29, 80624-80636.	5.3	2
63	Dripline Flushing Velocities for SDI. , 2009, , .		1
64	Filter and emitter performance of micro-irrigation systems using secondary and tertiary effluents. WIT Transactions on Ecology and the Environment, 2008, , .	0.0	1
65	CÃ³mo adquirir competencias especÃficas y transversales a partir de los mass media. Una aplicaciÃ³n original de app en la udg. Vivat Academia, 2011, .	0.2	1
66	Irrigation Performance and Water Productivity in Ornamental Plant Production in Girona (Spain). , 2009, , .		0
67	Effect of flushing velocity and elapsed time on sediment transport in driplines. , 2013, , .		0
68	Efecto de la altura de medio filtrante y la velocidad de filtraciÃ³n en el comportamiento de distintos modelos de filtro de arena en instalaciones de riego por goteo con aguas regeneradas. , 2019, , .		0
69	Efecto de diferentes diseÃ±os de drenajes de filtros de arena en la obturaciÃ³n de goteros utilizando aguas residuales regeneradas. , 2019, , .		0