

# Enrique Playán

## List of Publications by Year in descending order

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79  
papers

2,743  
citations

186209

28  
h-index

197736

49  
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79  
all docs

79  
docs citations

79  
times ranked

1495  
citing authors

#	ARTICLE	IF	CITATIONS
1	Modernization and optimization of irrigation systems to increase water productivity. <i>Agricultural Water Management</i> , 2006, 80, 100-116.	2.4	317
2	Irrigation modernization and water conservation in Spain: The case of Riegos del Alto Aragón. <i>Agricultural Water Management</i> , 2010, 97, 1663-1675.	2.4	158
3	Day and night wind drift and evaporation losses in sprinkler solid-sets and moving laterals. <i>Agricultural Water Management</i> , 2005, 76, 139-159.	2.4	142
4	Yield-rainfall relationships in cereal cropping systems in the Ebro river valley of Spain. <i>European Journal of Agronomy</i> , 1998, 8, 239-248.	1.9	92
5	Assessing sprinkler irrigation uniformity using a ballistic simulation model. <i>Agricultural Water Management</i> , 2006, 84, 89-100.	2.4	86
6	Wind effects on solid set sprinkler irrigation depth and yield of maize ( <i>Zea mays</i> ). <i>Irrigation Science</i> , 2003, 22, 67-77.	1.3	83
7	Comparison of Fixed and Rotating Spray Plate Sprinklers. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2001, 127, 224-233.	0.6	80
8	Irrigation performance in private urban landscapes: A study case in Zaragoza (Spain). <i>Landscape and Urban Planning</i> , 2011, 100, 302-311.	3.4	72
9	Analysis of an irrigation district in northeastern Spain. <i>Agricultural Water Management</i> , 2003, 61, 75-92.	2.4	61
10	Two-Dimensional Simulation of Basin Irrigation. I: Theory. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 1994, 120, 837-856.	0.6	60
11	Contribution of Evapotranspiration Reduction during Sprinkler Irrigation to Application Efficiency. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2008, 134, 745-756.	0.6	58
12	A photographic method for drop characterization in agricultural sprinklers. <i>Irrigation Science</i> , 2009, 27, 307-317.	1.3	58
13	A case study for irrigation modernisation: II. <i>Agricultural Water Management</i> , 2000, 42, 335-354.	2.4	54
14	Analysis of an irrigation district in northeastern Spain. <i>Agricultural Water Management</i> , 2003, 61, 93-109.	2.4	54
15	A case study for irrigation modernisation. <i>Agricultural Water Management</i> , 2000, 42, 313-334.	2.4	53
16	Irrigation evaluation and simulation at the Irrigation District V of Bardenas (Spain). <i>Agricultural Water Management</i> , 2005, 73, 223-245.	2.4	52
17	Seasonal on-farm irrigation performance in the Ebro basin (Spain): Crops and irrigation systems. <i>Agricultural Water Management</i> , 2011, 98, 577-587.	2.4	50
18	Solute Transport Modeling in Overland Flow Applied to Fertigation. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2000, 126, 33-40.	0.6	46

#	ARTICLE	IF	CITATIONS
19	Irrigation Modernization in Spain: Effects on Water Quantity and Quality—A Conceptual Approach. <i>International Journal of Water Resources Development</i> , 2010, 26, 265-282.	1.2	45
20	Modeling Microtopography in Basin Irrigation. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 1996, 122, 339-347.	0.6	43
21	Border fertigation: field experiments and a simple model. <i>Irrigation Science</i> , 1997, 17, 163-171.	1.3	41
22	Simulation of 1D surface and 2D subsurface water flow and nitrate transport in alternate and conventional furrow fertigation. <i>Irrigation Science</i> , 2013, 31, 301-316.	1.3	41
23	From on-farm solid-set sprinkler irrigation design to collective irrigation network design in windy areas. <i>Agricultural Water Management</i> , 2007, 87, 187-199.	2.4	39
24	Performance of Rotating Spray Plate Sprinklers in Indoor Experiments. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2003, 129, 376-380.	0.6	37
25	Coupled Crop and Solid Set Sprinkler Simulation Model. I: Model Development. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2004, 130, 499-510.	0.6	35
26	Simulation of a Collective Solid-Set Sprinkler Irrigation Controller for Optimum Water Productivity. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2009, 135, 13-24.	0.6	32
27	Two-Dimensional Simulation of Basin Irrigation. II: Applications. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 1994, 120, 857-870.	0.6	31
28	Characterizing pivot sprinklers using an experimental irrigation machine. <i>Agricultural Water Management</i> , 2004, 70, 177-193.	2.4	31
29	Coupled Crop and Solid Set Sprinkler Simulation Model. II: Model Application. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2004, 130, 511-519.	0.6	28
30	Assessing low-pressure solid-set sprinkler irrigation in maize. <i>Agricultural Water Management</i> , 2017, 191, 37-49.	2.4	27
31	Low-pressure sprinkler irrigation in maize: Differences in water distribution above and below the crop canopy. <i>Agricultural Water Management</i> , 2018, 203, 353-365.	2.4	27
32	A database program for enhancing irrigation district management in the Ebro Valley (Spain). <i>Agricultural Water Management</i> , 2007, 87, 209-216.	2.4	26
33	Fertigation in Furrows and Level Furrow Systems. I: Model Description and Numerical Tests. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2009, 135, 401-412.	0.6	26
34	Salinity-Grain Yield Response Functions of Barley Cultivars Assessed with a Drip-Injection Irrigation System. <i>Soil Science Society of America Journal</i> , 2000, 64, 359-365.	1.2	25
35	Day and night time sprinkler irrigated tomato: Irrigation performance and crop yield. <i>Biosystems Engineering</i> , 2010, 107, 25-35.	1.9	25
36	Optimum Design of Alternate and Conventional Furrow Fertigation to Minimize Nitrate Loss. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2013, 139, 911-921.	0.6	25

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37	Surface fertigation: a review, gaps and needs. Spanish Journal of Agricultural Research, 2014, 12, 820.	0.3	25
38	Characterizing microtopographical effects on level-basin irrigation performance. Agricultural Water Management, 1996, 29, 129-145.	2.4	24
39	Numerical Modeling of Basin Irrigation with an Upwind Scheme. Journal of Irrigation and Drainage Engineering - ASCE, 2002, 128, 212-223.	0.6	24
40	Kinetic energy in sprinkler irrigation: different sources of drop diameter and velocity. Irrigation Science, 2012, 30, 29-41.	1.3	24
41	Simulating Elevation and Infiltration in Level-Basin Irrigation. Journal of Irrigation and Drainage Engineering - ASCE, 2000, 126, 78-84.	0.6	23
42	A particle tracking velocimetry technique for drop characterization in agricultural sprinklers. Irrigation Science, 2014, 32, 437-447.	1.3	22
43	Assessing alternate furrow strategies for potato at the Cherfech irrigation district of Tunisia. Biosystems Engineering, 2011, 108, 154-163.	1.9	21
44	Overland water and salt flows in a set of rice paddies. Agricultural Water Management, 2008, 95, 645-658.	2.4	20
45	Irrigation Governance in Developing Countries: Current Problems and Solutions. Water (Switzerland), 2018, 10, 1118.	1.2	20
46	Simulation of Maize Grain Yield Variability within a Surface-Irrigated Field. Agronomy Journal, 2001, 93, 773-782.	0.9	19
47	Field Verification of Two-Dimensional Surface Irrigation Model. Journal of Irrigation and Drainage Engineering - ASCE, 2003, 129, 402-411.	0.6	19
48	Fertigation in Furrows and Level Furrow Systems. II: Field Experiments, Model Calibration, and Practical Applications. Journal of Irrigation and Drainage Engineering - ASCE, 2009, 135, 413-420.	0.6	19
49	Dynamic model for water application using centre pivot irrigation. Biosystems Engineering, 2010, 105, 476-485.	1.9	18
50	Effect of the start–stop cycle of center-pivot towers on irrigation performance: Experiments and simulations. Agricultural Water Management, 2015, 147, 163-174.	2.4	18
51	Farmers' scheduling patterns in on-demand pressurized irrigation. Agricultural Water Management, 2011, 102, 86-96.	2.4	17
52	Assessing telemetry and remote control systems for water users associations in Spain. Agricultural Water Management, 2018, 202, 89-98.	2.4	16
53	Application of a topographic 3D scanner to irrigation research. Irrigation Science, 2010, 28, 245-256.	1.3	14
54	Discharge Coefficient Analysis for Triangular Sharp-Crested Weirs Using Low-Speed Photographic Technique. Journal of Irrigation and Drainage Engineering - ASCE, 2014, 140, .	0.6	14

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55	A modified particle tracking velocimetry technique to characterize sprinkler irrigation drops. <i>Irrigation Science</i> , 2017, 35, 515-531.	1.3	14
56	Water storage in soils during the fallow: prediction of the effects of rainfall pattern and soil conditions in the Ebro valley of Spain. <i>Agricultural Water Management</i> , 1998, 36, 213-231.	2.4	13
57	Elevation and infiltration in a level basin. II. Impact on soil water and corn yield. <i>Irrigation Science</i> , 2000, 19, 165-173.	1.3	13
58	Simulation Model for Level Furrows. I: Analysis of Field Experiments. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2004, 130, 106-112.	0.6	13
59	Model for the Simulation of Water Flows in Irrigation Districts. I: Description. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2006, 132, 310-321.	0.6	13
60	Instruments for Water Quantity and Quality Management in the Agriculture of Aragon. <i>International Journal of Water Resources Development</i> , 2007, 23, 147-164.	1.2	13
61	Software for on-farm irrigation scheduling of stone fruit orchards under water limitations. <i>Computers and Electronics in Agriculture</i> , 2012, 88, 52-62.	3.7	13
62	Initial Drop Velocity in a Fixed Spray Plate Sprinkler. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2013, 139, 521-531.	0.6	13
63	Simulation of sprinkler irrigation water uniformity impact on corn yield. <i>Spanish Journal of Agricultural Research</i> , 2010, 8, 143.	0.3	13
64	Solid-Set Sprinkler Irrigation Controllers Driven by Simulation Models: Opportunities and Bottlenecks. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2014, 140, .	0.6	12
65	Distribution and loss of water and nitrate under alternate and conventional furrow fertigation. <i>Spanish Journal of Agricultural Research</i> , 2012, 10, 849.	0.3	11
66	Field test of an automatic controller for solid-set sprinkler irrigation. <i>Irrigation Science</i> , 2013, 31, 1237-1249.	1.3	10
67	Effect of micro-dams on water flow characteristics in furrow irrigation. <i>Irrigation Science</i> , 2020, 38, 307-319.	1.3	10
68	Radial Flow Modeling for Estimating Level-Basin Irrigation Parameters. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 1997, 123, 229-237.	0.6	8
69	A New Drip-Injection Irrigation System for Crop Salt Tolerance Evaluation. <i>Soil Science Society of America Journal</i> , 1999, 63, 1397-1403.	1.2	8
70	Model for the Simulation of Water Flows in Irrigation Districts. II: Application. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2006, 132, 322-331.	0.6	8
71	Water Reuse in Sequential Basin Irrigation. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2000, 126, 362-370.	0.6	7
72	Simulation Model for Level Furrows. II: Description, Validation, and Application. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2004, 130, 113-121.	0.6	7

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73	A simulation tool for advanced design and management of collective sprinkler-irrigated areas: a study case. <i>Irrigation Science</i> , 2017, 35, 327-345.	1.3	7
74	A 2D curvilinear coupled surface–subsurface flow model for simulation of basin/border irrigation: theory, validation and application. <i>Irrigation Science</i> , 2019, 37, 151-168.	1.3	7
75	Limitations to adopting regulated deficit irrigation in stone fruit orchards: a case study. <i>Spanish Journal of Agricultural Research</i> , 2013, 11, 529.	0.3	6
76	Closure to “Contribution of Evapotranspiration Reduction during Sprinkler Irrigation to Application Efficiency” by A. Martínez-Cob, E. Playán, N. Zapata, J. Caverro, E. T. Medina, and M. Puig. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2010, 136, 671-672.	0.6	3
77	Assessing zebra mussel colonization of collective pressurized irrigation networks through pressure measurements and simulations. <i>Agricultural Water Management</i> , 2018, 204, 301-313.	2.4	2
78	Closure to “Discharge Coefficient Analysis for Triangular Sharp-Crested Weirs Using Low-Speed Photographic Technique” by C. Bautista-Capetillo, O. Robles, H. JÁñez-Ferreira, and E. Playán. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 2015, 141, 07014067.	0.6	1
79	Normalized pressure: a key variable to assess zebra mussel infestation in pressurized irrigation networks. <i>Agricultural Water Management</i> , 2022, 260, 107300.	2.4	1