Francisco Domingo Molina-Aiz

List of Publications by Year in descending order

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Version: 2024-02-01

47 papers 961 citations

15 h-index 454577 30 g-index

48 all docs 48 docs citations

times ranked

48

704 citing authors

#	Article	IF	Citations
1	Measurement and simulation of climate inside Almer�2a-type greenhouses using computational fluid dynamics. Agricultural and Forest Meteorology, 2004, 125, 33-51.	1.9	103
2	A Wind Tunnel Study of Airflow through Horticultural Crops: Determination of the Drag Coefficient. Biosystems Engineering, 2006, 93, 447-457.	1.9	83
3	Comparison of finite element and finite volume methods for simulation of natural ventilation in greenhouses. Computers and Electronics in Agriculture, 2010, 72, 69-86.	3.7	83
4	Combination of image processing and artificial neural networks as a novel approach for the identification of Bemisia tabaci and Frankliniella occidentalis on sticky traps in greenhouse agriculture. Computers and Electronics in Agriculture, 2016, 127, 495-505.	3.7	82
5	Determining the emissivity of the leaves of nine horticultural crops by means of infrared thermography. Scientia Horticulturae, 2012, 137, 49-58.	1.7	71
6	A study of natural ventilation in an AlmerÃa-type greenhouse with insect screens by means of tri-sonic anemometry. Biosystems Engineering, 2009, 104, 224-242.	1.9	65
7	Aerodynamic analysis of several insect-proof screens used in greenhouses. Spanish Journal of Agricultural Research, 2006, 4, 273.	0.3	46
8	Sonic anemometry to evaluate airflow characteristics andÂtemperature distribution in empty Mediterranean greenhouses equipped with pad–fan and fog systems. Biosystems Engineering, 2012, 113, 334-350.	1.9	43
9	Development of a single energy balance model for prediction of temperatures inside a naturally ventilated greenhouse with polypropylene soil mulch. Computers and Electronics in Agriculture, 2017, 142, 9-28.	3.7	41
10	The greenhouses of AlmerÃa, Spain: technological analysis and profitability. Acta Horticulturae, 2017, , 219-226.	0.1	36
11	CONTRIBUTION TO CHARACTERISATION OF INSECT-PROOF SCREENS: EXPERIMENTAL MEASUREMENTS IN WIND TUNNEL AND CFD SIMULATION. Acta Horticulturae, 2005, , 441-448.	0.1	34
12	Sonic Anemometry to Measure Natural Ventilation in Greenhouses. Sensors, 2011, 11, 9820-9838.	2.1	34
13	Effects of ventilator configuration on the flow pattern of a naturally-ventilated three-span Mediterranean greenhouse. Biosystems Engineering, 2017, 164, 13-30.	1.9	31
14	OPTIMISATION OF ALMERÃA-TYPE GREENHOUSE VENTILATION PERFORMANCE WITH COMPUTATIONAL FLUID DYNAMICS. Acta Horticulturae, 2005, , 433-440.	0.1	19
15	An Auto-Tuning PI Control System for an Open-Circuit Low-Speed Wind Tunnel Designed for Greenhouse Technology. Sensors, 2015, 15, 19723-19749.	2.1	18
16	Wind Tunnel Analysis of the Airflow through Insect-Proof Screens and Comparison of Their Effect When Installed in a Mediterranean Greenhouse. Sensors, 2016, 16, 690.	2.1	15
17	Using Computational Fluid Dynamics to analyse the CO ₂ transfer in naturally ventilated greenhouses. Acta Horticulturae, 2017, , 283-292.	0.1	15
18	Microclimate evaluation of a new design of insect-proof screens in a Mediterranean greenhouse. Spanish Journal of Agricultural Research, 2014, 12, 338.	0.3	15

#	Article	IF	Citations
19	Sonic anemometry measurements to determine airflow patterns in multi-tunnel greenhouses. Spanish Journal of Agricultural Research, 2012, 10, 631.	0.3	14
20	Field analysis of the deterioration after some years of use of four insect-proof screens utilized in Mediterranean greenhouses. Spanish Journal of Agricultural Research, 2013, 11, 958.	0.3	12
21	A METHOD FOR THE ANALYSIS OF THE GEOMETRIC CHARACTERISTICS OF PROTECTION SCREENS. Acta Horticulturae, 2006, , 557-564.	0.1	8
22	AIRFLOW AT THE OPENINGS OF A NATURALLY VENTILATED ALMERÃA-TYPE GREENHOUSE WITH INSECT-PROOF SCREENS. Acta Horticulturae, 2011, , 545-552.	0.1	8
23	The Effect of Diffuse Film Covers on Microclimate and Growth and Production of Tomato (Solanum) Tj ETQq $1\ 1\ 0$.784314 r 1.3	gBT /Overlo
24	Experimental Evaluation by Sonic Anemometry of Airflow in a Mediterranean Greenhouse Equipped with a Pad-Fan Cooling System. Transactions of the ASABE, 2010, 53, 945-957.	1.1	6
25	Effectiveness of horizontal air flow fans supporting natural ventilation in a Mediterranean multi-span greenhouse. Scientia Agricola, 2013, 70, 219-228.	0.6	6
26	Sonic anemometry and sediment traps to evaluate the effectiveness of windbreaks in preventing wind erosion. Scientia Agricola, 2017, 74, 425-435.	0.6	6
27	Analysis of the Effect of Concentrations of Four Whitening Products in Cover Transmissivity of Mediterranean Greenhouses. International Journal of Environmental Research and Public Health, 2019, 16, 958.	1.2	6
28	Application of Semi-Empirical Ventilation Models in A Mediterranean Greenhouse with Opposing Thermal and Wind Effects. Use of Non-Constant Cd (Pressure Drop Coefficient Through the Vents) and Cw (Wind Effect Coefficient). Agronomy, 2019, 9, 736.	1.3	6
29	Effects of Cover Whitening Concentrations on the Microclimate and on the Development and Yield of Tomato (Lycopersicon esculentum Mill.) Inside Mediterranean Greenhouses. Agronomy, 2020, 10, 237.	1.3	6
30	Thermography and Sonic Anemometry to Analyze Air Heaters in Mediterranean Greenhouses. Sensors, 2012, 12, 13852-13870.	2.1	5
31	Numerical and experimental study of heat and mass transfers in an AlmerÃa-type greenhouse. Acta Horticulturae, 2017, , 209-218.	0.1	5
32	Pad-Fan Systems in Mediterranean Greenhouses: Determining Optimal Setup by Sonic Anemometry. Transactions of the ASABE, 2012, 55, 1077-1089.	1.1	4
33	USING COMPUTATIONAL FLUID DYNAMICS TOOL TO MODEL THE INTERNAL CLIMATE OF AN ALMERÃA-TYPE GREENHOUSE. Acta Horticulturae, 2004, , 271-278.	0.1	4
34	Analysis of Turbulent Air Flow Characteristics Due to the Presence of a $13~\text{\AA}-30~\text{Threads}\text{\AA}\cdot\text{cm}\text{\$a}^2$ Insect Proof Screen on the Side Windows of a Mediterranean Greenhouse. Agronomy, 2022, 12, 586.	1.3	4
35	EFFECTS OF INSECT-PROOF SCREENS USED IN GREENHOUSE ON MICROCLIMATE AND FRUIT YIELD OF TOMATO (SOLANUM LYCOPERSICUM L.) IN A MEDITERRANEAN CLIMATE. Acta Horticulturae, 2012, , 707-714.	0.1	3
36	Influence of the greenhouse type and cooling system on the production of a tomato crop during the spring/summer cycle under Mediterranean climate. Acta Horticulturae, 2017, , 829-838.	0.1	3

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37	The Influence of Different Cooling Systems on the Microclimate, Photosynthetic Activity and Yield of a Tomato Crops (Lycopersicum esculentum Mill.) in Mediterranean Greenhouses. Agronomy, 2022, 12, 524.	1.3	3
38	Effect of Different Substrates, and Irrigation with Water with Different Saline Concentrations, on the Development of Tomato Fungal Diseases in an AlmerÃa-Type Greenhouse. Agronomy, 2022, 12, 1050.	1.3	3
39	Effects of Surrounding Buildings on Air Patterns and Turbulence in Two Naturally Ventilated Mediterranean Greenhouses Using Tri-Sonic Anemometry. Transactions of the ASABE, 2011, 54, 1941-1950.	1.1	2
40	Low Tunnels inside Mediterranean Greenhouses: Effects on Air/Soil Temperature and Humidity. Agronomy, 2021, 11, 1973.	1.3	2
41	Effect of material ageing and dirt on the behaviour of greenhouse insect-proof screens. Spanish Journal of Agricultural Research, 2019, 16, e0205.	0.3	2
42	NUMERICAL SIMULATION OF NATURAL VENTILATION IN GREENHOUSES: A COMPARISON BETWEEN FINITE VOLUMES METHOD AND FINITE ELEMENTS METHOD. Acta Horticulturae, 2008, , 971-978.	0.1	1
43	AIR PATTERNS IN A MEDITERRANEAN GREENHOUSE EQUIPPED WITH A COOLING SYSTEM. Acta Horticulturae, 2012, , 651-658.	0.1	O
44	STUDY BY SONIC-ANEMOMETRY OF THE EFFECTS OF SURROUNDING BUILDINGS ON NATURAL VENTILATION IN A MEDITERRANEAN GREENHOUSE. Acta Horticulturae, 2012, , 715-722.	0.1	0
45	Analysis of the microclimate of a greenhouse with two anti-insect screens of different thread density. Acta Horticulturae, 2017, , 227-234.	0.1	O
46	DESIGN OF DIGITAL RESOURCES FOR LEARNING IN INDUSTRIAL ENGINEERING SUBJECTS IN COVID TIMES. INTED Proceedings, 2022, , .	0.0	0
47	COMPARISON OF DIFFERENT COMPETENCE EVALUATION TOOLS IN INDUSTRIAL ENGINEERING STUDENTS. INTED Proceedings, 2022, , .	0.0	O