Marco Acutis

List of Publications by Year
in descending order

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85	3,188	136885	168321
papers	citations	32 h-index	53 g-index

86	86	86	3963
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comparison of sensitivity analysis techniques: A case study with the rice model WARM. Ecological Modelling, 2010, 221, 1897-1906.	1.2	207
2	Short-term experiments in using digestate products as substitutes for mineral (N) fertilizer: Agronomic performance, odours, and ammonia emission impacts. Science of the Total Environment, 2016, 547, 206-214.	3.9	144
3	Nitrate leaching under maize cropping systems in Po Valley (Italy). Agriculture, Ecosystems and Environment, 2012, 147, 57-65.	2.5	135
4	Development of an app for estimating leaf area index using a smartphone. Trueness and precision determination and comparison with other indirect methods. Computers and Electronics in Agriculture, 2013, 96, 67-74.	3.7	130
5	Spatio-temporal topsoil organic carbon mapping of a semi-arid Mediterranean region: The role of land use, soil texture, topographic indices and the influence of remote sensing data to modelling. Science of the Total Environment, 2017, 601-602, 821-832.	3.9	122
6	Temperature and precipitation effects on wheat yield across a European transect: a crop model ensemble analysis using impact response surfaces. Climate Research, 2015, 65, 87-105.	0.4	122
7	Multi-metric evaluation of the models WARM, CropSyst, and WOFOST for rice. Ecological Modelling, 2009, 220, 1395-1410.	1.2	103
8	Origin and fate of nitrates in groundwater from the central Po plain: Insights from isotopic investigations. Applied Geochemistry, 2013, 34, 164-180.	1.4	90
9	Sensitivity analysis of the rice model WARM in Europe: Exploring the effects of different locations, climates and methods of analysis on model sensitivity to crop parameters. Environmental Modelling and Software, 2010, 25, 479-488.	1.9	88
10	SOILPAR 2.00: software to estimate soil hydrological parameters and functions. European Journal of Agronomy, 2003, 18, 373-377.	1.9	83
11	An Indicator of Solar Radiation Model Performance based on a Fuzzy Expert System. Agronomy Journal, 2002, 94, 1222-1233.	0.9	82
12	irene: a software to evaluate model performance. European Journal of Agronomy, 2003, 18, 369-372.	1.9	76
13	Sensitivity analysis for a complex crop model applied to Durum wheat in the Mediterranean. European Journal of Agronomy, 2010, 32, 127-136.	1.9	76
14	SWAP, CropSyst and MACRO comparison in two contrasting soils cropped with maize in Northern Italy. Agricultural Water Management, 2010, 97, 1051-1062.	2.4	71
15	Can conservation agriculture increase soil carbon sequestration? A modelling approach. Geoderma, 2020, 369, 114298.	2.3	63
16	Uncertainty in crop model predictions: What is the role of users?. Environmental Modelling and Software, 2016, 81, 165-173.	1.9	62
17	Multi-model simulation of soil temperature, soil water content and biomass in Euro-Mediterranean grasslands: Uncertainties and ensemble performance. European Journal of Agronomy, 2017, 88, 22-40.	1.9	58
18	Evaluation of mitigation strategies to reduce ammonia losses from slurry fertilisation on arable lands. Science of the Total Environment, 2013, 449, 126-133.	3.9	52

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19	Modelling the topsoil carbon stock of agricultural lands with the Stochastic Gradient Treeboost in a semi-arid Mediterranean region. Geoderma, 2017, 286, 35-45.	2.3	48
20	Classifying multi-model wheat yield impact response surfaces showing sensitivity to temperature and precipitation change. Agricultural Systems, 2018, 159, 209-224.	3.2	47
21	Multi metric evaluation of leaf wetness models for large-area application of plant disease models. Agricultural and Forest Meteorology, 2011, 151, 1163-1172.	1.9	46
22	A proposal of an indicator for quantifying model robustness based on the relationship between variability of errors and of explored conditions. Ecological Modelling, 2010, 221, 960-964.	1.2	45
23	An analysis of agricultural sustainability of cropping systems in arable and dairy farms in an intensively cultivated plain. European Journal of Agronomy, 2011, 34, 71-82.	1.9	43
24	Model simplification and development via reuse, sensitivity analysis and composition: A case study in crop modelling. Environmental Modelling and Software, 2014, 59, 44-58.	1.9	43
25	Forecasting sugarcane yields using agro-climatic indicators and Canegro model: A case study in the main production region in Brazil. Agricultural Systems, 2017, 154, 45-52.	3.2	41
26	Perfunctory analysis of variance in agronomy, and its consequences in experimental results interpretation. European Journal of Agronomy, 2012, 43, 129-135.	1.9	40
27	Topographic impacts on wheat yields under climate change: two contrasted case studies in Europe. Theoretical and Applied Climatology, 2010, 99, 53-65.	1.3	38
28	Stochastic use of the LEACHN model to forecast nitrate leaching in different maize cropping systems. European Journal of Agronomy, 2000, 13, 191-206.	1.9	36
29	Performance assessment of nitrate leaching models for highly vulnerable soils used in low-input farming based on lysimeter data. Science of the Total Environment, 2014, 499, 463-480.	3.9	35
30	New multi-model approach gives good estimations of wheat yield under semi-arid climate in Morocco. Agronomy for Sustainable Development, 2015, 35, 157-167.	2.2	35
31	Dual-porosity and kinematic wave approaches to assess the degree of preferential flow in an unsaturated soil. Hydrological Sciences Journal, 2003, 48, 455-472.	1.2	34
32	ValorE: An integrated and GIS-based decision support system for livestock manure management in the Lombardy region (northern Italy). Land Use Policy, 2014, 41, 149-162.	2.5	34
33	Agro-environmental aspects of conservation agriculture compared to conventional systems: A 3-year experience on 20 farms in the Po valley (Northern Italy). Agricultural Systems, 2019, 168, 73-87.	3.2	34
34	An integrated evaluation of thirteen modelling solutions for the generation of hourly values of air relative humidity. Theoretical and Applied Climatology, 2010, 102, 429-438.	1.3	33
35	Quantifying uncertainty in crop model predictions due to the uncertainty in the observations used for calibration. Ecological Modelling, 2016, 328, 72-77.	1.2	33
36	The CropSyst model to simulate the N balance of rice for alternative management. Agronomy for Sustainable Development, 2006, 26, 241-249.	2.2	32

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37	Precision determination for the dynamic respirometric index (DRI) method used for biological stability evaluation on municipal solid waste and derived products. Waste Management, 2011, 31, 2-9.	3.7	31
38	A model for simulating the height of rice plants. European Journal of Agronomy, 2011, 34, 20-25.	1.9	29
39	Improving inÂvivo plant nitrogen content estimates from digital images: Trueness and precision of a new approach as compared to other methods and commercial devices. Biosystems Engineering, 2015, 135, 21-30.	1.9	29
40	New pedotransfer approaches to predict soil bulk density using WoSIS soil data and environmental covariates in Mediterranean agro-ecosystems. Science of the Total Environment, 2021, 780, 146609.	3.9	29
41	IRENE_DLL: A Class Library for Evaluating Numerical Estimates. Agronomy Journal, 2003, 95, 1330-1333.	0.9	28
42	New Indices to Quantify Patterns of Residuals Produced by Model Estimates. Agronomy Journal, 2004, 96, 631-645.	0.9	27
43	Modelling the point and non-point nitrogen loads to the Venice Lagoon (Italy): the application of water quality models to the Dese-Zero basin. Desalination, 2008, 226, 81-88.	4.0	26
44	Inverse dispersion modelling highlights the efficiency of slurry injection to reduce ammonia losses by agriculture in the Po Valley (Italy). Agricultural and Forest Meteorology, 2013, 171-172, 306-318.	1.9	26
45	Designing a high-yielding maize ideotype for a changing climate in Lombardy plain (northern Italy). Science of the Total Environment, 2014, 499, 497-509.	3.9	24
46	A Component-Based Framework for Simulating Agricultural Production and Externalities. , 2010, , 63-108.		23
47	Analysis of rice sample size variability due to development stage, nitrogen fertilization, sowing technique and variety using the visual jackknife. Field Crops Research, 2006, 97, 135-141.	2.3	22
48	Quantifying plasticity in simulation models. Ecological Modelling, 2012, 225, 159-166.	1.2	22
49	Chloride profile technique to estimate water movement through unsatured zone in a cropped area in subhumid climate (Po Valleyâ€"NW Italy). Journal of Hydrology, 2003, 270, 65-74.	2.3	21
50	Expanding Horizons in the Validation of GMO Analytical Methods: Fuzzy-based Expert Systems. Food Analytical Methods, 2008, 1, 126-135.	1.3	19
51	A generic framework for evaluating hybrid models by reuse and composition â€“ A case study on soil temperature simulation. Environmental Modelling and Software, 2014, 62, 478-486.	1.9	19
52	A new approach for determining rice critical nitrogen concentration. Journal of Agricultural Science, 2011, 149, 633-638.	0.6	18
53	A taxonomy-based approach to shed light on the babel of mathematical models for rice simulation. Environmental Modelling and Software, 2016, 85, 332-341.	1.9	18
54	Dynamics of ammonia volatilisation measured by eddy covariance during slurry spreading in north Italy. Agriculture, Ecosystems and Environment, 2016, 219, 1-13.	2.5	17

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55	A multi-approach software library for estimating crop suitability to environment. Computers and Electronics in Agriculture, 2013, 90, 170-175.	3.7	16
56	Deliberative processes for comprehensive evaluation of agroecological models. A review. Agronomy for Sustainable Development, 2015, 35, 589-605.	2.2	16
57	Soil type and cropping system as drivers of soil quality indicators response to no-till: A 7-year field study. Applied Soil Ecology, 2020, 155, 103646.	2.1	16
58	Resampling-based software for estimating optimal sample size. Environmental Modelling and Software, 2007, 22, 1796-1800.	1.9	15
59	Avoiding social traps in the ecosystem stewardship: The Italian Fontanile lowland spring. Science of the Total Environment, 2016, 539, 526-535.	3.9	15
60	Modelling nitrogen leaching from sewage sludge application to arable land in the Lombardy region (northern Italy). Science of the Total Environment, 2013, 461-462, 509-518.	3.9	14
61	Assimilation of COSMO-SkyMed-derived LAI maps into the AQUATER crop growth simulation model. Capitanata (Southern Italy) case study. European Journal of Remote Sensing, 2013, 46, 891-908.	1.7	14
62	District specific, in silico evaluation of rice ideotypes improved for resistance/tolerance traits to biotic and abiotic stressors under climate change scenarios. Climatic Change, 2015, 132, 661-675.	1.7	14
63	Analytical Method Performance Evaluation (AMPE)A Software Tool for Analytical Method Validation. Journal of AOAC INTERNATIONAL, 2007, 90, 1432-1438.	0.7	13
64	Analysis of sample size for variables related to plant, soil, and soil microbial respiration in a paddy rice field. Field Crops Research, 2009, 113, 125-130.	2.3	13
65	Epidemiology and agronomic predictors of herbicide resistance in rice at a large scale. Agronomy for Sustainable Development, 2018, 38, 1.	2.2	13
66	Modelling of Soil Organic Carbon in the Mediterranean area: a systematic map. Rendiconti Online Societa Geologica Italiana, 0, 46, 161-166.	0.3	13
67	A methodology for designing and evaluating alternative cropping systems: Application on dairy and arable farms. Ecological Indicators, 2012, 23, 189-201.	2.6	12
68	The Nitrification Inhibitor VizuraÂ® Reduces N2O Emissions When Added to Digestate before Injection under Irrigated Maize in the Po Valley (Northern Italy). Agronomy, 2019, 9, 431.	1.3	12
69	A simple pipeline for the assessment of legacy soil datasets: An example and test with soil organic carbon from a highly variable area. Catena, 2019, 175, 110-122.	2.2	12
70	AQUATER Software as a DSS for Irrigation Management in Semi-Arid Mediterranean Areas. Italian Journal of Agronomy, 2010, 5, 205.	0.4	11
71	An integrated procedure to evaluate hydrological models. Hydrological Processes, 2010, 24, 2762-2770.	1.1	10
72	The development of a methodology using fuzzy logic to assess the performance of cropping systems based on a case study of maize in the Po Valley. Soil Use and Management, 2013, 29, 576-585.	2.6	9

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73	Evaluation of WARM for different establishment techniques in Jiangsu (China). European Journal of Agronomy, 2014, 59, 78-85.	1.9	8
74	Integrating a spatial micrometeorological model into the risk assessment for arable crops in hilly terrain. , 2007, , 51-57.		8
75	Wheat modeling in Morocco unexpectedly reveals predominance of photosynthesis versus leaf area expansion plant traits. Agronomy for Sustainable Development, 2013, 33, 393-403.	2.2	7
76	Zero-Tillage Effects on Durum Wheat Productivity and Soil-Related Variables in Future Climate Scenarios: A Modeling Analysis. Agronomy, 2022, 12, 331.	1.3	7
77	Any chance to evaluate in vivo field methods using standard protocols?. Field Crops Research, 2014, 161, 128-136.	2.3	5
78	A new method for analysing the interrelationship between performance indicators with an application to agrometeorological models. Environmental Modelling and Software, 2015, 73, 286-304.	1.9	5
79	Reducing Topdressing N Fertilization with Variable Rates Does Not Reduce Maize Yield. Sustainability, 2021, 13, 8059.	1.6	5
80	EX-TRACT: An excel tool for the estimation of standard deviations from published articles. Environmental Modelling and Software, 2022, 147, 105236.	1.9	5
81	Validating the regional estimates of changes in soil organic carbon by using the data from paired-sites: the case study of Mediterranean arable lands. Carbon Balance and Management, 2021, 16, 19.	1.4	3
82	Decision Support Systems To Manage Water Resources At Irrigation District Level In Southern Italy Using Remote Sensing Information. An Integrated Project (AQUATER). AIP Conference Proceedings, 2006, , .	0.3	2
83	Long-term durum wheat monoculture: modelling and future projection. Italian Journal of Agronomy, 2012, 7, 13.	0.4	2
84	Impact of Agromanagement Practices on Rice Elongation: Analysis and Modelling. Crop Science, 2014, 54, 2294-2302.	0.8	1
85	Evolution of vegetation under intensive grazing: Two examples in North-western Italian mountains. Agriculture, Ecosystems and Environment, 1989, 27, 347-359.	2.5	0