MarÃ-a Bonita Villamil

List of Publications by Year
in descending order

71 papers	2,498 citations	201674 27 h-index	206112 48 g-index
75 all docs	75 docs citations	75 times ranked	2679 citing authors

#	Article	IF	Citations
1	Meta-analysis approach to assess effect of tillage on microbial biomass and enzyme activities. Soil Biology and Biochemistry, 2016, 97, 176-187.	8.8	254
2	No-Till Corn/Soybean Systems Including Winter Cover Crops. Soil Science Society of America Journal, 2006, 70, 1936-1944.	2.2	252
3	Do cover crops benefit soil microbiome? A meta-analysis of current research. Soil Biology and Biochemistry, 2020, 142, 107701.	8.8	224
4	Meta-analysis of the effects of management factors on MiscanthusÃ—giganteus growth and biomass production. Agricultural and Forest Meteorology, 2008, 148, 1280-1292.	4.8	152
5	Crop Rotation and Tillage Effects on Soil Physical and Chemical Properties in Illinois. Agronomy Journal, 2015, 107, 971-978.	1.8	117
6	Long-term crop rotation and tillage effects on soil greenhouse gas emissions and crop production in Illinois, USA. Agriculture, Ecosystems and Environment, 2018, 261, 62-70.	5.3	96
7	Multivariate assessment of soil quality indicators for crop rotation and tillage in Illinois. Soil and Tillage Research, 2017, 174, 147-155.	5.6	93
8	A quantitative understanding of the role of co-composted biochar in plant growth using meta-analysis. Science of the Total Environment, 2019, 685, 741-752.	8.0	93
9	Corn residue, tillage, and nitrogen rate effects on soil properties. Soil and Tillage Research, 2015, 151, 61-66.	5.6	77
10	SOIL DEGRADATION RELATED TO OVERGRAZING IN THE SEMI-ARID SOUTHERN CALDENAL AREA OF ARGENTINA. Soil Science, 2001, 166, 441-452.	0.9	67
11	Shortâ€Term Effects of Cover Crops and Compaction on Soil Properties and Soybean Production in Illinois. Agronomy Journal, 2014, 106, 860-870.	1.8	60
12	Yields and yield stability of no-till and chisel-plow fields in the Midwestern US Corn Belt. Field Crops Research, 2018, 218, 243-253.	5.1	55
13	Producer perceptions and information needs regarding their adoption of bioenergy crops. Renewable and Sustainable Energy Reviews, 2012, 16, 3604-3612.	16.4	53
14	Tillage and Cover Cropping Effects on Soil Properties and Crop Production in Illinois. Agronomy Journal, 2017, 109, 1261-1270.	1.8	50
15	What does it take to detect a change in soil carbon stock? A regional comparison of minimum detectable difference and experiment duration in the north central United States. Journal of Soils and Water Conservation, 2014, 69, 517-531.	1.6	47
16	Potential miscanthusâ€™ adoption in Illinois: Information needs and preferred information channels. Biomass and Bioenergy, 2008, 32, 1338-1348.	5.7	44
17	Assessing the impacts of cover crops on maize and soybean yield in the U.S. Midwestern agroecosystems. Field Crops Research, 2021, 273, 108264.	5.1	40
18	A Comparison of Soil Properties after Five Years of Noâ€Till and Stripâ€Till. Agronomy Journal, 2015, 107, 1339-1346.	1.8	39

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19	Long-term N fertilization imbalances potential N acquisition and transformations by soil microbes. Science of the Total Environment, 2019, 691, 562-571.	8.0	39
20	Cover crop rotations affect greenhouse gas emissions and crop production in Illinois, USA. Field Crops Research, 2019, 241, 107580.	5.1	38
21	Using cover crops in headlands of organic grain farms: Effects on soil properties, weeds and crop yields. Agriculture, Ecosystems and Environment, 2016, 216, 322-332.	5.3	35
22	Estimating Factor Contributions to Soybean Yield from Farm Field Data. Agronomy Journal, 2012, 104, 881-887.	1.8	33
23	Effect of Clay Minerals and Organic Matter on the Cation Exchange Capacity of Silt Fractions. Journal of Plant Nutrition and Soil Science, 2000, 163, 47-52.	1.9	32
24	Carbon and Nitrogen Content of Soil Organic Matter and Microbial Biomass under Long-Term Crop Rotation and Tillage in Illinois, USA. Agriculture (Switzerland), 2018, 8, 37.	3.1	32
25	Multivariate Analysis and Visualization of Soil Quality Data for Noâ€Till Systems. Journal of Environmental Quality, 2008, 37, 2063-2069.	2.0	31
26	Standardized research protocols enable transdisciplinary research of climate variation impacts in corn production systems. Journal of Soils and Water Conservation, 2014, 69, 532-542.	1.6	31
27	Different response of silicate fertilizer having electron acceptors on methane emission in rice paddy soil under green manuring. Biology and Fertility of Soils, 2012, 48, 435-442.	4.3	30
28	Corn residue, tillage, and nitrogen rate effects on soil carbon and nutrient stocks in Illinois. Geoderma, 2015, 253-254, 61-66.	5.1	30
29	Acidification in corn monocultures favor fungi, ammonia oxidizing bacteria, and nirK-denitrifier groups. Science of the Total Environment, 2020, 720, 137514.	8.0	30
30	Soil quality under conservation practices on farm operations of the southern semiarid pampas region of Argentina. Soil and Tillage Research, 2018, 176, 85-94.	5.6	24
31	Long-Term N Fertilization Decreased Diversity and Altered the Composition of Soil Bacterial and Archaeal Communities. Agronomy, 2019, 9, 574.	3.0	22
32	Enhancedâ€Efficiency Fertilizer Impacts on Yieldâ€Scaled Nitrous Oxide Emissions in Maize. Soil Science Society of America Journal, 2018, 82, 1469-1481.	2.2	19
33	Soil Microbial Indicators within Rotations and Tillage Systems. Microorganisms, 2021, 9, 1244.	3.6	19
34	Exploring the Relationships between Greenhouse Gas Emissions, Yields, and Soil Properties in Cropping Systems. Agriculture (Switzerland), 2018, 8, 62.	3.1	15
35	Long-Lasting Impact of Maternal Immune Activation and Interaction With a Second Immune Challenge on Pig Behavior. Frontiers in Veterinary Science, 2020, 7, 561151.	2.2	15
36	Soil N₂O emissions as affected by longâ€term residue removal and noâ€till practices in continuous corn. GCB Bioenergy, 2018, 10, 972-985.	5.6	14

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37	Microbial Signatures in Fertile Soils Under Long-Term N Management. Frontiers in Soil Science, 2021, 1, .	2.2	14
38	Agronomic assessment of cover cropping and tillage practices across environments. Agronomy Journal, 2020, 112, 3913-3928.	1.8	13
39	The Combined Effect of Weaning Stress and Immune Activation during Pig Gestation on Serum Cytokine and Analyte Concentrations. Animals, 2021, 11, 2274.	2.3	13
40	Short Corn Rotations Do Not Improve Soil Quality, Compared with Corn Monocultures. Agronomy Journal, 2018, 110, 1274-1288.	1.8	11
41	Long-term residue removal under tillage decreases amoA-nitrifiers and stimulates nirS-denitrifier groups in the soil. Applied Soil Ecology, 2021, 157, 103730.	4.3	11
42	Bioenergy Yields of Several Cropping Systems in the U.S. Corn Belt. Agronomy Journal, 2016, 108, 559-565.	1.8	10
43	Microbial Shifts Following Five Years of Cover Cropping and Tillage Practices in Fertile Agroecosystems. Microorganisms, 2020, 8, 1773.	3.6	10
44	Characterization of Septoria brown spot disease development and yield effects on soybean in Illinois. Canadian Journal of Plant Pathology, 2021, 43, 62-72.	1.4	10
45	Biochemistry and Immune Biomarkers Indicate Interacting Effects of Pre- and Postnatal Stressors in Pigs across Sexes. Animals, 2021, 11, 987.	2.3	10
46	Organic Transition Effects on Soilborne Diseases of Soybean and Populations of Pseudomonadaceae. Agronomy Journal, 2015, 107, 1087-1097.	1.8	9
47	New Grain P and K Concentration Values for Illinois Field Crops. Crop, Forage and Turfgrass Management, 2019, 5, 180090.	0.6	7
48	Nitrogen provisioned and recycled by cover crops in monoculture and mixture across two organic farms. Nutrient Cycling in Agroecosystems, 2019, 115, 441-453.	2.2	6
49	Primer design to assess bacterial degradation of glyphosate and other phosphonates. Journal of Microbiological Methods, 2020, 169, 105814.	1.6	6
50	High-Resolution Indicators of Soil Microbial Responses to N Fertilization and Cover Cropping in Corn Monocultures. Agronomy, 2022, 12, 954.	3.0	6
51	Organic matter mobilization as affected by soil-solution composition and prevailing clay minerals. Communications in Soil Science and Plant Analysis, 2002, 33, 2291-2299.	1.4	5
52	Organic Amendment and Transitional Cropping System Effects on Crop Diseases. Agronomy Journal, 2014, 106, 519-527.	1.8	5
53	Multivariate Methods for Agricultural Research. Assa, Cssa and Sssa, 2018, , 371-399.	0.6	5
54	Long-term effects of crop rotation and nitrogen fertilization on phosphorus cycling and balances in loess-derived Mollisols. Geoderma, 2022, 420, 115829.	5.1	5

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55	Apparent Nitrogen Recovery from Fallâ€Applied Ammoniated Phosphates and Ammonium Sulfate Fertilizers. Agronomy Journal, 2010, 102, 1674-1681.	1.8	4
56	Chapter 14: Multivariate Methods for Agricultural Research. ACSESS Publications, 2018, , .	0.2	4
57	Characterization of Mollisols after Long-Term N Fertilization at Successive Rates in Continuous and Rotated Corn Systems. Agronomy, 2022, 12, 625.	3.0	4
58	Towards Sustainable Dairy Production in Argentina: Evaluating Nutrient and CO2 Release from Raw and Processed Farm Waste. Agronomy, 2021, 11, 2595.	3.0	4
59	Agronomic and Taxonomic Consequences of Agricultural Use of Marginal Soils in Argentina. Soil Science Society of America Journal, 2012, 76, 558-568.	2.2	3
60	Initial Plant Size Affects Response to Thinning in Soybean. Agronomy Journal, 2015, 107, 158-166.	1.8	3
61	Effects of Pyraclostrobin Foliar Fungicide, Corn Hybrid, and Harvest Timing on Stalk Health of Corn. Crop, Forage and Turfgrass Management, 2018, 4, 1-5.	0.6	3
62	A Longitudinal Study of the Microbial Basis of Nitrous Oxide Emissions Within a Long-Term Agricultural Experiment. Frontiers in Agronomy, 2022, 4, .	3.3	3
63	Meiotic pairing as an indicator of genome composition in polyploid prairie cordgrass (Spartina) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.1	2
64	A Modeling Framework to Evaluate the Impacts of Future Climate on Soil Organic Carbon Dynamics. Journal of Environmental Quality, 2018, 47, 596-606.	2.0	2
65	Ammonia Oxidizing Prokaryotes Respond Differently to Fertilization and Termination Methods in Common Oatâ€™s Rhizosphere. Frontiers in Microbiology, 2021, 12, 746524.	3.5	2
66	Limited Impacts of Cover Cropping on Soil N-Cycling Microbial Communities of Long-Term Corn Monocultures. Frontiers in Microbiology, 0, 13, .	3.5	2
67	Integration of statistical models and visualization tools to characterize microRNA networks influencing cancer. , 2011, , .		0
68	Additive and multiplicative genome-wide association models identify genes associated with growth. , 2011, , .		0
69	A spatially explicit, agent-based model for simulating movements of cattle grazing corn residues. , 2016, , .		0
70	Segregation of patches by patterns of soil attributes in a native grassland in central Argentina. Phyton, 2011, 80, 193-201.	0.7	0
71	Evaluation of N sources, cover crops, and tillage systems for corn grown under organic management. Phyton, 2014, 83, 71-81.	0.7	0