Mariana C Rufino

List of Publications by Year
in descending order

97 papers	7,236 citations	70961 41 h-index	58464 82 g-index
112 all docs	112 docs citations	112 times ranked	8445 citing authors

#	Article	IF	Citations
1	SUSTAINABLE DEVELOPMENT OF CROP-LIVESTOCK FARMS IN AFRICA. Frontiers of Agricultural Science and Engineering, 2021, 8, 175.	0.9	8
2	Variability in tree water uptake determined with stable water isotopes in an African tropical montane forest. Ecohydrology, 2021, 14, e2278.	1.1	5
3	Feeding efficiency gains can increase the greenhouse gas mitigation potential of the Tanzanian dairy sector. Scientific Reports, 2021, 11, 4190.	1.6	7
4	Spatial distribution and perceived drivers of provisioning service values across an East African montane forest landscape. Landscape and Urban Planning, 2021, 207, 103995.	3.4	3
5	Particulate macronutrient exports from tropical African montane catchments point to the impoverishment of agricultural soils. Soil, 2021, 7, 53-70.	2.2	3
6	Embedding stakeholdersâ€™ priorities into the low-emission development of the East African dairy sector. Environmental Research Letters, 2021, 16, 064032.	2.2	3
7	Monitoring of Suspended Sediments in a Tropical Forested Landscape With Citizen Science. Frontiers in Water, 2021, 3, .	1.0	3
8	Local solutions to global phosphorus imbalances. Nature Food, 2021, 2, 459-460.	6.2	14
9	Statement based on the 4ÂTH international conference on global food security â€" December 2020: Challenges for a disruptive research Agenda. Global Food Security, 2021, 30, 100554.	4.0	4
10	Crowdsourced Water Level Monitoring in Kenyaâ€™s Sondu-Miriu Basinâ€"Who Is â€œThe Crowdâ€?. Frontiers in Earth Science, 2021, 8, .	0.8	2
11	Intensification of dairy production can increase the GHG mitigation potential of the land use sector in East Africa. Global Change Biology, 2020, 26, 568-585.	4.2	23
12	Advances in sensing ammonia from agricultural sources. Science of the Total Environment, 2020, 706, 135124.	3.9	61
13	Tropical Montane Forest Conversion Is a Critical Driver for Sediment Supply in East African Catchments. Water Resources Research, 2020, 56, e2020WR027495.	1.7	11
14	Land-use change and Biogeochemical controls of soil <scp>CO₂, N₂O</scp> and <scp>CH₄</scp> fluxes in Cameroonian forest landscapes. Journal of Integrative Environmental Sciences, 2020, 17, 45-67.	1.0	10
15	Agricultural land is the main source of stream sediments after conversion of an African montane forest. Scientific Reports, 2020, 10, 14827.	1.6	21
16	The value of animal-sourced foods. Nature Food, 2020, 1, 330-331.	6.2	1
17	Diurnal Patterns in Solute Concentrations Measured with In Situ UV-Vis Sensors: Natural Fluctuations or Artefacts?. Sensors, 2020, 20, 859.	2.1	5
18	Citizen science in hydrological monitoring and ecosystem services management: State of the art and future prospects. Science of the Total Environment, 2019, 693, 133531.	3.9	94

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19	The value of manure - Manure as co-product in life cycle assessment. Journal of Environmental Management, 2019, 241, 293-304.	3.8	33
20	Agroforestry as a climate change mitigation practice in smallholder farming: evidence from Kenya. Climatic Change, 2019, 153, 379-394.	1.7	21
21	Soil carbon dioxide and methane fluxes from forests and other land use types in an African tropical montane region. Biogeochemistry, 2019, 143, 171-190.	1.7	44
22	Rainfallâ€Runoff Modeling Using Crowdsourced Water Level Data. Water Resources Research, 2019, 55, 10856-10871.	1.7	12
23	Temporal and spatial variability in the nutritive value of pasture vegetation and supplement feedstuffs for domestic ruminants in Western Kenya. Asian-Australasian Journal of Animal Sciences, 2019, 32, 637-647.	2.4	15
24	Land Use, Land Use History, and Soil Type Affect Soil Greenhouse Gas Fluxes From Agricultural Landscapes of the East African Highlands. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 976-990.	1.3	8
25	Using Highâ€Resolution Data to Assess Land Use Impact on Nitrate Dynamics in East African Tropical Montane Catchments. Water Resources Research, 2018, 54, 1812-1830.	1.7	27
26	The contribution of sectoral climate change mitigation options to national targets: a quantitative assessment of dairy production in Kenya. Environmental Research Letters, 2018, 13, 034016.	2.2	20
27	Management intensity controls soil N2O fluxes in an Afromontane ecosystem. Science of the Total Environment, 2018, 624, 769-780.	3.9	22
28	Impacts of land use and land cover change on surface runoff, discharge and low flows: Evidence from East Africa. Journal of Hydrology: Regional Studies, 2018, 15, 49-67.	1.0	260
29	Climate-smart land use requires local solutions, transdisciplinary research, policy coherence and transparency. Carbon Management, 2018, 9, 291-301.	1.2	16
30	Citizen science pioneers in Kenya â€“ A crowdsourced approach for hydrological monitoring. Science of the Total Environment, 2018, 631-632, 1590-1599.	3.9	65
31	Agriculture-driven deforestation in the tropics from 1990â€“2015: emissions, trends and uncertainties. Environmental Research Letters, 2018, 13, 014002.	2.2	42
32	Conversion of natural forest results in a significant degradation of soil hydraulic properties in the highlands of Kenya. Soil and Tillage Research, 2018, 176, 36-44.	2.6	41
33	Assessment of hydrological pathways in East African montane catchments under different land use. Hydrology and Earth System Sciences, 2018, 22, 4981-5000.	1.9	30
34	Sustainable intensification of dairy production can reduce forest disturbance in Kenyan montane forests. Agriculture, Ecosystems and Environment, 2018, 265, 307-319.	2.5	21
35	How to target climate-smart agriculture? Concept and application of the consensus-driven decision support framework â€œtargetCSAâ€. Agricultural Systems, 2017, 151, 234-245.	3.2	74
36	To mulch or to munch? Big modelling of big data. Agricultural Systems, 2017, 153, 32-42.	3.2	42

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37	Is production intensification likely to make farm households food-adequate? A simple food availability analysis across smallholder farming systems from East and West Africa. Food Security, 2017, 9, 115-131.	2.4	58
38	Land use affects total dissolved nitrogen and nitrate concentrations in tropical montane streams in Kenya. Science of the Total Environment, 2017, 603-604, 519-532.	3.9	56
39	Quantifying the contribution of land use to N2O, NO and CO2 fluxes in a montane forest ecosystem of Kenya. Biogeochemistry, 2017, 134, 95-114.	1.7	13
40	Spatial variability of soil N₂O and CO₂ fluxes in different topographic positions in a tropical montane forest in Kenya. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 514-527.	1.3	46
41	Smallholder farms in eastern African tropical highlands have low soil greenhouse gas fluxes. Biogeosciences, 2017, 14, 187-202.	1.3	43
42	Hotspots of gross emissions from the land use sector: patterns, uncertainties, and leading emission sources for the period 2000â€"2005 in the tropics. Biogeosciences, 2016, 13, 4253-4269.	1.3	29
43	Multi-gas and multi-source comparisons of six land use emission datasets and AFOLU estimates in the Fifth Assessment Report, for the tropics for 2000â€"2005. Biogeosciences, 2016, 13, 5799-5819.	1.3	8
44	Greenhouse gas fluxes from agricultural soils of Kenya and Tanzania. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1568-1580.	1.3	49
45	Methane and Nitrous Oxide Emissions from Cattle Excreta on an East African Grassland. Journal of Environmental Quality, 2016, 45, 1531-1539.	1.0	58
46	Groundwater recharge rates and surface runoff response to land use and land cover changes in semi-arid environments. Ecological Processes, 2016, 5, .	1.6	107
47	Adaptation of agriculture to climate change in semi-arid Borena, Ethiopia. Regional Environmental Change, 2016, 16, 2317-2330.	1.4	28
48	Long-term assessment of soil and water conservation measures (Fanya-juu terraces) on soil organic matter in South Eastern Kenya. Geoderma, 2016, 274, 1-9.	2.3	32
49	Migration and Self-Protection Against Climate Change: A Case Study of Samburu County, Kenya. World Development, 2016, 84, 55-68.	2.6	42
50	Livestock wealth and social capital as insurance against climate risk: A case study of Samburu County in Kenya. Agricultural Systems, 2016, 146, 44-54.	3.2	29
51	Introduction to the SAMPLES Approach. , 2016, , 1-13.		1
52	Reducing emissions from agriculture to meet the 2ÂÂ°C target. Global Change Biology, 2016, 22, 3859-3864.	4.2	267
53	Linking agricultural adaptation strategies, food security and vulnerability: evidence from West Africa. Regional Environmental Change, 2016, 16, 1305-1317.	1.4	93
54	Targeting Landscapes to Identify Mitigation Options in Smallholder Agriculture. , 2016, , 15-36.		2

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55	Scaling Point and Plot Measurements of Greenhouse Gas Fluxes, Balances, and Intensities to Whole Farms and Landscapes. , 2016, , 175-188.		4
56	CLIMATE VARIABILITY AND CHANGE IN SOUTHERN MALI: LEARNING FROM FARMER PERCEPTIONS AND ON-FARM TRIALS. Experimental Agriculture, 2015, 51, 615-634.	0.4	34
57	Milk: the new white gold? Milk production options for smallholder farmers in Southern Mali. Animal, 2015, 9, 1221-1229.	1.3	13
58	Mitigation of agricultural emissions in the tropics: comparing forest land-sparing options at the national level. Biogeosciences, 2015, 12, 4809-4825.	1.3	18
59	Maize crop residue uses and trade-offs on smallholder crop-livestock farms in Zimbabwe: Economic implications of intensification. Agriculture, Ecosystems and Environment, 2015, 214, 31-45.	2.5	30
60	Feeding, crop residue and manure management for integrated soil fertility management â€" A case study from Kenya. Agricultural Systems, 2015, 134, 24-35.	3.2	71
61	Climate change mitigation through livestock system transitions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3709-3714.	3.3	407
62	Regional nitrogen budget of the Lake Victoria Basin, East Africa: syntheses, uncertainties and perspectives. Environmental Research Letters, 2014, 9, 105009.	2.2	49
63	Reducing uncertainty in nitrogen budgets for African livestock systems. Environmental Research Letters, 2014, 9, 105008.	2.2	29
64	Comparative assessment of maize, finger millet and sorghum for household food security in the face of increasing climatic risk. European Journal of Agronomy, 2014, 55, 29-41.	1.9	51
65	Exploring future changes in smallholder farming systems by linking socio-economic scenarios with regional and household models. Global Environmental Change, 2014, 24, 165-182.	3.6	100
66	Farm household models to analyse food security in a changing climate: A review. Global Food Security, 2014, 3, 77-84.	4.0	60
67	Evaluation of climate adaptation options for Sudano-Sahelian cropping systems. Field Crops Research, 2014, 156, 63-75.	2.3	28
68	Whole-farm nitrogen cycling and intensification of crop-livestock systems in the highlands of Madagascar: An application of network analysis. Agricultural Systems, 2014, 126, 25-37.	3.2	44
69	Sources of vulnerability to a variable and changing climate among smallholder households in Zimbabwe: A participatory analysis. Climate Risk Management, 2014, 3, 65-78.	1.6	74
70	Transitions in agro-pastoralist systems of East Africa: Impacts on food security and poverty. Agriculture, Ecosystems and Environment, 2013, 179, 215-230.	2.5	104
71	Crop Productivity and the Global Livestock Sector: Implications for Land Use Change and Greenhouse Gas Emissions. American Journal of Agricultural Economics, 2013, 95, 442-448.	2.4	102
72	Effects of climate variability and climate change on crop production in southern Mali. European Journal of Agronomy, 2013, 49, 115-125.	1.9	93

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73	Managing soil fertility to adapt to rainfall variability in smallholder cropping systems in Zimbabwe. Field Crops Research, 2013, 154, 211-225.	2.3	49
74	Increasing nutrient use efficiency through improved feeding and manure management in urban and peri-urban livestock units of a West African city: A scenario analysis. Agricultural Systems, 2013, 114, 64-72.	3.2	27
75	Gas pooling: A sampling technique to overcome spatial heterogeneity of soil carbon dioxide and nitrous oxide fluxes. Soil Biology and Biochemistry, 2013, 67, 20-23.	4.2	53
76	Correction for Bouwman et al., Exploring global changes in nitrogen and phosphorus cycles in agriculture induced by livestock production over the 1900-2050 period. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 21195-21195.	3.3	20
77	Toward a protocol for quantifying the greenhouse gas balance and identifying mitigation options in smallholder farming systems. Environmental Research Letters, 2013, 8, 021003.	2.2	42
78	Biomass use, production, feed efficiencies, and greenhouse gas emissions from global livestock systems. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20888-20893.	3.3	867
79	Accuracy and precision of photoacoustic spectroscopy not guaranteed. Global Change Biology, 2013, 19, 3565-3567.	4.2	22
80	Exploring global changes in nitrogen and phosphorus cycles in agriculture induced by livestock production over the 1900â€“2050 period. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20882-20887.	3.3	742
81	The roles of livestock in developing countries. Animal, 2013, 7, 3-18.	1.3	319
82	The Use of Woodland Products to Cope with Climate Variability in Communal Areas in Zimbabwe. Ecology and Society, 2013, 18, .	1.0	27
83	Conservation Agriculture in mixed cropâ€“livestock systems: Scoping crop residue trade-offs in Sub-Saharan Africa and South Asia. Field Crops Research, 2012, 132, 175-184.	2.3	231
84	Competing use of organic resources, village-level interactions between farm types and climate variability in a communal area of NE Zimbabwe. Agricultural Systems, 2011, 104, 175-190.	3.2	111
85	Communicating complexity: Integrated assessment of trade-offs concerning soil fertility management within African farming systems to support innovation and development. Agricultural Systems, 2011, 104, 191-203.	3.2	339
86	A meta-analysis of long-term effects of conservation agriculture on maize grain yield under rain-fed conditions. Agronomy for Sustainable Development, 2011, 31, 657-673.	2.2	340
87	Comments to â€œIs an integrated farm more resilient against climate change? A micro-econometric analysis of portfolio diversification in African agricultureâ€. Food Policy, 2011, 36, 452-454.	2.8	7
88	Carbon and nutrient losses during manure storage under traditional and improved practices in smallholder crop-livestock systemsâ€"evidence from Kenya. Plant and Soil, 2010, 328, 253-269.	1.8	74
89	Analysing integration and diversity in agro-ecosystems by using indicators of network analysis. Nutrient Cycling in Agroecosystems, 2009, 84, 229-247.	1.1	24
90	Network analysis of N flows and food self-sufficiencyâ€"a comparative study of crop-livestock systems of the highlands of East and southern Africa. Nutrient Cycling in Agroecosystems, 2009, 85, 169-186.	1.1	34

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91	Beyond resource constraints â€“ Exploring the biophysical feasibility of options for the intensification of smallholder crop-livestock systems in Vihiga district, Kenya. Agricultural Systems, 2009, 101, 1-19.	3.2	83
92	Identifying key entry-points for strategic management of smallholder farming systems in sub-Saharan Africa using the dynamic farm-scale simulation model NUANCES-FARMSIM. Agricultural Systems, 2009, 102, 89-101.	3.2	63
93	Lifetime productivity of dairy cows in smallholder farming systems of the Central highlands of Kenya. Animal, 2009, 3, 1044-1056.	1.3	49
94	Low-Cost Economic and Environmental Performance Assessment of Farm Households Systems: Application to Mixed Crop-Livestock Systems in the Ethiopian Highlands. Agroecology and Sustainable Food Systems, 2008, 32, 565-595.	0.9	5
95	Analysing trade-offs in resource and labour allocation by smallholder farmers using inverse modelling techniques: A case-study from Kakamega district, western Kenya. Agricultural Systems, 2007, 95, 76-95.	3.2	83
96	Manure as a key resource within smallholder farming systems: Analysing farm-scale nutrient cycling efficiencies with the NUANCES framework. Livestock Science, 2007, 112, 273-287.	0.6	115
97	Nitrogen cycling efficiencies through resource-poor African cropâ€“livestock systems. Agriculture, Ecosystems and Environment, 2006, 112, 261-282.	2.5	157