Achim Dobermann

List of Publications by Year
in descending order

99 papers	11,970 citations	28242 55 h-index	37183 96 g-index
101 all docs	101 docs citations	101 times ranked	9773 citing authors

#	Article	IF	Citations
1	Nitrogen and the future of agriculture: 20Âyears on. Ambio, 2022, 51, 17-24.	2.8	38
2	What is a plant nutrient? Changing definitions to advance science and innovation in plant nutrition. Plant and Soil, 2022, 476, 11-23.	1.8	38
3	Southeast Asia must narrow down the yield gap to continue to be a major rice bowl. Nature Food, 2022, 3, 217-226.	6.2	45
4	Responsible plant nutrition: A new paradigm to support food system transformation. Global Food Security, 2022, 33, 100636.	4.0	28
5	Used Wisely, Fertilizers Will Feed Africa and Protect its Unique Biodiversity. , 2022, 1, .		0
6	African soil properties and nutrients mapped at 30Âm spatial resolution using two-scale ensemble machine learning. Scientific Reports, 2021, 11, 6130.	1.6	103
7	The potential for soybean to diversify the production of plant-based protein in the UK. Science of the Total Environment, 2021, 767, 144903.	3.9	17
8	All hat and no cattle: Accountability following the UN food systems summit. Global Food Security, 2021, 30, 100569.	4.0	11
9	Co-benefits of nutrient management tailored to smallholder agriculture. Global Food Security, 2021, 30, 100570.	4.0	19
10	The nitrogen economy of rice-livestock systems in Uruguay. Global Food Security, 2021, 30, 100566.	4.0	11
11	Steady agronomic and genetic interventions are essential for sustaining productivity in intensive rice cropping. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	13
12	A research vision for food systems in the 2020s: Defying the status quo. Global Food Security, 2020, 26, 100397.	4.0	78
13	Sustainable intensification of agriculture in sub-Saharan Africa: first things first. Frontiers of Agricultural Science and Engineering, 2020, 7, 376.	0.9	17
14	Exploring Future Food Provision Scenarios for China. Environmental Science & Technology, 2019, 53, 1385-1393.	4.6	62
15	Agronomic and environmental causes of yield and nitrogen use efficiency gaps in Chinese rice farming systems. European Journal of Agronomy, 2018, 93, 40-49.	1.9	47
16	Agronomic improvements can make future cereal systems in South Asia far more productive and result in a lower environmental footprint. Global Change Biology, 2016, 22, 1054-1074.	4.2	70
17	Translating the Sustainable Development Goals into action: A participatory backcasting approach for developing national agricultural transformation pathways. Global Food Security, 2016, 10, 71-79.	4.0	77
18	Growing innovations for the bioeconomy. Nature Plants, 2015, 1, 15193.	4.7	12

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19	Exploiting Co-Benefits of Increased Rice Production and Reduced Greenhouse Gas Emission through Optimized Crop and Soil Management. PLoS ONE, 2015, 10, e0140023.	1.1	15
20	Educating and Training a Workforce for Nutrition in a Post-2015 World. Advances in Nutrition, 2015, 6, 639-647.	2.9	36
21	Closing yield gaps in maize production in Southeast Asia through site-specific nutrient management. Field Crops Research, 2014, 156, 219-230.	2.3	66
22	Comparing apples with oranges. Nature, 2012, 485, 176-177.	13.7	35
23	Rice in cropping systemsâ€"Modelling transitions between flooded and non-flooded soil environments. European Journal of Agronomy, 2012, 39, 9-24.	1.9	86
24	Nitrogen Response and Economics for Irrigated Corn in Nebraska. Agronomy Journal, 2011, 103, 67-75.	0.9	35
25	Nitrogen Use Efficiency of Irrigated Corn for Three Cropping Systems in Nebraska. Agronomy Journal, 2011, 103, 76-84.	0.9	65
26	Maizeâ€N: A Decision Tool for Nitrogen Management in Maize. Agronomy Journal, 2011, 103, 1276-1283.	0.9	67
27	Improving Nitrogen Fertilization in Rice by Site-Specific N Management. , 2011, , 943-952.		9
28	Evaluation of NASA Satelliteâ€•and Modelâ€Derived Weather Data for Simulation of Maize Yield Potential in China. Agronomy Journal, 2010, 102, 9-16.	0.9	109
29	Improving nitrogen fertilization in rice by sitespecific N management. A review. Agronomy for Sustainable Development, 2010, 30, 649-656.	2.2	436
30	Estimating maize nutrient uptake requirements. Field Crops Research, 2010, 118, 158-168.	2.3	163
31	Simulation of soybean growth and yield in near-optimal growth conditions. Field Crops Research, 2010, 119, 161-174.	2.3	92
32	Rice yields in tropical/subtropical Asia exhibit large but opposing sensitivities to minimum and maximum temperatures. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14562-14567.	3.3	495
33	Growth and Nitrogen Fixation in High-Yielding Soybean: Impact of Nitrogen Fertilization. Agronomy Journal, 2009, 101, 958-970.	0.9	91
34	Agronomic and economic evaluation of site-specific nutrient management for irrigated wheat in northwest India. Nutrient Cycling in Agroecosystems, 2008, 82, 15-31.	1.1	37
35	Agitated soil measurement method for integrated on-the-go mapping of soil pH, potassium and nitrate contents. Computers and Electronics in Agriculture, 2008, 60, 212-225.	3.7	34
36	Nitrogen uptake, fixation and response to fertilizer N in soybeans: A review. Field Crops Research, 2008, 108, 1-13.	2.3	723

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37	Leaf area index simulation in soybean grown under near-optimal conditions. Field Crops Research, 2008, 108, 82-92.	2.3	79
38	Soybean Sowing Date: The Vegetative, Reproductive, and Agronomic Impacts. Crop Science, 2008, 48, 727-740.	0.8	138
39	Understanding and modeling the effect of temperature and daylength on soybean phenology under high-yield conditions. Field Crops Research, 2007, 100, 257-271.	2.3	197
40	Performance of Site-Specific Nutrient Management for Irrigated, Transplanted Rice in Northwest India. Agronomy Journal, 2007, 99, 1436-1447.	0.9	37
41	Net Biome Productivity of Irrigated and Rainfed Maizeâ€“Soybean Rotations: Modeling vs. Measurements. Agronomy Journal, 2007, 99, 1404-1423.	0.9	64
42	Nitrogen Response of Grain Sorghum in Rotation with Soybean. Agronomy Journal, 2007, 99, 808-813.	0.9	19
43	Soil greenhouse gas fluxes and global warming potential in four highâ€yielding maize systems. Global Change Biology, 2007, 13, 1972-1988.	4.2	205
44	Comment on â€œCarbon budget of mature no-till ecosystem in North Central Region of the United Statesâ€• Agricultural and Forest Meteorology, 2006, 136, 83-84.	1.9	14
45	Integrated assessment of cropping systems in the Eastern Indo-Gangetic plain. Field Crops Research, 2006, 99, 35-47.	2.3	60
46	Fine-resolution mapping of soil organic carbon based on multivariate secondary data. Geoderma, 2006, 132, 471-489.	2.3	150
47	Sampling optimization based on secondary information and its utilization in soil carbon mapping. Geoderma, 2006, 133, 345-362.	2.3	69
48	An algorithm for spatially constrained classification of categorical and continuous soil properties. Geoderma, 2006, 136, 504-523.	2.3	71
49	Features, Applications, and Limitations of the Hybridâ€Maize Simulation Model. Agronomy Journal, 2006, 98, 737-748.	0.9	70
50	Soil Electrical Conductivity and Water Content Affect Nitrous Oxide and Carbon Dioxide Emissions in Intensively Managed Soils. Journal of Environmental Quality, 2006, 35, 1999-2010.	1.0	119
51	Comparison of partial and complete soil K budgets under intensive rice cropping in the Mekong Delta, Vietnam. Agriculture, Ecosystems and Environment, 2006, 116, 121-131.	2.5	37
52	Changes in soil phosphorus fractions in a calcareous paddy soil under intensive rice cropping. Plant and Soil, 2006, 288, 141-154.	1.8	47
53	Anthropogenic Drivers of Ecosystem Change: an Overview. Ecology and Society, 2006, 11, .	1.0	229
54	Maize Radiation Use Efficiency under Optimal Growth Conditions. Agronomy Journal, 2005, 97, 72-78.	0.9	221

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55	Direct measurement of soil chemical properties on-the-go using ion-selective electrodes. Computers and Electronics in Agriculture, 2005, 48, 272-294.	3.7	94
56	Processing of Yield Map Data. Precision Agriculture, 2005, 6, 193-212.	3.1	44
57	Annual carbon dioxide exchange in irrigated and rainfed maize-based agroecosystems. Agricultural and Forest Meteorology, 2005, 131, 77-96.	1.9	449
58	Cereal area and nitrogen use efficiency are drivers of future nitrogen fertilizer consumption. Science in China Series C: Life Sciences, 2005, 48, 745-758.	1.3	39
59	Cereal area and nitrogen use efficiency are drivers of future nitrogen fertilizer consumption. Science in China Series C: Life Sciences, 2005, 48 Spec No, 745-58.	1.3	15
60	Identification of Relationships between Cotton Yield, Quality, and Soil Properties. Agronomy Journal, 2004, 96, 1588-1597.	0.9	37
61	Hybrid-maizeâ€"a maize simulation model that combines two crop modeling approaches. Field Crops Research, 2004, 87, 131-154.	2.3	314
62	A critical assessment of the system of rice intensification (SRI). Agricultural Systems, 2004, 79, 261-281.	3.2	183
63	Screening Yield Monitor Data Improves Grain Yield Maps. Agronomy Journal, 2004, 96, 1091-1102.	0.9	61
64	Cropping Systems: Irrigated Continuous Rice Systems of Tropical and Subtropical Asia. , 2004, , 349-354.		1
65	Do organic amendments improve yield trends and profitability in intensive rice systems?. Field Crops Research, 2003, 83, 191-213.	2.3	146
66	MEETINGCEREALDEMANDWHILEPROTECTINGNATURALRESOURCES ANDIMPROVINGENVIRONMENTALQUALITY. Annual Review of Environment and Resources, 2003, 28, 315-358.	5.6	774
67	Soil Fertility and Indigenous Nutrient Supply in Irrigated Rice Domains of Asia. Agronomy Journal, 2003, 95, 913-923.	0.9	90
68	Estimating Indigenous Nutrient Supplies for Siteâ€Specific Nutrient Management in Irrigated Rice. Agronomy Journal, 2003, 95, 924-935.	0.9	60
69	Classification of Crop Yield Variability in Irrigated Production Fields. Agronomy Journal, 2003, 95, 1105-1120.	0.9	76
70	Creating Spatially Contiguous Yield Classes for Siteâ€Specific Management. Agronomy Journal, 2003, 95, 1121-1131.	0.9	51
71	Phosphorus Fertilizer Effects on Soil Phosphorus Pools in Acid Upland Soils. Soil Science Society of America Journal, 2002, 66, 652-660.	1.2	44
72	Agroecosystems, Nitrogen-use Efficiency, and Nitrogen Management. Ambio, 2002, 31, 132-140.	2.8	1,251

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73	Site-specific nutrient management for intensive rice cropping systems in Asia. Field Crops Research, 2002, 74, 37-66.	2.3	365
74	Insufficient geographic characterization and analysis in the planning, execution and dissemination of agronomic research?. Field Crops Research, 2002, 76, 45-54.	2.3	20
75	Biosolids as Nitrogen Source for Irrigated Maize and Rainfed Sorghum. Soil Science Society of America Journal, 2002, 66, 531-543.	1.2	76
76	Title is missing!. Plant and Soil, 2002, 247, 153-175.	1.8	183
77	Biosolids as Nitrogen Source for Irrigated Maize and Rainfed Sorghum. Soil Science Society of America Journal, 2002, 66, 531.	1.2	27
78	Phosphorus Fertilizer Effects on Soil Phosphorus Pools in Acid Upland Soils. Soil Science Society of America Journal, 2002, 66, 652.	1.2	30
79	Performance of Siteâ€Specific Nutrient Management for Irrigated Rice in Southeast China. Agronomy Journal, 2001, 93, 869-878.	0.9	149
80	Reversal of Rice Yield Decline in a Longâ€Term Continuous Cropping Experiment. Agronomy Journal, 2000, 92, 633-643.	0.9	166
81	How widespread are yield declines in long-term rice experiments in Asia?. Field Crops Research, 2000, 66, 175-193.	2.3	193
82	Mapping soil texture classes using field textuing, particle size distribution and local knowledge by both conventional and geostatisical methods. European Journal of Soil Science, 1999, 50, 457-479.	1.8	38
83	Internal nutrient efficiencies of irrigated lowland rice in tropical and subtropical Asia. Field Crops Research, 1999, 63, 113-138.	2.3	323
84	On-farm soil N supply and N nutrition in the riceâ€“wheat system of Nepal and Bangladesh. Field Crops Research, 1999, 64, 273-286.	2.3	77
85	Management of phosphorus, potassium, and sulfur in intensive, irrigated lowland rice. Field Crops Research, 1998, 56, 113-138.	2.3	225
86	Opportunities for increased nitrogen-use efficiency from improved resource management in irrigated rice systems. Field Crops Research, 1998, 56, 7-39.	2.3	458
87	Nutritional physiology of the rice plants and productivity decline of irrigated rice systems in the tropics. Soil Science and Plant Nutrition, 1997, 43, 1101-1106.	0.8	27
88	Scale-Dependent Correlations among Soil Properties in Two Tropical Lowland Rice Fields. Soil Science Society of America Journal, 1997, 61, 1483-1496.	1.2	56
89	Fuzzy mapping of soil fertility â€" a case study on irrigated riceland in the Philippines. Geoderma, 1997, 77, 317-339.	2.3	56
90	Synthetic Ionâ€Exchange Resins: Soil and Environmental Studies. Journal of Environmental Quality, 1996, 25, 13-24.	1.0	141

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91	Fertilizer inputs, nutrient balance and soil nutrient supplying power in intensive, irrigated rice system. III. Phosphorus. Nutrient Cycling in Agroecosystems, 1996, 46, 111-125.	1.1	76
92	Soil organic matter and the indigenous nitrogen supply of intensive irrigated rice systems in the tropics. Plant and Soil, 1996, 182, 267-278.	1.8	126
93	Fertilizer inputs, nutrient balance, and soil nutrient-supplying power in intensive, irrigated rice systems. I. Potassium uptake and K balance. Nutrient Cycling in Agroecosystems, 1996, 46, 1-10.	1.1	139
94	How good is a reconnaissance soil map for agronomic purposes?. Soil Use and Management, 1996, 12, 33-43.	2.6	34
95	Spatial and Temporal Variability of Transplanted Rice at the Field Scale. Agronomy Journal, 1995, 87, 712-720.	0.9	25
96	Sources of soil variation in an acid Ultisol of the Philippines. Geoderma, 1995, 68, 173-191.	2.3	47
97	Nutrient adsorption kinetics of ion exchange resin capsules: A study with soils of international origin. Communications in Soil Science and Plant Analysis, 1994, 25, 1329-1353.	0.6	38
98	Factors causing field variation of direct-seeded flooded rice. Geoderma, 1994, 62, 125-150.	2.3	38
99	Avoiding a Rice Crisis: What Needs to Be Done?. Assa, Cssa and Sssa, 0, , 49-55.	0.6	0