Henning Kage

List of Publications by Year
in descending order

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98 papers	2,720 citations	201674 27 h-index	223800 46 g-index
99 all docs	99 docs citations	99 times ranked	3062 citing authors

#	Article	IF	Citations
1	Breeding improves wheat productivity under contrasting agrochemical input levels. Nature Plants, 2019, 5, 706-714.	9.3	194
2	Impact of heat stress on crop yieldâ€"on the importance of considering canopy temperature. Environmental Research Letters, 2014, 9, 044012.	5.2	151
3	Reevaluation of the Evaporation Method for Determining Hydraulic Functions in Unsaturated Soils. Soil Science Society of America Journal, 1993, 57, 1436-1443.	2.2	142
4	N balance as an indicator of N leaching in an oilseed rape â€“ winter wheat â€“ winter barley rotation. Agriculture, Ecosystems and Environment, 2006, 115, 261-269.	5.3	132
5	Root growth and dry matter partitioning of cauliflower under drought stress conditions: measurement and simulation. European Journal of Agronomy, 2004, 20, 379-394.	4.1	121
6	Ammonia volatilization after application of urea to winter wheat over 3 years affected by novel urease and nitrification inhibitors. Agriculture, Ecosystems and Environment, 2014, 197, 184-194.	5.3	99
7	Efficient N management using winter oilseed rape. A review. Agronomy for Sustainable Development, 2010, 30, 271-279.	5.3	79
8	Nitrogen leaching losses after biogas residue application to maize. Soil and Tillage Research, 2013, 130, 69-80.	5.6	77
9	Effects of weather conditions during different growth phases on yield formation of winter oilseed rape. Field Crops Research, 2015, 173, 41-48.	5.1	69
10	Biogas cropping systems: Short term response of yield performance and N use efficiency to biogas residue application. European Journal of Agronomy, 2013, 47, 44-54.	4.1	64
11	An alternative strategy of dismantling of the chloroplasts during leaf senescence observed in a highâ€yield variety of barley. Physiologia Plantarum, 2012, 144, 189-200.	5.2	54
12	Analysis of vegetation indices derived from hyperspectral reflection measurements for estimating crop canopy parameters of oilseed rape (Brassica napus L.). Biosystems Engineering, 2008, 101, 172-182.	4.3	51
13	Ammonia volatilization and yield response of energy crops after fertilization with biogas residues in a coastal marsh of Northern Germany. Agriculture, Ecosystems and Environment, 2012, 160, 66-74.	5.3	50
14	Measurement of ammonia emissions in multi-plot field experiments. Biosystems Engineering, 2011, 108, 164-173.	4.3	47
15	Title is missing!. Plant and Soil, 2000, 223, 133-147.	3.7	40
16	Crop production for biogas and water protectionâ€"A trade-off?. Agriculture, Ecosystems and Environment, 2013, 177, 36-47.	5.3	40
17	Impact of uncertainty on the optimum nitrogen fertilization rate and agronomic, ecological and economic factors in an oilseed rape based crop rotation. Journal of Agricultural Science, 2007, 145, 455-468.	1.3	39
18	Evaluation of different agronomic strategies to reduce nitrate leaching after winter oilseed rape (Brassica napus L.) using a simulation model. Nutrient Cycling in Agroecosystems, 2008, 82, 299-314.	2.2	37

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19	Physical robustness of canopy temperature models for crop heat stress simulation across environments and production conditions. Field Crops Research, 2018, 216, 75-88.	5.1	36
20	Nitrous oxide emissions from winter oilseed rape cultivation. Agriculture, Ecosystems and Environment, 2017, 249, 57-69.	5.3	35
21	Decoupling of impact factors reveals the response of German winter wheat yields to climatic changes. Global Change Biology, 2020, 26, 3601-3626.	9.5	35
22	Emission of N2O from Biogas Crop Production Systems in Northern Germany. Bioenergy Research, 2014, 7, 1223-1236.	3.9	34
23	Effects of acidification and injection of pasture applied cattle slurry on ammonia losses, N 2 O emissions and crop N uptake. Agriculture, Ecosystems and Environment, 2017, 247, 23-32.	5.3	34
24	Do farmers in Germany exploit the potential yield and nitrogen benefits from preceding oilseed rape in winter wheat cultivation?. Archives of Agronomy and Soil Science, 2018, 64, 25-37.	2.6	34
25	Is low rooting density of faba beans a cause of high residual nitrate content of soil at harvest ?. Plant and Soil, 1997, 190, 47-60.	3.7	30
26	Title is missing!. Plant and Soil, 2002, 246, 201-209.	3.7	30
27	Integrating Wheat Canopy Temperatures in Crop System Models. Agronomy, 2016, 6, 7.	3.0	30
28	A variable thermal time of the double ridge to flag leaf emergence phase improves the predictive quality of a CERES-Wheat type phenology model. Computers and Electronics in Agriculture, 2012, 89, 62-69.	7.7	29
29	A simple empirical model for predicting development and dry matter partitioning in cauliflower (Brassica oleracea L. botrytis). Scientia Horticulturae, 1999, 80, 19-38.	3.6	28
30	Analysing soil and canopy factors affecting optimum nitrogen fertilization rates of oilseed rape (Brassica napus). Journal of Agricultural Science, 2009, 147, 1-8.	1.3	28
31	Analysis of ammonia losses after field application of biogas slurries by an empirical model. Journal of Plant Nutrition and Soil Science, 2012, 175, 253-264.	1.9	28
32	Drought Tolerance and Waterâ€Use Efficiency of Biogas Crops: A Comparison of Cup Plant, Maize and Lucerneâ€Grass. Journal of Agronomy and Crop Science, 2017, 203, 117-130.	3.5	28
33	Does transport of water to roots limit water uptake of field crops?. Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science, 1996, 159, 583-590.	0.4	27
34	Aspects of nitrogen use efficiency of cauliflower I. A simulation modelling based analysis of nitrogen availability under field conditions. Journal of Agricultural Science, 2003, 141, 1-16.	1.3	26
35	Short-term effects of biogas residue application on yield performance and N balance parameters of maize in different cropping systems. Journal of Agricultural Science, 2013, 151, 449-462.	1.3	26
36	Modelling Ammonia Losses After Field Application of Biogas Slurry in Energy Crop Rotations. Water, Air, and Soil Pollution, 2012, 223, 29-47.	2.4	24

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37	The potential of semi-dwarf oilseed rape genotypes to reduce the risk of N leaching. Journal of Agricultural Science, 2008, 146, 77-84.	1.3	23
38	The effect of nitrogen and late blight on crop growth, solar radiation interception and yield of two potato cultivars. Field Crops Research, 2014, 155, 56-66.	5.1	22
39	Root traits of cup plant, maize and lucerne grass grown under different soil and soil moisture conditions. Journal of Agronomy and Crop Science, 2017, 203, 345-359.	3.5	22
40	Is mutual shading a decisive factor for differences in overall canopy specific leaf area of winter wheat crops?. Field Crops Research, 2013, 149, 338-346.	5.1	21
41	Dry matter partitioning and canopy traits in wheat and barley under varying N supply. European Journal of Agronomy, 2016, 74, 1-8.	4.1	21
42	Key variables for simulating leaf area and N status: Biomass based relations versus phenology driven approaches. European Journal of Agronomy, 2018, 100, 110-117.	4.1	21
43	Indirect nitrous oxide emissions from oilseed rape cropping systems by NH3 volatilization and nitrate leaching as affected by nitrogen source, N rate and site conditions. European Journal of Agronomy, 2020, 116, 126039.	4.1	21
44	Effect of biogas digestate, animal manure and mineral fertilizer application on nitrogen flows in biogas feedstock production. European Journal of Agronomy, 2017, 91, 63-73.	4.1	20
45	Effects of novel nitrification and urease inhibitors (DCD/TZ and 2-NPT) on N2O emissions from surface applied urea: An incubation study. Atmospheric Environment, 2018, 175, 75-82.	4.1	20
46	Modelling Nitrogen Content and Distribution in Cauliflower (Brassica oleracea L.botrytis). Annals of Botany, 2000, 86, 963-973.	2.9	18
47	Predicting dry matter production of cauliflower (Brassica oleracea L. botrytis) under unstressed conditions. Scientia Horticulturae, 2001, 87, 171-190.	3.6	18
48	A phenological model of winter oilseed rape according to the BBCH scale. Crop and Pasture Science, 2016, 67, 345.	1.5	18
49	Sowing date and N application effects on tap root and above-ground dry matter of winter oilseed rape in autumn. European Journal of Agronomy, 2017, 83, 40-46.	4.1	18
50	Life-cycle assessment of biogas production under the environmental conditions of northern Germany: greenhouse gas balance. Journal of Agricultural Science, 2014, 152, 172-181.	1.3	17
51	An analysis of factors determining spatial variable grain yield of winter wheat. European Journal of Agronomy, 2014, 52, 297-306.	4.1	17
52	Optimal Nitrogen Content and Photosynthesis in Cauliflower (Brassica oleracea L. botrytis). Scaling up from a Leaf to the Whole Plant. Annals of Botany, 2000, 85, 779-787.	2.9	16
53	Modelling the effects of soil water limitations on transpiration and stomatal regulation of cauliflower. European Journal of Agronomy, 2007, 26, 375-383.	4.1	16
54	Application of pig slurryâ€"First year and residual effects on yield and N balance. European Journal of Agronomy, 2014, 59, 13-21.	4.1	16

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55	Apparent fertilizer N recovery and the relationship between grain yield and grain protein concentration of different winter wheat varieties in a long-term field trial. European Journal of Agronomy, 2021, 124, 126246.	4.1	16
56	The Contribution of Functional Traits to the Breeding Progress of Central-European Winter Wheat Under Differing Crop Management Intensities. Frontiers in Plant Science, 2019, 10, 1521.	3.6	15
57	Sentinel-2 Data for Precision Agriculture?â€"A UAV-Based Assessment. Sensors, 2021, 21, 2861.	3.8	15
58	Developing and testing an algorithm for site-specific N fertilization of winter oilseed rape. Computers and Electronics in Agriculture, 2017, 136, 228-237.	7.7	14
59	High-Throughput Prediction of Whole Season Green Area Index in Winter Wheat With an Airborne Multispectral Sensor. Frontiers in Plant Science, 2019, 10, 1798.	3.6	14
60	Aspects of nitrogen use efficiency of cauliflower II. Productivity and nitrogen partitioning as influenced by N supply. Journal of Agricultural Science, 2003, 141, 17-29.	1.3	12
61	Improved modeling of grain number in winter wheat. Field Crops Research, 2012, 133, 167-175.	5.1	12
62	Radiation use efficiency, chemical composition, and methane yield of biogas crops under rainfed and irrigated conditions. European Journal of Agronomy, 2017, 87, 8-18.	4.1	12
63	Organ-specific approaches describing crop growth of winter oilseed rape under optimal and N-limited conditions. European Journal of Agronomy, 2017, 82, 71-79.	4.1	12
64	Irrigation Scheduling of Kohlrabi (Brassica oleracea var. gongylodes) Using Crop Water Stress Index. Hortscience: A Publication of the American Society for Hortcultural Science, 2004, 39, 276-279.	1.0	12
65	Zur relativen Bedeutung von MassenfluÃŸ und Diffusion beim Nitrattransport zur Wurzel. Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science, 1997, 160, 171-178.	0.4	11
66	Forecasting yield via reference- and scenario calculations. Computers and Electronics in Agriculture, 2015, 114, 212-220.	7.7	11
67	Ecological Efficiency of Maize-Based Cropping Systems for Biogas Production. Bioenergy Research, 2015, 8, 1621-1635.	3.9	11
68	Yield formation of Central-European winter wheat cultivars on a large scale perspective. European Journal of Agronomy, 2017, 86, 93-102.	4.1	11
69	Effect of Sowing Method and N Application on Seed Yield and N Use Efficiency of Winter Oilseed Rape. Agronomy, 2017, 7, 21.	3.0	11
70	Nitrogen-limited light use efficiency in wheat crop simulators: comparing three model approaches. Journal of Agricultural Science, 2016, 154, 1090-1101.	1.3	10
71	Modelling N and Dry Matter Partitioning between Leaf and Stem of Wheat under Varying N Supply. Journal of Agronomy and Crop Science, 2016, 202, 576-586.	3.5	10
72	Modelling Wheat Stomatal Resistance in Hourly Time Steps from Micrometeorological Variables and Soil Water Status. Journal of Agronomy and Crop Science, 2016, 202, 174-191.	3.5	10

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73	A Simple Droughtâ€Sensitive Model for LeafÂ:ÂStem Partitioning of Wheat. Journal of Agronomy and Crop Science, 2016, 202, 300-308.	3.5	10
74	Organ-specific critical N dilution curves and derived NNI relationships for winter wheat, winter oilseed rape and maize. European Journal of Agronomy, 2021, 130, 126365.	4.1	9
75	Comparing different approaches to calculate the effects of heterogeneous root distribution on nutrient uptake: a case study on subsoil nitrate uptake by a barley root system. Plant and Soil, 2007, 298, 145-159.	3.7	8
76	Cold season ammonia emissions from land spreading with anaerobic digestates from biogas production. Atmospheric Environment, 2014, 84, 35-38.	4.1	8
77	Predicting dry matter production of cauliflower (Brassica oleracea L. botrytis) under unstressed conditions. Scientia Horticulturae, 2001, 87, 155-170.	3.6	7
78	Copper reducing strategies for late blight (Phytophthora infestans) control in organic potato (Solanum tuberosum) production. Journal of Plant Diseases and Protection, 2014, 121, 105-116.	2.9	7
79	Evaluating Bioenergy Cropping Systems towards Productivity and Resource Use Efficiencies: An Analysis Based on Field Experiments and Simulation Modelling. Agronomy, 2018, 8, 117.	3.0	7
80	Interaction of nitrate uptake and nitrogen fixation in faba beans. Plant and Soil, 1995, 176, 189-196.	3.7	6
81	Possible impact of the Renewable Energy Directive on N fertilization intensity and yield of winter oilseed rape in different cropping systems. Biomass and Bioenergy, 2013, 57, 168-179.	5.7	6
82	Evaluation of small site-specific N fertilization trials using uniformly shaped response curves. European Journal of Agronomy, 2016, 76, 87-94.	4.1	6
83	Development and evaluation of HUME-OSR: A dynamic crop growth model for winter oilseed rape. Field Crops Research, 2020, 246, 107679.	5.1	6
84	Model sensitivity of simulated yield of winter oilseed rape to climate change scenarios in Europe. European Journal of Agronomy, 2021, 129, 126341.	4.1	6
85	A Field Experiment to Test Interactive Effects of Elevated CO2 Concentration (FACE) and Elevated Canopy Temperature (FATE) on Wheat. Procedia Environmental Sciences, 2015, 29, 60-61.	1.4	5
86	Predicting the site specific soil N supply under winter wheat in Germany. Nutrient Cycling in Agroecosystems, 2018, 110, 71-81.	2.2	5
87	Growth stage specific optima for the green area index of winter wheat. Field Crops Research, 2013, 148, 34-42.	5.1	4
88	The measurement time required for determining total NH3 losses after field application of slurries by trail hoses. Journal of Agricultural Science, 2013, 151, 34-43.	1.3	4
89	Estimating net N mineralization under unfertilized winter wheat using simulations with NET N and a balance approach. Nutrient Cycling in Agroecosystems, 2014, 99, 31-44.	2.2	4
90	Effects of freeâ€air CO 2 enrichment and drought on root growth of field grown maize and sorghum. Journal of Agronomy and Crop Science, 2019, 205, 477-489.	3.5	4

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91	Is canopy temperature suitable for high throughput field phenotyping of drought resistance of winter rye in temperate climate?. European Journal of Agronomy, 2020, 120, 126104.	4.1	4
92	Evaluating the potential of winter beet in northern Germany by a simulation model. European Journal of Agronomy, 2019, 109, 125910.	4.1	3
93	Efficient N Management Using Winter Oilseed Rape. , 2011, , 931-942.		3
94	Specific leaf area development of autumn-sown sugar beet (Beta vulgaris L.) on different sowing dates in northern Germany. Journal of Agricultural Science, 2015, 153, 1292-1301.	1.3	2
95	Yield potential of non-bolting winter sugar beet in Germany. European Journal of Agronomy, 2020, 115, 126035.	4.1	2
96	Nitrogen Status and Light Environment Influence Dry Matter Partitioning in Cauliflower. Journal of the American Society for Horticultural Science, 2001, 126, 750-756.	1.0	2
97	Incorporation of Wheat Canopy Temperatures into Agroecosystem Models by Using a Meta-model. Procedia Environmental Sciences, 2015, 29, 144-146.	1.4	0
98	Festschrift zum 75. JubilÃum der Agrar- und ErnÃhrungswissenschaftlichen FakultÃt der Christian-Albrechts-UniversitÃt zu Kiel (1946-2021). , 2021, , .		0