Mats SÃ¶derstrÃ¶m

List of Publications by Year
in descending order

57 papers	**1,353** citations	393982 **19** h-index	360668 **35** g-index
58 all docs	**58** docs citations	**58** times ranked	**1849** citing authors

#	Article	IF	Citations
1	Predicting grain protein concentration in winter wheat (*Triticum aestivum* L.) based on unpiloted aerial vehicle multispectral optical remote sensing. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2022, 72, 788-802.	0.3	0
2	Perspectives on validation in digital soil mapping of continuous attributes—A review. Soil Use and Management, 2021, 37, 7-21.	2.6	44
3	Precision Agriculture for Resource Use Efficiency in Smallholder Farming Systems in Sub-Saharan Africa: A Systematic Review. Sustainability, 2021, 13, 1158.	1.6	27
4	Upscaling proximal sensor N-uptake predictions in winter wheat (Triticum aestivum L.) with Sentinel-2 satellite data for use in a decision support system. Precision Agriculture, 2021, 22, 1263-1283.	3.1	8
5	Estimating spatially distributed SOC sequestration potentials of sustainable land management practices in Ethiopia. Journal of Environmental Management, 2021, 286, 112191.	3.8	13
6	Footprint and height corrections for UAV-borne gamma-ray spectrometry studies. Journal of Environmental Radioactivity, 2021, 231, 106545.	0.9	18
7	Optimizing gamma-ray spectrometers for UAV-borne surveys with geophysical applications. Journal of Environmental Radioactivity, 2021, 237, 106717.	0.9	7
8	Precision agriculture research in sub-Saharan Africa countries: a systematic map. Precision Agriculture, 2021, 22, 1217-1236.	3.1	16
9	Soil organic carbon in agricultural systems of six countries in East Africa – a literature review of status and carbon sequestration potential. South African Journal of Plant and Soil, 2020, 37, 35-49.	0.4	11
10	Potential for soil organic carbon sequestration in grasslands in East African countries: A review. Grassland Science, 2020, 66, 135-144.	0.6	20
11	Predictions of Cu, Zn, and Cd Concentrations in Soil Using Portable X-Ray Fluorescence Measurements. Sensors, 2020, 20, 474.	2.1	22
12	CropSAT – A Decision Support System for Practical Use of Satellite Images in Precision Agriculture. Lecture Notes in Electrical Engineering, 2020, , 415-421.	0.3	1
13	A Boundary Plane Approach to Map Hotspots for Achievable Soil Carbon Sequestration and Soil Fertility Improvement. Sustainability, 2019, 11, 4038.	1.6	3
14	Herd and environmental determinants of reproductive performance in Swedish dairy herds, 2001–2009. Spatial and Spatio-temporal Epidemiology, 2019, 31, 100299.	0.9	0
15	Digital soil mapping of arable land in Sweden – Validation of performance at multiple scales. Geoderma, 2019, 352, 342-350.	2.3	52
16	Satellite-based modelling of protein content in winter wheat and malting barley. , 2019, , .		2
17	Automated mixed-scale data fusion for mapping of within-field variation in a national decision support system - the example of pH correction. , 2019, , .		0
18	Near-real time winter wheat N uptake from a combination of proximal and remote optical measurements: how to refine Sentinel-2 satellite images for use in a precision agriculture decision support system. , 2019, , .		2

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19	Risk assessment of high concentrations of molybdenum in forage. Environmental Geochemistry and Health, 2018, 40, 2685-2694.	1.8	12
20	Soil Organic Carbon Baselines for Land Degradation Neutrality: Map Accuracy and Cost Tradeoffs with Respect to Complexity in Otjozondjupa, Namibia. Sustainability, 2018, 10, 1610.	1.6	18
21	Improved usefulness of continental soil databases for agricultural management through local adaptation. South African Journal of Plant and Soil, 2017, 34, 35-45.	0.4	7
22	Improvement of spatial modelling of crop suitability using a new digital soil map of Tanzania. South African Journal of Plant and Soil, 2017, 34, 243-254.	0.4	20
23	Producing nitrogen (N) uptake maps in winter wheat by combining proximal crop measurements with Sentinel-2 and DMC satellite images in a decision support system for farmers. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2017, 67, 637-650.	0.3	15
24	Predicting deoxynivalenol in oats under conditions representing Scandinavian production regions. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2017, 34, 1026-1038.	1.1	4
25	Spatial and phyloecological analyses of nosZ genes underscore niche differentiation amongst terrestrial N2O reducing communities. Soil Biology and Biochemistry, 2017, 115, 82-91.	4.2	52
26	Spatial patterns of essential trace element concentrations in Swedish soils and crops. Geoderma Regional, 2017, 10, 163-174.	0.9	8
27	Local adaptation of a national digital soil map for use in precision agriculture. Advances in Animal Biosciences, 2017, 8, 430-432.	1.0	8
28	Performance Evaluation of Proximal Sensors for Soil Assessment in Smallholder Farms in Embu County, Kenya. Sensors, 2016, 16, 1950.	2.1	21
29	Adaptation of regional digital soil mapping for precision agriculture. Precision Agriculture, 2016, 17, 588-607.	3.1	37
30	Sensor mapping of Amazonian Dark Earths in deforested croplands. Geoderma, 2016, 281, 58-68.	2.3	17
31	Exploring the predictability of soil texture and organic matter content with a commercial integrated soil profiling tool. European Journal of Soil Science, 2015, 66, 631-638.	1.8	28
32	Modelling within-field variations in deoxynivalenol (DON) content in oats using proximal and remote sensing. Precision Agriculture, 2015, 16, 1-14.	3.1	12
33	Three-dimensional digital soil mapping of agricultural fields by integration of multiple proximal sensor data obtained from different sensing methods. Precision Agriculture, 2015, 16, 29-45.	3.1	21
34	Determining soil properties in Amazonian Dark Earths by reflectance spectroscopy. Geoderma, 2015, 237-238, 308-317.	2.3	32
35	Constructing a layered electrical conductivity model using k nearest‐neighbour predictions and a combination of two proximal sensors. European Journal of Soil Science, 2014, 65, 816-826.	1.8	3
36	Effects of breed on foraging sites and diets in dairy cows on mountain pasture. International Journal of Biodiversity Science, Ecosystem Services & Management, 2014, 10, 334-342.	2.9	10

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37	Gamma-ray spectrometry and geological maps as tools for cadmium risk assessment in arable soils. Geoderma, 2013, 192, 323-334.	2.3	17
38	Sensor data fusion for topsoil clay mapping. Geoderma, 2013, 199, 106-116.	2.3	51
39	Using proximal soil sensors and fuzzy classification for mapping Amazonian Dark Earths. Agricultural and Food Science, 2013, 22, 380-389.	0.3	10
40	Tile drain losses of nitrogen and phosphorus from fields under integrated and organic crop rotations. A four-year study on a clay soil in southwest Sweden. Science of the Total Environment, 2012, 434, 79-89.	3.9	39
41	In‑field distribution of <i>Plasmodiophora brassicae</i> measured using quantitative real‑time PCR. Plant Pathology, 2012, 61, 16-28.	1.2	79
42	Spatial distribution of ammonia-oxidizing bacteria and archaea across a 44-hectare farm related to ecosystem functioning. ISME Journal, 2011, 5, 1213-1225.	4.4	130
43	Prediction of protein content in malting barley using proximal and remote sensing. Precision Agriculture, 2010, 11, 587-599.	3.1	25
44	Soil Resources Influence Spatial Patterns of Denitrifying Communities at Scales Compatible with Land Management. Applied and Environmental Microbiology, 2010, 76, 2243-2250.	1.4	202
45	Increased sample point density in farm soil mapping by local calibration of visible and near infrared prediction models. Geoderma, 2010, 156, 152-160.	2.3	73
46	Gamma Ray Sensing for Cadmium Risk Assessment in Agricultural Soil and Grain: A Case Study in Southern Sweden. , 2010, , 333-342.		0
47	The use of near infrared (NIR) spectroscopy to improve soil mapping at the farm scale. Precision Agriculture, 2008, 9, 57-69.	3.1	75
48	Influence of input uncertainty on prediction of within-field pesticide leaching risks. Journal of Contaminant Hydrology, 2008, 98, 106-114.	1.6	10
49	Canopy reflectance, thermal stress, and apparent soil electrical conductivity as predictors of within-field variability in grain yield and grain protein of malting barley. Precision Agriculture, 2006, 7, 343-359.	3.1	22
50	Performance of Soil Electrical Conductivity and Different Methods for Mapping Soil Data from a Small Dataset. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2002, 52, 127-135.	0.3	7
51	Modelling local heavy metal distribution: A study of chromium in soil and wheat at a ferrochrome smelter in South‑Western Sweden. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 1998, 48, 2-10.	0.3	4
52	Cadmium in Soil and Winter Wheat Grain in Southern Sweden: I. Factors Influencing Cd Levels in Soils and Grain. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 1996, 46, 240-248.	0.3	9
53	Cokriging of Heavy Metals as an Aid to Biogeochemical Mapping. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 1996, 46, 1-8.	0.3	2
54	Cadium in Soil and Winter Wheat Grain in Southern Sweden: II. Geographical Distribution and its Relation to Substratum. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 1996, 46, 249-257.	0.3	3

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55	Assessment of local agroclimatological conditions—a methodology. Agricultural and Forest Meteorology, 1995, 72, 243-260.	1.9	19
56	Combining Crop Growth Models and Geographical Information Systems for Agricultural Management: A Case Study of Ley Production Potential as Affected by Local Temperature Variation and Soil Water Capacity. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 1994, 44, 65-74.	0.3	1
57	Geostatistical modeling of salinity as a basis for irrigation management and crop selection—A case study in central Tunisia. Environmental Geology and Water Sciences, 1992, 20, 85-92.	0.4	4