Viacheslav I Adamchuk

List of Publications by Year
in descending order

41 papers	1,613 citations	471509 17 h-index	330143 37 g-index
41 all docs	41 docs citations	41 times ranked	1954 citing authors

#	Article	IF	Citations
1	Evaluation of Two Portable Hyperspectral-Sensor-Based Instruments to Predict Key Soil Properties in Canadian Soils. Sensors, 2022, 22, 2556.	3.8	5
2	Comparison of sampling designs for calibrating digital soil maps at multiple depths. Pedosphere, 2022, 32, 588-601.	4.0	6
3	The Scope for Using Proximal Soil Sensing by the Farmers of India. Sustainability, 2022, 14, 8561.	3.2	2
4	Analysis of Four Delineation Methods to Identify Potential Management Zones in a Commercial Potato Field in Eastern Canada. Agronomy, 2021, 11, 432.	3.0	12
5	Comparison of Heating Strategies on Soil Water Measurement Using Actively Heated Fiber Optics on Contrasting Textured Soils. Sensors, 2021, 21, 962.	3.8	1
6	Towards a Machine Vision-Based Yield Monitor for the Counting and Quality Mapping of Shallots. Frontiers in Robotics and AI, 2021, 8, 627067.	3.2	3
7	Evaluating the Precision and Accuracy of Proximal Soil visâ€“NIR Sensors for Estimating Soil Organic Matter and Texture. Soil Systems, 2021, 5, 48.	2.6	15
8	Evaluating the synergy of three soil spectrometers for improving the prediction and mapping of soil properties in a high anthropic management area: A case of study from Southeast Brazil. Geoderma, 2021, 402, 115347.	5.1	8
9	Evaluation of Optimized Preprocessing and Modeling Algorithms for Prediction of Soil Properties Using VIS-NIR Spectroscopy. Sensors, 2021, 21, 6745.	3.8	14
10	Predicting soil organic matter from cellular phone images under varying soil moisture. Geoderma, 2020, 361, 114020.	5.1	41
11	Optimum irrigation strategy to maximize yield and quality of potato: A case study in southern Alberta, Canada. Irrigation and Drainage, 2020, 70, 609.	1.7	1
12	Development of Willow Tree Yield-Mapping Technology. Sensors, 2020, 20, 2650.	3.8	0
13	Three-dimensional digital soil mapping of multiple soil properties at a field-scale using regression kriging. Geoderma, 2020, 366, 114253.	5.1	44
14	Biomass estimation from canopy measurements for leafy vegetables based on ultrasonic and laser sensors. Computers and Electronics in Agriculture, 2019, 164, 104896.	7.7	7
15	Simultaneous measurement of multiple soil properties through proximal sensor data fusion: A case study. Geoderma, 2019, 341, 111-128.	5.1	73
16	Proximal sensing of soil particle sizes using a microscope-based sensor and bag of visual words model. Geoderma, 2019, 351, 144-152.	5.1	10
17	Aerated chicken, cow, and turkey manure extracts differentially affect lettuce and kale yield in hydroponics. International Journal of Recycling of Organic Waste in Agriculture, 2019, 8, 241-252.	2.0	8
18	Clustering Tools for Integration of Satellite Remote Sensing Imagery and Proximal Soil Sensing Data. Remote Sensing, 2019, 11, 1036.	4.0	10

#	Article	IF	Citations
19	Precision apiculture: Development of a wireless sensor network for honeybee hives. Computers and Electronics in Agriculture, 2019, 156, 138-144.	7.7	31
20	Characterizing soil particle sizes using wavelet analysis of microscope images. Computers and Electronics in Agriculture, 2018, 148, 217-225.	7.7	20
21	Proximal Soil and Plant Sensing. Assa, Cssa and Sssa, 2018, , 119-140.	0.6	16
22	Soil Water Measurement Using Actively Heated Fiber Optics at Field Scale. Sensors, 2018, 18, 1116.	3.8	19
23	Performance Evaluation of Constant Versus Variable Rate Irrigation. Irrigation and Drainage, 2017, 66, 501-509.	1.7	18
24	Depthâ€Specific Prediction of Soil Properties In Situ using visâ€NIR Spectroscopy. Soil Science Society of America Journal, 2017, 81, 993-1004.	2.2	27
25	Implementation of a sigmoid depth function to describe change of soil pH with depth. Geoderma, 2017, 289, 1-10.	5.1	21
26	Assessment of soil properties in situ using a prototype portable MIR spectrometer in two agricultural fields. Biosystems Engineering, 2016, 152, 14-27.	4.3	54
27	Selected papers from the Third Global Workshop on Proximal Soil Sensing 2013. European Journal of Soil Science, 2015, 66, 629-630.	3.9	0
28	Development of an NDIR CO2 Sensor-Based System for Assessing Soil Toxicity Using Substrate-Induced Respiration. Sensors, 2015, 15, 4734-4748.	3.8	22
29	Effective sensor deployment based on field information coverage in precision agriculture. Wireless Communications and Mobile Computing, 2015, 15, 1606-1620.	1.2	12
30	Vertical Soil Profiling Using a Galvanic Contact Resistivity Scanning Approach. Sensors, 2014, 14, 13243-13255.	3.8	13
31	Estimating Nitrogen Sufficiency Index using a Natural Local Reference approach. , 2013, , .		1
32	Relationships between Soil-Based Management Zones and Canopy Sensing for Corn Nitrogen Management. Agronomy Journal, 2012, 104, 119-129.	1.8	19
33	Using targeted sampling to process multivariate soil sensing data. Geoderma, 2011, 163, 63-73.	5.1	43
34	Water and Nitrogen Effects on Active Canopy Sensor Vegetation Indices. Agronomy Journal, 2011, 103, 1815-1826.	1.8	44
35	Using a vision sensor system for performance testing of satellite-based tractor auto-guidance. Computers and Electronics in Agriculture, 2010, 72, 107-118.	7.7	16
36	An Active Sensor Algorithm for Corn Nitrogen Recommendations Based on a Chlorophyll Meter Algorithm. Agronomy Journal, 2010, 102, 1090-1098.	1.8	49

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37	Precision Agriculture and Food Security. Science, 2010, 327, 828-831.	12.6	860
38	Pairing Educational Robotics with Geospatial Technologies in Informal Learning Environments. Journal of Youth Development, 2010, 5, 44-52.	0.3	3
39	Optimization of Crop Canopy Sensor Placement for Measuring Nitrogen Status in Corn. Agronomy Journal, 2009, 101, 140-149.	1.8	18
40	Evaluation of an on-the-go technology for soil pH mapping. Precision Agriculture, 2007, 8, 139-149.	6.0	42
41	Hastes instrumentadas para a mensuraÃ§Ã£o da resistÃªncia mecÃ¢nica do solo. Engenharia Agricola, 2006, 26, 161-169.	0.7	5