Matt J Aitkenhead

List of Publications by Year
in descending order

38 papers	934 citations	516710 16 h-index	477307 29 g-index
38 all docs	38 docs citations	38 times ranked	1389 citing authors

#	Article	IF	Citations
1	Soil Spectroscopy: An Alternative to Wet Chemistry for Soil Monitoring. Advances in Agronomy, 2015, , 139-159.	5.2	288
2	Gypsophile Chemistry Unveiled: Fourier Transform Infrared (FTIR) Spectroscopy Provides New Insight into Plant Adaptations to Gypsum Soils. PLoS ONE, 2014, 9, e107285.	2.5	65
3	Prediction of soil characteristics and colour using data from the National Soils Inventory of Scotland. Geoderma, 2013, 200-201, 99-107.	5.1	61
4	Mapping soil carbon stocks across Scotland using a neural network model. Geoderma, 2016, 262, 187-198.	5.1	56
5	Soil organic carbon sequestration rates in vineyard agroecosystems under different soil management practices: A meta-analysis. Journal of Cleaner Production, 2021, 290, 125736.	9.3	38
6	Digital RGB photography and visible-range spectroscopy for soil composition analysis. Geoderma, 2018, 313, 265-275.	5.1	34
7	Adapting scenarios for climate adaptation: Practitionersâ€™ perspectives on a popular planning method. Environmental Science and Policy, 2020, 104, 13-19.	4.9	32
8	A method for automatic segmentation and splitting of hyperspectral images of raspberry plants collected in field conditions. Plant Methods, 2017, 13, 74.	4.3	30
9	Mapping soil profile depth, bulk density and carbon stock in Scotland using remote sensing and spatial covariates. European Journal of Soil Science, 2020, 71, 553-567.	3.9	25
10	Predicting Scottish topsoil organic matter content from colour and environmental factors. European Journal of Soil Science, 2015, 66, 112-120.	3.9	23
11	Mapping peat in Scotland with remote sensing and site characteristics. European Journal of Soil Science, 2017, 68, 28-38.	3.9	22
12	Predicting soil chemical composition and other soil parameters from field observations using a neural network. Computers and Electronics in Agriculture, 2012, 82, 108-116.	7.7	21
13	Detection and differentiation between potato (Solanum tuberosum) diseases using calibration models trained with non-imaging spectrometry data. Computers and Electronics in Agriculture, 2019, 167, 105056.	7.7	21
14	Automated Soil Physical Parameter Assessment Using Smartphone and Digital Camera Imagery. Journal of Imaging, 2016, 2, 35.	3.0	19
15	Potential carbon loss from Scottish peatlands under climate change. Regional Environmental Change, 2019, 19, 2101-2111.	2.9	17
16	E-SMART: Environmental Sensing for Monitoring and Advising in Real-Time. IFIP Advances in Information and Communication Technology, 2013, , 129-142.	0.7	16
17	Innovations in Environmental Monitoring Using Mobile Phone Technology â€“ A Review. International Journal of Interactive Mobile Technologies, 2014, 8, 42.	1.2	15
18	Low-cost hyper-spectral imaging system using a linear variable bandpass filter for agritech applications. Applied Optics, 2020, 59, A167.	1.8	14

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19	Use of artificial neural networks in measuring characteristics of shielded plutonium for arms control. Journal of Analytical Atomic Spectrometry, 2012, 27, 432.	3.0	12
20	Development and testing of a process-based model (MOSES) for simulating soil processes, functions and ecosystem services. Ecological Modelling, 2011, 222, 3795-3810.	2.5	11
21	Predicting Sample Source Location from Soil Analysis Using Neural Networks. Environmental Forensics, 2014, 15, 281-292.	2.6	11
22	Estimating Soil Properties with a Mobile Phone. Progress in Soil Science, 2016, , 89-110.	0.8	11
23	PHYLIS: A Low-Cost Portable Visible Range Spectrometer for Soil and Plants. Sensors, 2017, 17, 99.	3.8	11
24	Estimating soil properties from smartphone imagery in Ethiopia. Computers and Electronics in Agriculture, 2020, 171, 105322.	7.7	11
25	The physical environment and health-enhancing activity during the school commute: global positioning system, geographical information systems and accelerometry. Geospatial Health, 2014, 8, 569.	0.8	10
26	Predicting the abatement rates of soil organic carbon sequestration management in Western European vineyards using random forest regression. Cleaner Environmental Systems, 2021, 2, 100024.	4.2	8
27	Digital mapping of soil ecosystem services in Scotland using neural networks and relationship modellingâ€"Part 1: Mapping of soil classes. Soil Use and Management, 2019, 35, 205-216.	4.9	7
28	The effect of image compression on synthetic PROBA-V images. International Journal of Remote Sensing, 2014, 35, 2639-2653.	2.9	6
29	Neural Network Analysis to Evaluate Ozone Damage to Vegetation Under Different Climatic Conditions. Frontiers in Forests and Global Change, 2020, 3, .	2.3	6
30	Use of Imaging Technologies for High Throughput Phenotyping. , 2018, , 145-158.		5
31	Digital mapping of soil ecosystem services in Scotland using neural networks and relationship modelling. Part 2: Mapping of soil ecosystem services. Soil Use and Management, 2019, 35, 217-231.	4.9	5
32	Factors influencing winegrowersâ€™ adoption of soil organic carbon sequestration practices in France. Environmental Science and Policy, 2022, 128, 45-55.	4.9	5
33	Sustainable local land use policy: rhetoric and reality. Local Environment, 2008, 13, 291-308.	2.4	4
34	Neural network integration of field observations for soil endocrine disruptor characterisation. Science of the Total Environment, 2014, 468-469, 240-248.	8.0	4
35	Exploring the Impact of Different Input Data Types on Soil Variable Estimation Using the ICRAF-ISRIC Global Soil Spectral Database. Applied Spectroscopy, 2018, 72, 188-198.	2.2	4
36	Optimization of spectral preâ€processing for estimating soil condition on small farms. Soil Use and Management, 2020, , .	4.9	3

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37	SPOT-VEGETATION â€“ 15 years of success: whatâ€™s next?. International Journal of Remote Sensing, 2014, 35, 2397-2401.	2.9	2
38	Climate change and soil organic matter in Scotland: time to turn over a new leaf?. Soil Research, 2021, 59, 529.	1.1	1