Ben P Marchant

List of Publications by Year
in descending order

66	3,646	136950 32	133252 59
papers	citations	h-index	g-index

67	67	67	4765
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	What are the priority research questions for digital agriculture?. Land Use Policy, 2022, 114, 105962.	5.6	42
2	Using remote sensors to predict soil properties: Radiometry and peat depth in Dartmoor, UK. Geoderma, 2021, 403, 115232.	5.1	6
3	Sounding Out the Carbon: The Potential of Acoustic Backscatter Data to Yield Improved Spatial Predictions of Organic Carbon in Marine Sediments. Frontiers in Marine Science, 2021, 8, .	2.5	2
4	Boundary line models for soil nutrient concentrations and wheat yield in nationalâ€scale datasets. European Journal of Soil Science, 2020, 71, 334-351.	3.9	11
5	Estimating organic surface horizon depth for peat and peaty soils across a Scottish upland catchment using linear mixed models with topographic and geological covariates. Soil Use and Management, 2020, 37, 628.	4.9	2
6	Provenance of drinking water revealed through compliance sampling. Environmental Sciences: Processes and Impacts, 2019, 21, 1052-1064.	3.5	5
7	A methodological framework for identifying potential sources of soil heavy metal pollution based on machine learning: A case study in the Yangtze Delta, China. Environmental Pollution, 2019, 250, 601-609.	7.5	101
8	Spatial changes in soil chemical properties in an agricultural zone in southeastern China due to land consolidation. Soil and Tillage Research, 2019, 187, 152-160.	5.6	23
9	Establishing the precision and robustness of farmersâ€™ crop experiments. Field Crops Research, 2019, 230, 31-45.	5.1	39
10	How should a spatial-coverage sample design for a geostatistical soil survey be supplemented to support estimation of spatial covariance parameters?. Geoderma, 2018, 319, 89-99.	5.1	28
11	Rejoinder to Comments on Minasny et al., 2017 Soil carbon 4 per mille Geoderma 292, 59â€“86. Geoderma, 2018, 309, 124-129.	5.1	34
12	Spatio-temporal modelling of the status of groundwater droughts. Journal of Hydrology, 2018, 564, 397-413.	5.4	46
13	Model-Based Soil Geostatistics. Progress in Soil Science, 2018, , 341-371.	0.8	2
14	Broad-Scale Soil Monitoring Schemes. Progress in Soil Science, 2018, , 669-691.	0.8	0
15	Soil carbon 4 per mille. Geoderma, 2017, 292, 59-86.	5.1	1,279
16	A survey of topsoil arsenic and mercury concentrations across France. Chemosphere, 2017, 181, 635-644.	8.2	53
17	Assessing sampling designs for determining fertilizer practice from yield data. Computers and Electronics in Agriculture, 2017, 135, 163-174.	7.7	8
18	Improved understanding of spatioâ€temporal controls on regional scale groundwater flooding using hydrograph analysis and impulse response functions. Hydrological Processes, 2017, 31, 4586-4599.	2.6	28

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19	Quantifying uncertainty in predictions of groundwater levels using formal likelihood methods. Journal of Hydrology, 2016, 540, 699-711.	5.4	17
20	Modelling the electrical conductivity of soil in the Yangtze delta in three dimensions. Geoderma, 2016, 269, 119-125.	5.1	14
21	Soil apparent conductivity measurements for planning and analysis of agricultural experiments: A case study from Western-Thailand. Geoderma, 2016, 267, 220-229.	5.1	15
22	Are sanitation interventions a threat to drinking water supplies in rural India? An application of tryptophan-like fluorescence. Water Research, 2016, 88, 923-932.	11.3	57
23	Quantifying and mapping topsoil inorganic carbon concentrations and stocks: approaches tested in France. Soil Use and Management, 2015, 31, 29-38.	4.9	23
24	Multi-annual droughts in the English Lowlands: a review of their characteristics and climate drivers in the winter half-year. Hydrology and Earth System Sciences, 2015, 19, 2353-2375.	4.9	66
25	Exploring the spatial variation in the fertilizer-nitrogen requirement of wheat within fields. Journal of Agricultural Science, 2015, 153, 25-41.	1.3	19
26	Testing the application and limitation of stochastic simulations to predict the lithology of glacial and fluvial deposits in Central Glasgow, UK. Engineering Geology, 2015, 187, 98-112.	6.3	29
27	In-situ tryptophan-like fluorescence: A real-time indicator of faecal contamination in drinking water supplies. Water Research, 2015, 81, 38-46.	11.3	81
28	Discrete wetland groundwater discharges revealed with a three-dimensional temperature model and botanical indicators (Boxford, UK). Hydrogeology Journal, 2015, 23, 775-787.	2.1	15
29	Combining observations with acoustic swath bathymetry and backscatter to map seabed sediment texture classes: The empirical best linear unbiased predictor. Sedimentary Geology, 2015, 328, 17-32.	2.1	20
30	Spatial variation of trace elements in the peri-urban soil of Madrid. Journal of Soils and Sediments, 2014, 14, 78-88.	3.0	21
31	Estimating change in soil organic carbon using legacy data as the baseline: issues, approaches and lessons to learn. Soil Research, 2014, 52, 349.	1.1	21
32	CO2 storage monitoring: leakage detection and measurement in subsurface volumes from 3D seismic data at Sleipner. Energy Procedia, 2014, 63, 4224-4239.	1.8	39
33	On Soil Carbon Monitoring Networks. , 2014, , 59-68.		2
34	Optimized multi-phase sampling for soil remediation surveys. Spatial Statistics, 2013, 4, 1-13.	1.9	20
35	Spatial distribution of Lindane concentration in topsoil across France. Science of the Total Environment, 2013, 443, 338-350.	8.0	30
36	Fluctuations in methodâ€ofâ€moments variograms caused by clustered sampling and their elimination by declustering and residual maximum likelihood estimation. European Journal of Soil Science, 2013, 64, 401-409.	3.9	17

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37	Analysis of groundwater drought building on the standardised precipitation index approach. Hydrology and Earth System Sciences, 2013, 17, 4769-4787.	4.9	274
38	Analyzing the Spatial Distribution of PCB Concentrations in Soils Using Below-Quantification Limit Data. Journal of Environmental Quality, 2012, 41, 1893-1905.	2.0	4
39	Disaggregation of legacy soil data using area to point kriging for mapping soil organic carbon at the regional scale. Geoderma, 2012, 170, 347-358.	5.1	87
40	Mapping soil Pb stocks and availability in mainland France combining regression trees with robust geostatistics. Geoderma, 2012, 170, 359-368.	5.1	39
41	Generic Issues on Broad-Scale Soil Monitoring Schemes: A Review. Pedosphere, 2012, 22, 456-469.	4.0	59
42	Robust geostatistical prediction of trace elements across France. Geoderma, 2011, 162, 303-311.	5.1	55
43	Spatial prediction of soil properties with copulas. Geoderma, 2011, 162, 327-334.	5.1	48
44	Soil carbon stock in the tropical rangelands of Australia: Effects of soil type and grazing pressure, and determination of sampling requirement. Geoderma, 2011, 167-168, 261-273.	5.1	36
45	Spatial Sampling to Detect an Invasive Pathogen Outside of an Eradication Zone. Phytopathology, 2011, 101, 725-731.	2.2	17
46	The assessment of pointâ€source and diffuse soil metal pollution using robust geostatistical methods: a case study in Swansea (Wales, UK). European Journal of Soil Science, 2011, 62, 346-358.	3.9	48
47	Which persistent organic pollutants can we map in soil using a large spacing systematic soil monitoring design? A case study in Northern France. Science of the Total Environment, 2011, 409, 3719-3731.	8.0	40
48	Geostatistical analysis of the distribution of Leptosphaeria species causing phoma stem canker on winter oilseed rape (Brassica napus) in England. Plant Pathology, 2010, 59, 200-210.	2.4	11
49	Robust analysis of soil properties at the national scale: cadmium content of French soils. European Journal of Soil Science, 2010, 61, 144-152.	3.9	66
50	Airborne radiometric survey data and a DTM as covariates for regional scale mapping of soil organic carbon across Northern Ireland. European Journal of Soil Science, 2009, 60, 44-54.	3.9	65
51	Spatial monitoring of a nonâ€stationary soil property: phosphorus in a Florida water conservation area. European Journal of Soil Science, 2009, 60, 757-769.	3.9	46
52	Spatial analysis of the error in a model of soil nitrogen. Ecological Modelling, 2008, 211, 453-467.	2.5	8
53	Analysis of two variants of a spatially distributed crop model, using wavelet transforms and geostatistics. Agricultural Systems, 2008, 98, 135-146.	6.1	8
54	Robust estimation of the variogram by residual maximum likelihood. Geoderma, 2007, 140, 62-72.	5.1	50

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55	The MatÃ©rn variogram model: Implications for uncertainty propagation and sampling in geostatistical surveys. Geoderma, 2007, 140, 337-345.	5.1	47
56	Estimation of Linear Models of Coregionalization by Residual Maximum Likelihood. European Journal of Soil Science, 2007, 58, 1506-1513.	3.9	32
57	Optimized Sample Schemes for Geostatistical Surveys. Mathematical Geosciences, 2007, 39, 113-134.	0.9	72
58	Adaptive sampling and reconnaissance surveys for geostatistical mapping of the soil. European Journal of Soil Science, 2006, 57, 831-845.	3.9	36
59	Biphasic behaviour in malignant invasion. Mathematical Medicine and Biology, 2006, 23, 173-196.	1.2	19
60	Estimating Variogram Uncertainty. Mathematical Geosciences, 2004, 36, 867-898.	0.9	63
61	Timeâ€“frequency Analysis for Biosystems Engineering. Biosystems Engineering, 2003, 85, 261-281.	4.3	62
62	Discontinuous travelling wave solutions for certain hyperbolic systems. IMA Journal of Applied Mathematics, 2002, 67, 201-224.	1.6	14
63	Using acoustic emissions to monitor crop throughput of a large square baler. Computers and Electronics in Agriculture, 2002, 36, 33-54.	7.7	5
64	Travelling wave solutions to a haptotaxis-dominated model of malignant invasion. Nonlinearity, 2001, 14, 1653-1671.	1.4	65
65	Nonsharp travelling wave fronts in the Fisher equation with degenerate nonlinear diffusion. Applied Mathematics Letters, 1996, 9, 33-38.	2.7	48
66	The Groundwater Drought Initiative (GDI): Analysing and understanding groundwater drought across Europe. Proceedings of the International Association of Hydrological Sciences, 0, 383, 297-305.	1.0	7