Bernard G Barthes

List of Publications by Year
in descending order

55	3,605	201674	161849
papers	citations	27 h-index	54 g-index

56	56	56	3640
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Aggregate stability as an indicator of soil susceptibility to runoff and erosion; validation at several levels. Catena, 2002, 47, 133-149.	5.0	564
2	A global spectral library to characterize the world's soil. Earth-Science Reviews, 2016, 155, 198-230.	9.1	546
3	Soil Spectroscopy: An Alternative to Wet Chemistry for Soil Monitoring. Advances in Agronomy, 2015, , 139-159.	5.2	288
4	Assessment and monitoring of soil quality using nearâ€infrared reflectance spectroscopy (NIRS). European Journal of Soil Science, 2009, 60, 770-784.	3.9	179
5	Texture and sesquioxide effects on water-stable aggregates and organic matter in some tropical soils. Geoderma, 2008, 143, 14-25.	5.1	168
6	Increased soil organic carbon stocks under agroforestry: A survey of six different sites in France. Agriculture, Ecosystems and Environment, 2017, 236, 243-255.	5.3	158
7	Determination of carbon and nitrogen contents in Alfisols, Oxisols and Ultisols from Africa and Brazil using NIRS analysis: Effects of sample grinding and set heterogeneity. Geoderma, 2007, 139, 106-117.	5.1	146
8	Impact of alley cropping agroforestry on stocks, forms and spatial distribution of soil organic carbon â€" A case study in a Mediterranean context. Geoderma, 2015, 259-260, 288-299.	5.1	121
9	Long-term effect ofÂaÂlegume cover crop (MucunaÂpruriens var. utilis) onÂtheÂcommunities ofÂsoil macrofauna andÂnematofauna, under maize cultivation, inÂsouthern Benin. European Journal of Soil Biology, 2006, 42, S136-S144.	3.2	104
10	National calibration of soil organic carbon concentration using diffuse infrared reflectance spectroscopy. Geoderma, 2016, 276, 41-52.	5.1	91
11	Title is missing!. Nutrient Cycling in Agroecosystems, 2001, 61, 159-170.	2.2	81
12	Earthworm activity affects soil aggregation and organic matter dynamics according to the quality and localization of crop residuesâ€"An experimental study (Madagascar). Soil Biology and Biochemistry, 2007, 39, 2119-2128.	8.8	78
13	Effect of sugarcane residue management (mulching versus burning) on organic matter in a clayey Oxisol from southern Brazil. Agriculture, Ecosystems and Environment, 2006, 115, 285-289.	5.3	72
14	Determination of Total Carbon and Nitrogen Content in a Range of Tropical Soils Using near Infrared Spectroscopy: Influence of Replication and Sample Grinding and Drying. Journal of Near Infrared Spectroscopy, 2006, 14, 341-348.	1.5	66
15	Determining the distributions of soil carbon and nitrogen in particle size fractions using near-infrared reflectance spectrum of bulk soil samples. Soil Biology and Biochemistry, 2008, 40, 1533-1537.	8.8	63
16	Prediction of soil organic and inorganic carbon contents at a national scale (France) using midâ€infrared reflectance spectroscopy (MIRS). European Journal of Soil Science, 2012, 63, 141-151.	3.9	62
17	Field-scale run-off and erosion in relation to topsoil aggregate stability in three tropical regions (Benin, Cameroon, Mexico). European Journal of Soil Science, 2000, 51, 485-495.	3.9	57
18	Relationship between soil erodibility and topsoil aggregate stability or carbon content in a cultivated mediterranean highland (Aveyron, France). Communications in Soil Science and Plant Analysis, 1999, 30, 1929-1938.	1.4	56

#	Article	IF	Citations
19	Prediction of soil organic carbon stock using visible and near infrared reflectance spectroscopy (VNIRS) in the field. Geoderma, 2016, 261, 151-159.	5.1	55
20	Best practices for obtaining and processing field visible and near infrared (VNIR) spectra of topsoils. Geoderma, 2014, 214-215, 126-134.	5.1	46
21	Near infrared reflectance spectroscopy: A tool to characterize the composition of different types of exogenous organic matter and their behaviour in soil. Soil Biology and Biochemistry, 2011, 43, 197-205.	8.8	44
22	Determination of soil content in chlordecone (organochlorine pesticide) using near infrared reflectance spectroscopy (NIRS). Environmental Pollution, 2009, 157, 3120-3125.	7.5	43
23	AvaliaÃ§Ã£o de atributos fÃsicos e estoques de carbono e nitrogÃªnio em solos com queima e sem queima de canavial. Revista Brasileira De Ciencia Do Solo, 2008, 32, 789-800.	1.3	42
24	Performance comparison between a miniaturized and a conventional near infrared reflectance (NIR) spectrometer for characterizing soil carbon and nitrogen. Geoderma, 2019, 338, 422-429.	5.1	39
25	Effect of a legume cover crop (<I>Mucuna pruriens</I> var. <I>utilis</I>) on soil carbon in an Ultisol under maize cultivation in southern Benin. Soil Use and Management, 2004, 20, 231-239.	4.9	39
26	Prediction of soil organic and inorganic carbon concentrations in Tunisian samples by mid-infrared reflectance spectroscopy using a French national library. Geoderma, 2020, 375, 114469.	5.1	36
27	Pairwise comparison of soil organic particle-size distributions in native savannas and Eucalyptus plantations in Congo. Forest Ecology and Management, 2008, 255, 1050-1056.	3.2	33
28	Quantification of soil organic carbon stock in urban soils using visible and near infrared reflectance spectroscopy (VNIRS) in situ or in laboratory conditions. Science of the Total Environment, 2019, 686, 764-773.	8.0	27
29	Comparing near and Mid-Infrared Reflectance Spectroscopy for Determining Properties of Malagasy Soils, Using Global or LOCAL Calibration. Journal of Near Infrared Spectroscopy, 2013, 21, 495-509.	1.5	26
30	Improvement in spectral library-based quantification of soil properties using representative spiking and local calibration â€“ The case of soil inorganic carbon prediction by mid-infrared spectroscopy. Geoderma, 2020, 369, 114272.	5.1	21
31	Comparison between predictions of C and N contents in tropical soils using a Visâ€“NIR spectrometer including a fibre-optic probe versus a NIR spectrometer including a sample transport module. Biosystems Engineering, 2008, 100, 448-452.	4.3	20
32	Near infrared reflectance spectroscopy (NIRS) could be used for characterization of soil nematode community. Soil Biology and Biochemistry, 2011, 43, 1649-1659.	8.8	17
33	Ramial wood amendments (<scp>Piliostigma reticulatum</scp>) mitigate degradation of tropical soils but do not replenish nutrient exports. Land Degradation and Development, 2018, 29, 2694-2706.	3.9	15
34	La matiÃ©re organique soluble Ã l'eau chaude et la stabilityÃ© de l'agrÃ©gation. Aspects mÃ©thodologiques et application Ã des sols ferrallitiques du Congo. European Journal of Soil Science, 1997, 48, 239-247.	3.9	14
35	Prediction of total silicon concentrations in French soils using pedotransfer functions from mid-infrared spectrum and pedological attributes. Geoderma, 2018, 331, 70-80.	5.1	14
36	Effets deÂl'apport deÂbois ramÃ©al surÂlaÂplante etÂleÂsol: uneÂrevueÂdesÂrÃ©sultats expÃ©rimentaux. Cahiers Agricultures, 2010, 19, 280-287.	0.9	14

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37	Black carbon estimation in French calcareous soils using chemoâ€thermal oxidation method. Soil Use and Management, 2011, 27, 333-339.	4.9	13
38	Studying the Physical Protection of Soil Carbon with Quantitative Infrared Spectroscopy. Journal of Near Infrared Spectroscopy, 2016, 24, 199-214.	1.5	13
39	Prediction of soil carbon and nitrogen contents using visible and near infrared diffuse reflectance spectroscopy in varying salt-affected soils in Sine Saloum (Senegal). Catena, 2022, 212, 106075.	5.0	12
40	Effect of ramial wood amendment on sorghum production and topsoil quality in a Sudano-Sahelian ecosystem (central Burkina Faso). Agroforestry Systems, 2015, 89, 81-93.	2.0	11
41	Diversity and socio-economic aspects of oil palm agroforestry systems on the Allada plateau, southern Benin. Agroforestry Systems, 2020, 94, 41-56.	2.0	11
42	Infrared spectroscopy approaches support soil organic carbon estimations to evaluate land degradation. Land Degradation and Development, 2021, 32, 310-322.	3.9	11
43	Relations entre stabilitÃ© de l'agrÃ©gation et matiÃ¨re organique totale et soluble Ã l'eau chaude dans des sols ferrallitiques argileux (Congo, BrÃ©sil). Canadian Journal of Soil Science, 1999, 79, 561-569.	1.2	10
44	Determination of potential denitrification in a range of tropical topsoils using near infrared reflectance spectroscopy (NIRS). Applied Soil Ecology, 2010, 46, 81-89.	4.3	10
45	Dataset of visible-near infrared handheld and micro-spectrometers â€“ comparison of the prediction accuracy of sugarcane properties. Data in Brief, 2020, 31, 106013.	1.0	10
46	Using carbonate absorbance peak to select the most suitable regression model before predicting soil inorganic carbon concentration by mid-infrared reflectance spectroscopy. Geoderma, 2022, 405, 115403.	5.1	10
47	Use of Near Infrared Reflectance Spectroscopy (NIRS) for Predicting Soil Fertility and Historical Management. Communications in Soil Science and Plant Analysis, 2011, 42, 1692-1705.	1.4	9
48	A Congo Basin ethnographic analogue of pre-Columbian Amazonian raised fields shows the ephemeral legacy of organic matter management. Scientific Reports, 2020, 10, 10851.	3.3	9
49	Physical protection of soil carbon in macroaggregates does not reduce the temperature dependence of soil CO₂ emissions. Journal of Plant Nutrition and Soil Science, 2015, 178, 592-600.	1.9	8
50	Near Infrared Reflectance Spectroscopy Applied to Model the Transformation of Added Organic Materials in Soil. Journal of Near Infrared Spectroscopy, 2012, 20, 339-351.	1.5	6
51	Effect of a Legume Cover Crop on Carbon Storage and Erosion in an Ultisol under Maize Cultivation in Southern Benin. , 2005, , 143-155.		5
52	Effet Ã court terme de la mise en culture sur le statut organique et lâ€™agrÃ©gation dâ€™un sol ferrallitique argileux du Congo. Canadian Journal of Soil Science, 1996, 76, 493-499.	1.2	4
53	Comparative analysis of nutritional status and growth of immature oil palm in various intercropping systems in southern Benin. Experimental Agriculture, 2020, 56, 371-386.	0.9	3
54	Comparison of soil organic carbon stocks predicted using visible and near infrared reflectance (VNIR) spectra acquired in situ vs. on sieved dried samples: Synthesis of different studies. Soil Security, 2021, 5, 100024.	2.3	3

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55	Concurrent starch accumulation in stump and high fruit production in coffee (<i>Coffea) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5	3.1	2