isabelle Bertrand

List of Publications by Year
in descending order

59	2,488	159525	206029
papers	citations	30 h-index	48 g-index

59	59	59	2868
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Carbon and nitrogen mineralization in acidic, limed and calcareous agricultural soils: Apparent and actual effects. Soil Biology and Biochemistry, 2007, 39, 276-288.	4.2	166
2	Organic phosphorus in the terrestrial environment: a perspective on the state of the art and future priorities. Plant and Soil, 2018, 427, 191-208.	1.8	145
3	Chemical characteristics of phosphorus in alkaline soils from southern Australia. Soil Research, 2003, 41, 61.	0.6	138
4	Aboveground litter quality is a better predictor than belowground microbial communities when estimating carbon mineralization along a land-use gradient. Soil Biology and Biochemistry, 2016, 94, 48-60.	4.2	133
5	Can the Biochemical Features and Histology of Wheat Residues Explain their Decomposition in Soil?. Plant and Soil, 2006, 281, 291-307.	1.8	107
6	Eco-enzymatic stoichiometry and enzymatic vectors reveal differential C, N, P dynamics in decaying litter along a land-use gradient. Biogeochemistry, 2016, 129, 21-36.	1.7	106
7	Improving fertiliser efficiency on calcareous and alkaline soils with fluid sources of P, N and Zn. Plant and Soil, 2001, 236, 209-219.	1.8	87
8	Quality and decomposition in soil of rhizome, root and senescent leaf from Miscanthus x giganteus, as affected by harvest date and N fertilization. Plant and Soil, 2011, 338, 83-97.	1.8	80
9	High carbon use efficiency and low priming effect promote soil C stabilization under reduced tillage. Soil Biology and Biochemistry, 2018, 123, 64-73.	4.2	78
10	Title is missing!. Plant and Soil, 1999, 211, 111-119.	1.8	76
11	Use and abuse of isotopic exchange data in soil chemistry. Soil Research, 2002, 40, 1371.	0.6	74
12	The dynamics of soil micro-food web structure and functions vary according to litter quality. Soil Biology and Biochemistry, 2016, 95, 262-274.	4.2	74
13	Functional breadth and homeâ€field advantage generate functional differences among soil microbial decomposers. Ecology, 2016, 97, 1023-1037.	1.5	71
14	Impact of fine litter chemistry on lignocellulolytic enzyme efficiency during decomposition of maize leaf and root in soil. Biogeochemistry, 2014, 117, 169-183.	1.7	65
15	Impact of plant cell wall network on biodegradation in soil: Role of lignin composition and phenolic acids in roots from 16 maize genotypes. Soil Biology and Biochemistry, 2011, 43, 1544-1552.	4.2	59
16	New generation of controlled release phosphorus fertilizers based on biological macromolecules: Effect of formulation properties on phosphorus release. International Journal of Biological Macromolecules, 2020, 143, 153-162.	3.6	58
17	Properties of Coated Slow-Release Triple Superphosphate (TSP) Fertilizers Based on Lignin and Carrageenan Formulations. ACS Sustainable Chemistry and Engineering, 2019, 7, 10371-10382.	3.2	56
18	Enzymatic Strategies and Carbon Use Efficiency of a Litter-Decomposing Fungus Grown on Maize Leaves, Stems, and Roots. Frontiers in Microbiology, 2016, 7, 1315.	1.5	52

#	ARTICLE	IF	CITATIONS
19	With or without trees: Resistance and resilience of soil microbial communities to drought and heat stress in a Mediterranean agroforestry system. Soil Biology and Biochemistry, 2019, 129, 122-135.	4.2	52
20	Temporal dynamics of litter quality, soil properties and microbial strategies as main drivers of the priming effect. Geoderma, 2020, 377, 114576.	2.3	51
21	MiscanthusÂÃ—Âgiganteus leaf senescence, decomposition and C and N inputs to soil. GCB Bioenergy, 2012, 4, 698-707.	2.5	49
22	Can changes in litter quality drive soil fauna structure and functions?. Soil Biology and Biochemistry, 2017, 107, 94-103.	4.2	44
23	Soil enzymes in response to climate warming: Mechanisms and feedbacks. Functional Ecology, 2022, 36, 1378-1395.	1.7	44
24	Wetting-drying cycles do not increase organic carbon and nitrogen mineralization in soils with straw amendment. Geoderma, 2017, 304, 68-75.	2.3	40
25	Soil decomposition of wheat internodes of different maturity stages: Relative impact of the soluble and structural fractions. Bioresource Technology, 2009, 100, 155-163.	4.8	37
26	Stoichiometry constraints challenge the potential of agroecological practices for the soil C storage. A review. Agronomy for Sustainable Development, 2019, 39, 1.	2.2	37
27	Changes in P Bioavailability Induced by the Application of Liquid and Powder Sources of P, N and Zn Fertilizers in Alkaline Soils. Nutrient Cycling in Agroecosystems, 2006, 74, 27-40.	1.1	36
28	Comparing the effects of litter quantity and quality on soil biota structure and functioning: Application to a cultivated soil in Northern France. Applied Soil Ecology, 2016, 107, 261-271.	2.1	36
29	The rapid assessment of concentrations and solid phase associations of macro- and micronutrients in alkaline soils by mid-infrared diffuse reflectance spectroscopy. Soil Research, 2002, 40, 1339.	0.6	35
30	Decomposition in soil and chemical changes of maize roots with genetic variations affecting cell wall quality. European Journal of Soil Science, 2009, 60, 176-185.	1.8	35
31	Role of trees and herbaceous vegetation beneath trees in maintaining arbuscular mycorrhizal communities in temperate alley cropping systems. Plant and Soil, 2020, 453, 153-171.	1.8	34
32	Nitrogen alters microbial enzyme dynamics but not lignin chemistry during maize decomposition. Biogeochemistry, 2016, 128, 171-186.	1.7	31
33	Separate effects of the biochemical quality and N content of crop residues on C and N dynamics in soil. Biology and Fertility of Soils, 2007, 43, 797-804.	2.3	28
34	Can the comparison of above- and below-ground litter decomposition improve our understanding of bacterial and fungal successions?. Soil Biology and Biochemistry, 2019, 132, 24-27.	4.2	27
35	Co-localised phosphorus mobilization processes in the rhizosphere of field-grown maize jointly contribute to plant nutrition. Soil Biology and Biochemistry, 2022, 165, 108497.	4.2	27
36	Interacting Microbe and Litter Quality Controls on Litter Decomposition: A Modeling Analysis. PLoS ONE, 2014, 9, e108769.	1.1	25

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37	Spatial heterogeneity of soil quality within a Mediterranean alley cropping agroforestry system: Comparison with a monocropping system. European Journal of Soil Biology, 2021, 105, 103330.	1.4	22
38	Dissolution of iron oxyhydroxide in the rhizosphere of various crop species. Journal of Plant Nutrition, 2000, 23, 1559-1577.	0.9	18
39	Impact of Plasticizers on Ligninâ€“Carrageenan Formulation Properties and on Phosphorus Release from a Coated Triple Superphosphate Fertilizer. Industrial & Engineering Chemistry Research, 2020, 59, 14172-14179.	1.8	17
40	Soil biodegradation of maize root residues: Interaction between chemical characteristics and the presence of colonizing micro-organisms. Soil Biology and Biochemistry, 2009, 41, 1253-1261.	4.2	16
41	Regulation of carbon and nitrogen exchange rates in biological soil crusts by intrinsic and land use factors in the Sahel area. Soil Biology and Biochemistry, 2014, 72, 133-144.	4.2	13
42	Sown understory vegetation strips impact soil chemical fertility, associated microorganisms and macro-invertebrates in two temperate alley cropping systems. Agroforestry Systems, 2020, 94, 1851-1864.	0.9	12
43	Trees and herbaceous vegetation strips both contribute to changes in soil fertility and soil organism communities in an agroforestry system. Plant and Soil, 2021, 463, 537-553.	1.8	12
44	Carbon and nutrient dynamics in short-rotation coppice of poplar and willow in a converted marginal land, a case study in central France. Nutrient Cycling in Agroecosystems, 2016, 106, 293-309.	1.1	11
45	Agroecosystem diversification with legumes or non-legumes improves differently soil fertility according to soil type. Science of the Total Environment, 2021, 795, 148934.	3.9	11
46	Assessment of Ligninâ€Related Compounds in Soils and Maize Roots by Alkaline Oxidations and Thioacidolysis. Soil Science Society of America Journal, 2011, 75, 542-552.	1.2	10
47	A Congo Basin ethnographic analogue of pre-Columbian Amazonian raised fields shows the ephemeral legacy of organic matter management. Scientific Reports, 2020, 10, 10851.	1.6	9
48	Inter-laboratory validation of an ISO test method for measuring enzyme activities in soil samples using colorimetric substrates. Environmental Science and Pollution Research, 2022, 29, 29348-29357.	2.7	8
49	Seasonal variations in macrofauna distribution according to the distance from a herbaceous strip in a Mediterranean alley cropping plot. Applied Soil Ecology, 2022, 170, 104309.	2.1	7
50	Root litter decomposition in a sub-Sahelian agroforestry parkland dominated by Faidherbia albida. Journal of Arid Environments, 2022, 198, 104696.	1.2	6
51	Câ€“Nâ€“P Decoupling Processes Linked to Arable Cropping Management Systems in Relation With Intensification of Production. , 2019, , 35-53.		5
52	Functional breadth and home-field advantage generate functional differences among soil microbial decomposers. Ecology, 2016, , .	1.5	4
53	Impact of biochar and manure application on in situ carbon dioxide flux, microbial activity, and carbon budget in degraded cropland soil of southern India. Land Degradation and Development, 0, , .	1.8	4
54	Optimal preprocessing and FCM clustering of MIR, NIR and combined MIR-NIR spectra for classification of maize roots. , 2014, , .		3

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55	Evaluation of Lignocellulosic Biomass Degradation by Combining Mid- and Near-Infrared Spectra by the Outer Product and Selecting Discriminant Wavenumbers Using a Genetic Algorithm. Applied Spectroscopy, 2015, 69, 1303-1312.	1.2	3
56	Classification of lignocellulosic biomass by weightedâ€covariance factor fuzzy Câ€means clustering of midâ€infrared and nearâ€infrared spectra. Journal of Chemometrics, 2017, 31, e2865.	0.7	3
57	Impact of epiphytic and endogenous enzyme activities of senescent maize leaves and roots on the soil biodegradation process. Comptes Rendus - Biologies, 2011, 334, 824-836.	0.1	1
58	Features' selection based on weighted distance minimization, application to biodegradation process evaluation. , 2015, , .		0
59	Weighted-covariance factor fuzzy c-means clustering. , 2015, , .		0