Christian Morel

List of Publications by Citations

63 papers	1,679 citations	23 h-index	38 g-index
64 ext. papers	1,897 ext. citations	4.5 avg, IF	4.48 L-index

#	Paper	IF	Citations
63	Soil and fertilizer phosphorus: Effects on plant P supply and mycorrhizal development. *Canadian Journal of Plant Science*, **2005**, 85, 3-14	1	170
62	Assessing turnover of microbial biomass phosphorus: Combination of an isotopic dilution method with a mass balance model. *Soil Biology and Biochemistry*, **2010**, 42, 2231-2240	7.5	93
61	The Use of Tracers to Investigate Phosphate Cycling in Soil–Plant Systems. *Soil Biology*, **2011**, 59-91	1	68
60	Evaluation of the phosphorus status of P-deficient podzols in temperate pine stands: combining isotopic dilution and extraction methods. *Biogeochemistry*, **2009**, 92, 183-200	3.8	66
59	Long-term organic phosphorus mineralization in Spodosols under forests and its relation to carbon and nitrogen mineralization. *Soil Biology and Biochemistry*, **2010**, 42, 1479-1490	7.5	63
58	Long term impact of tillage practices and biennial P and N fertilization on maize and soybean yields and soil P status. *Field Crops Research*, **2012**, 133, 10-22	5.5	59
57	Interference of colloidal particles in the determination of orthophosphate concentrations in soil water extracts. *Communications in Soil Science and Plant Analysis*, **1998**, 29, 1091-1105	1.5	57
56	Relative contribution of seed phosphorus reserves and exogenous phosphorus uptake to maize (Zea mays L.) nutrition during early growth stages. *Plant and Soil*, **2011**, 346, 231-244	4.2	55
55	Process-Based Assessment of Phosphorus Availability in a Low Phosphorus Sorbing Forest Soil using Isotopic Dilution Methods. *Soil Science Society of America Journal*, **2009**, 73, 2131-2142	2.5	55
54	Phosphorus budget in the Marne Watershed (France): urban vs. diffuse sources, dissolved vs. particulate forms. *Biogeochemistry*, **2005**, 72, 35-66	3.8	54
53	Microbial processes controlling P availability in forest spodosols as affected by soil depth and soil properties. *Soil Biology and Biochemistry*, **2012**, 44, 39-48	7.5	52
52	Assessment and Modeling of Soil Available Phosphorus in Sustainable Cropping Systems. *Advances in Agronomy*, **2013**, 122, 85-126	7.7	48
51	Plant-availability of phosphorus recycled from pig manures and dairy effluents as assessed by isotopic labeling techniques. *Geoderma*, **2014**, 232-234, 24-33	6.7	47
50	Potential role of phosphate buffering capacity of soils in fertilizer management strategies fitted to environmental goals. *Journal of Plant Nutrition and Soil Science*, **2003**, 166, 409-415	2.3	42
49	Forest floor contribution to phosphorus nutrition: experimental data. *Annals of Forest Science*, **2009**, 66, 510-510	3.1	37
48	Tillage practices of a clay loam soil affect soil aggregation and associated C and P concentrations. *Geoderma*, **2011**, 164, 225-231	6.7	36
47	A two-dimensional simulation model of phosphorus uptake including crop growth and P-response. *Ecological Modelling*, **2008**, 210, 453-464	3	36

46	Pourquoi choisir la m□thode Olsen pour estimer le phosphore « assimilable » des sols ?. *Agronomy for Sustainable Development*, **1988**, 8, 577-584		31
45	Can the isotopic exchange kinetic method be used in soils with a very low water extractable phosphate content and a high sorbing capacity for phosphate ions?. *Geoderma*, **2013**, 200-201, 120-129	6.7	30
44	Dynamics of diffusive soil phosphorus in two grassland experiments determined both in field and laboratory conditions. *Agriculture, Ecosystems and Environment*, **2007**, 119, 60-74	5.7	30
43	Maize (Zea mays L.) endogenous seed phosphorus remobilization is not influenced by exogenous phosphorus availability during germination and early growth stages. *Plant and Soil*, **2012**, 357, 13-24	4.2	24
42	Process-based mass-balance modeling of soil phosphorus availability in a grassland fertilized with N and P. *Nutrient Cycling in Agroecosystems*, **2012**, 92, 273-287	3.3	23
41	Effect of incorporation of Brassica napus L. residues in soils on mycorrhizal fungus colonisation of roots and phosphorus uptake by maize (Zea mays L.). *European Journal of Agronomy*, **2007**, 26, 113-120	5	23
40	The long-term effects of tillage practice and phosphorus fertilization on the distribution and morphology of corn root. *Plant and Soil*, **2017**, 412, 97-114	4.2	22
39	Comparison of soluble P in soil water extracts determined by ion chromatography, colorimetric, and inductively coupled plasma techniques in PPB range. *Communications in Soil Science and Plant Analysis*, **2001**, 32, 2241-2253	1.5	22
38	Long-term tillage and synthetic fertilization affect soil functioning and crop yields in a corn□oybean rotation in eastern Canada. *Canadian Journal of Soil Science*, **2014**, 94, 365-376	1.4	21
37	Soybean root traits after 24 years of different soil tillage and mineral phosphorus fertilization management. *Soil and Tillage Research*, **2017**, 165, 258-267	6.5	21
36	Nitrogen Fertilization Effects on Grassland Soil Acidification: Consequences on Diffusive Phosphorus Ions. *Soil Science Society of America Journal*, **2011**, 75, 112-120	2.5	21
35	Predicting available phosphate ions from physical□hemical soil properties in acidic sandy soils under pine forests. *Journal of Soils and Sediments*, **2011**, 11, 452-466	3.4	21
34	Quantifying gross mineralisation of P in dead soil organic matter: Testing an isotopic dilution method. *Geoderma*, **2010**, 158, 163-172	6.7	21
33	Does long contact with the soil improve the efficiency of rock phosphate? Results of isotopic studies. *Fertilizer Research*, **1988**, 17, 3-19		20
32	Critical plant and soil phosphorus for wheat, maize, and rapeseed after 44 years of P fertilization. *Nutrient Cycling in Agroecosystems*, **2018**, 112, 417-433	3.3	20
31	Maize seedling phosphorus nutrition: Allocation of remobilized seed phosphorus reserves and external phosphorus uptake to seedling roots and shoots during early growth stages. *Plant and Soil* , **2013**, 371, 327-338	4.2	19
30	Contribution of phosphorus issued from crop residues to plant nutrition. *Soil Science and Plant Nutrition*, **1988**, 34, 481-491	1.6	19
29	Soil test phosphorus and cumulative phosphorus budgets in fertilized grassland. *Ambio*, **2015**, 44 Suppl 2, S252-62	6.5	18

28	Solubility and mobility of phosphorus recycled from dairy effluents and pig manures in incubated soils with different characteristics. *Nutrient Cycling in Agroecosystems*, **2014**, 99, 1-15	3.3	18
27	Assessing phosphorus management among organic farming systems: a farm input, output and budget analysis in southwestern France. *Nutrient Cycling in Agroecosystems*, **2012**, 92, 225-236	3.3	18
26	Contributions of microbial and physicalchemical processes to phosphorus availability in Podzols and Arenosols under a temperate forest. *Geoderma*, **2013**, 211-212, 18-27	6.7	18
25	Soil Nutrients and Other Major Properties in Grassland Fertilized with Nitrogen and Phosphorus. *Soil Science Society of America Journal*, **2013**, 77, 643-652	2.5	18
24	Modeling of phosphorus dynamics in contrasting agroecosystems using long-term field experiments. *Canadian Journal of Soil Science*, **2014**, 94, 377-387	1.4	17
23	Phosphorus uptake and partitioning in two durum wheat cultivars with contrasting biomass allocation as affected by different P supply during grain filling. *Plant and Soil*, **2020**, 449, 179-192	4.2	13
22	Relevance of a perchloric acid extraction scheme to determine mineral and organic phosphorus in swine slurry. *Bioresource Technology*, **2008**, 99, 1319-24	11	13
21	Modeling forest floor contribution to phosphorus supply to maritime pine seedlings in two-layered forest soils. *Ecological Modelling*, **2010**, 221, 927-935	3	12
20	Effects of a bacterivorous nematode on rice 32P uptake and root architecture in a high P-sorbing ferrallitic soil. *Soil Biology and Biochemistry*, **2018**, 122, 39-49	7.5	11
19	Relationship between Soil Phosphorus and Phosphorus Budget in Grass Sward with Varying Nitrogen Applications. *Soil Science Society of America Journal*, **2014**, 78, 1481-1488	2.5	11
18	Dermination par traage isotopique de la valeur fertilisante du phosphate alumino-calcique : comparaison avec dautres formes. *Agronomy for Sustainable Development*, **1988**, 8, 47-54		10
17	Drivers of Plant-Availability of Phosphorus from Thermally Conditioned Sewage Sludge as Assessed by Isotopic Labeling. *Frontiers in Nutrition*, **2016**, 3, 19	6.2	10
16	Effects of the earthworm Pontoscolex corethrurus on rice P nutrition and plant-available soil P in a tropical Ferralsol. *Applied Soil Ecology*, **2021**, 160, 103867	5	9
15	Importance of the vegetation-groundwater-stream continuum to understand transformation of biogenic carbon in aquatic systems - A case study based on a pine-maize comparison in a lowland sandy watershed (Landes de Gascogne, SW France). *Science of the Total Environment*, **2019**, 661, 613-629	10.2	8
14	Seed phosphorus remobilization is not a major limiting step for phosphorus nutrition during early growth of maize. *Journal of Plant Nutrition and Soil Science*, **2012**, 175, 805-809	2.3	7
13	Remobilization of seed phosphorus reserves and their role in attaining phosphorus autotrophy in maize (Zea mays L.) seedlings. *Seed Science Research*, **2014**, 24, 187-194	1.3	6
12	Process-based mass-balance modeling of soil phosphorus availability: Testing different scenarios in a long-term maize monoculture. *Geoderma*, **2015**, 243-244, 41-49	6.7	6
11	EFFECT OF POOLING SOIL SAMPLES ON THE DIFFUSIVE DYNAMICS OF PHOSPHATE IONIC SPECIES. *Soil Science*, **2007**, 172, 614-622	0.9	6

10	Long-term modeling of phosphorus spatial distribution in the no-tilled soil profile. *Soil and Tillage Research*, **2019**, 187, 119-134	6.5	6
9	Contribution of External and Internal Phosphorus Sources to Grain P Loading in Durum Wheat (L.) Grown Under Contrasting P Levels. *Frontiers in Plant Science*, **2020**, 11, 870	6.2	3
8	Phosphate fertilizer premixing with farmyard manure enhances phosphorus availability in calcareous soil for higher wheat productivity. *Environmental Science and Pollution Research*, **2019**, 26, 32276-32284	5.1	3
7	Calibration of maize phosphorus status by plant-available soil P assessed by common and process-based approaches. Is it soil-specific or not?. *European Journal of Agronomy*, **2021**, 122, 126174	5	3
6	Changes in the phosphorus availability of a chemically precipitated urban sewage sludge as a result of different dewatering processes. *Waste Management and Research*, **2000**, 18, 249-258	4	2
5	Conversion equations between Olsen-P and other methods used to assess plant available soil phosphorus in Europe A review. *Geoderma*, **2021**, 401, 115339	6.7	2
4	An 18-year field experiment to assess how various types of organic waste used at European regulatory rates sustain crop yields and C, N, P, and K dynamics in a French calcareous soil. *Soil and Tillage Research*, **2022**, 221, 105415	6.5	2
3	Isotopic Exchange Kinetics Method for Assessing Cadmium Availability in Soils **2001**,		1
2	Thresholds of target phosphorus fertility classes in European fertilizer recommendations in relation to critical soil test phosphorus values derived from the analysis of 55 European long-term field experiments. *Agriculture, Ecosystems and Environment*, **2022**, 332, 107926	5.7	1
1	Plant and soil tests to optimize phosphorus fertilization management of grasslands. *European Journal of Agronomy*, **2021**, 125, 126249	5	0