Alain Pierret

List of Publications by Year
in descending order

74 papers	3,456 citations	147726 31 h-index	143943 57 g-index
74 all docs	74 docs citations	74 times ranked	3846 citing authors

#	Article	IF	Citations
1	Does forest conversion to tree plantations affect properties of subsoil horizons? Findings from mainland Southeast Asia (Lao PDR, Yunnan-China). Geoderma Regional, 2022, 28, e00457.	0.9	1
2	Distribution of Burkholderia pseudomallei within a 300-cm deep soil profile: implications for environmental sampling. Scientific Reports, 2022, 12, .	1.6	5
3	<i>Escherichia coli</i> concentration, multiscale monitoring over the decade 2011â€“2021 in the Mekong River basin, Lao PDR. Earth System Science Data, 2022, 14, 2883-2894.	3.7	0
4	Will deeper roots be enough? Engineering drought-resistant crops will entail in-depth understanding of root hydraulic architecture. A Commentary on â€˜Root and xylem anatomy varies with root length, root order, soil depth and environmentâ€™. Annals of Botany, 2022, 130, xv-xvii.	1.4	6
5	Whole-Genome Assemblies of 16 Burkholderia pseudomallei Isolates from Rivers in Laos. Microbiology Resource Announcements, 2021, 10, .	0.3	3
6	Can Organic Amendments Improve Soil Physical Characteristics and Increase Maize Performances in Contrasting Soil Water Regimes?. Agriculture (Switzerland), 2021, 11, 132.	1.4	6
7	Effects of hydrological regime and land use on in-stream Escherichia coli concentration in the Mekong basin, Lao PDR. Scientific Reports, 2021, 11, 3460.	1.6	11
8	The Multiscale TROPIcal CatchmentS critical zone observatory Mâ€TROPICS dataset II : Land use, hydrology and sediment production monitoring in Houay Pano, northern Lao PDR. Hydrological Processes, 2021, 35, e14126.	1.1	9
9	Decay Rate of Escherichia coli in a Mountainous Tropical Headwater Wetland. Water (Switzerland), 2021, 13, 2068.	1.2	5
10	Understory Limits Surface Runoff and Soil Loss in Teak Tree Plantations of Northern Lao PDR. Water (Switzerland), 2020, 12, 2327.	1.2	13
11	Digging Deeper for Agricultural Resources, the Value of Deep Rooting. Trends in Plant Science, 2020, 25, 406-417.	4.3	127
12	Linking tree-rooting profiles to leaf phenology: a first attempt on Tectona Grandis Linn F.. Trees - Structure and Function, 2019, 33, 1491-1504.	0.9	3
13	Discovery of an outstanding Hoabinhian site from the Late Pleistocene at Doi Pha Kan (Lampang) Tj ETQq1 1 0.784314 rgBT /Overloc	0.2	19
14	Discovery of a new open-air Hoabinhian site in Luang Prabang province (Lao PDR). Dating and technological study of the lithic assemblage. Comptes Rendus - Palevol, 2019, 18, 142-157.	0.1	11
15	Hydrologic regulation of plant rooting depth: Breakthrough or observational conundrum?. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2669-E2670.	3.3	5
16	Linking crop structure, throughfall, soil surface conditions, runoff and soil detachment: 10 land uses analyzed in Northern Laos. Science of the Total Environment, 2018, 616-617, 1330-1338.	3.9	57
17	Interacting land use and soil surface dynamics control groundwater outflow in a montane catchment of the lower Mekong basin. Agriculture, Ecosystems and Environment, 2018, 268, 90-102.	2.5	20
18	Rivers as carriers and potential sentinels for Burkholderia pseudomallei in Laos. Scientific Reports, 2018, 8, 8674.	1.6	19

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19	Evaluation of consensus method for the culture of Burkholderia pseudomallei in soil samples from Laos. Wellcome Open Research, 2018, 3, 132.	0.9	10
20	Evaluation of consensus method for the culture of Burkholderia pseudomallei in soil samples from Laos. Wellcome Open Research, 2018, 3, 132.	0.9	4
21	Hydrological modeling of Fecal Indicator Bacteria in a tropical mountain catchment. Water Research, 2017, 119, 102-113.	5.3	43
22	Vegetation as a driver of temporal variations in slope stability: The impact of hydrological processes. Geophysical Research Letters, 2017, 44, 4897-4907.	1.5	61
23	The perforated stones of the Doi Pha Kan burials (Northern Thailand): A Mesolithic singularity?. Comptes Rendus - Palevol, 2017, 16, 351-361.	0.1	11
24	Burkholderia pseudomallei in a lowland rice paddy: seasonal changes and influence of soil depth and physico-chemical properties. Scientific Reports, 2017, 7, 3031.	1.6	33
25	From shifting cultivation to teak plantation: effect on overland flow and sediment yield in a montane tropical catchment. Scientific Reports, 2017, 7, 3987.	1.6	41
26	Contradictory hydrological impacts of afforestation in the humid tropics evidenced by long-term field monitoring and simulation modelling. Hydrology and Earth System Sciences, 2016, 20, 2691-2704.	1.9	69
27	Hydrological Regime and Water Shortage as Drivers of the Seasonal Incidence of Diarrheal Diseases in a Tropical Montane Environment. PLoS Neglected Tropical Diseases, 2016, 10, e0005195.	1.3	43
28	Understanding deep roots and their functions in ecosystems: an advocacy for more unconventional research. Annals of Botany, 2016, 118, 621-635.	1.4	211
29	An outlook on prehistoric research in Laos: An inventory and some perspectives. Quaternary International, 2016, 416, 177-182.	0.7	4
30	Land use and soil type determine the presence of the pathogen Burkholderia pseudomallei in tropical rivers. Environmental Science and Pollution Research, 2016, 23, 7828-7839.	2.7	33
31	Effect of land use and hydrological processes on Escherichia coli concentrations in streams of tropical, humid headwater catchments. Scientific Reports, 2016, 6, 32974.	1.6	47
32	Seasonal Patterns of Fine Root Production and Turnover in a Mature Rubber Tree (Hevea brasiliensis) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 in Plant Science, 2015, 6, 1022.	1.7	43
33	Evaluation of Molecular Methods To Improve the Detection of Burkholderia pseudomallei in Soil and Water Samples from Laos. Applied and Environmental Microbiology, 2015, 81, 3722-3727.	1.4	28
34	Root functional parameters along a landâ€use gradient: evidence of a communityâ€level economics spectrum. Journal of Ecology, 2015, 103, 361-373.	1.9	166
35	Melioidosis in Laos. , 2015, , 89-104.		2
36	IJ_Rhizo: an open-source software to measure scanned images of root samples. Plant and Soil, 2013, 373, 531-539.	1.8	100

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37	How to study deep rootsâ€"and why it matters. Frontiers in Plant Science, 2013, 4, 299.	1.7	222
38	Hydrological impact of warâ€induced deforestation in the Mekong Basin. Ecohydrology, 2013, 6, 901-903.	1.1	3
39	Multi-millennial occupation in northwestern Laos: Preliminary results of excavations at the Ngeubhinh Mouxeu rock-shelter. Comptes Rendus - Palevol, 2012, 11, 305-313.	0.1	12
40	Irreconcilable differences between stratigraphy and direct dating cast doubts upon the status of Tam Pa Ling fossil. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E3523; author reply E3524â€"5.	3.3	14
41	Spatial distribution of Hevea brasiliensis trunk phloem necrosis within a plot: aggregation but no evidence of constraint on cumulated growth. Forest Pathology, 2011, 41, 90-100.	0.5	3
42	Land Use and Water Quality Along a Mekong Tributary in Northern Lao P.D.R.. Environmental Management, 2011, 47, 291-302.	1.2	47
43	Possibilities of carbon and nitrogen sequestration under conventional tillage and no-till cover crop farming (Mekong valley, Laos). Agriculture, Ecosystems and Environment, 2010, 136, 148-161.	2.5	35
44	Estimating root elongation rates from morphological measurements of the root tip. Plant and Soil, 2010, 328, 35-44.	1.8	28
45	Effects of corn (Zea mays L.) on the local and overall root development of young rubber tree (Hevea) Tj ETQq1 1 0.784314 rgBT /Over	1.8	7
46	Conflict, migration and landâ€cover changes in Indochina: a hydrological assessment. Ecohydrology, 2010, 3, 382-391.	1.1	29
47	Contiguous multiâ€proxy analyses (Xâ€radiography, diatom, pollen, and microcharcoal) of Holocene archaeological features at Kuk Swamp, Upper Wahgi Valley, Papua New Guinea. Geoarchaeology - an International Journal, 2009, 24, 715-742.	0.7	12
48	Soil Exploration and Resource Acquisition by Plant Roots: An Architectural and Modelling Point of View. , 2009, , 583-600.		1
49	Potential and limitations of Payments for Environmental Services (PES) as a means to manage watershed services in mainland Southeast Asia. International Journal of the Commons, 2009, 3, 16.	0.6	20
50	Multi-spectral imaging of rhizobox systems: New perspectives for the observation and discrimination of rhizosphere components. Plant and Soil, 2008, 310, 263-268.	1.8	12
51	Trapping Efficiencies of Cultivated and Natural Riparian Vegetation of Northern Laos. Journal of Environmental Quality, 2008, 37, 889-897.	1.0	26
52	Root Functional Architecture: A Framework for Modeling the Interplay between Roots and Soil. Vadose Zone Journal, 2007, 6, 269-281.	1.3	166
53	Interactions between root growth, slope and soil detachment depending on land use: a case study in a small mountain catchment of Northern Laos. Plant and Soil, 2007, 301, 51-64.	1.8	26
54	Water Uptake by Plant Roots: I â€" Formation and Propagation of a Water Extraction Front in Mature Root Systems as Evidenced by 2D Light Transmission Imaging. Plant and Soil, 2006, 283, 83-98.	1.8	128

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55	Water Uptake by Plant Roots: II â€“ Modelling of Water Transfer in the Soil Root-system with Explicit Account of Flow within the Root System â€“ Comparison with Experiments. Plant and Soil, 2006, 283, 99-117.	1.8	281
56	Spatio-temporal Variations in Axial Conductance of Primary and First-order Lateral Roots of a Maize Crop as Predicted by a Model of the Hydraulic Architecture of Root Systems. Plant and Soil, 2006, 282, 117-126.	1.8	26
57	Conventional detection methodology is limiting our ability to understand the roles and functions of fine roots. New Phytologist, 2005, 166, 967-980.	3.5	160
58	Simultaneous X-ray imaging of plant root growth and water uptake in thin-slab systems. Plant and Soil, 2003, 255, 361-373.	1.8	35
59	Characterisation of the three-dimensional structure of earthworm burrow systems using image analysis and mathematical morphology. Biology and Fertility of Soils, 2003, 38, 301-310.	2.3	44
60	Simultaneous X-ray imaging of plant root growth and water uptake in thin-slab systems. , 2003, , 361-373.		4
61	Observing plant roots in their environment: current imaging options and specific contribution of two-dimensional approaches. Agronomy for Sustainable Development, 2003, 23, 471-479.	0.8	39
62	Soil exploration and resource acquisition by plant roots: an architectural and modelling point of view. Agronomy for Sustainable Development, 2003, 23, 419-431.	0.8	90
63	3D reconstruction and quantification of macropores using X-ray computed tomography and image analysis. Geoderma, 2002, 106, 247-271.	2.3	230
64	Influence of xylem development on axial hydraulic conductance within Prunus root systems. Trees - Structure and Function, 2002, 16, 479-487.	0.9	33
65	Title is missing!. Plant and Soil, 2002, 238, 11-20.	1.8	82
66	Testing local dependence of spatial structures on images. Journal of Microscopy, 2000, 200, 32-41.	0.8	13
67	Title is missing!. Plant and Soil, 2000, 223, 101-117.	1.8	51
68	Evolution of burrow systems after the accidental introduction of a new earthworm species into a Swiss pre-alpine meadow. Biology and Fertility of Soils, 2000, 31, 494-500.	2.3	18
69	MEASUREMENT OF ROOT LENGTH DENSITY IN INTACT SAMPLES USING X-RADIOGRAPHY AND IMAGE ANALYSIS. Image Analysis and Stereology, 2000, 19, 145.	0.4	11
70	Title is missing!. Plant and Soil, 1999, 211, 51-58.	1.8	73
71	X-ray computed tomography to quantify tree rooting spatial distributions. Geoderma, 1999, 90, 307-326.	2.3	71
72	3D skeleton reconstructions of natural earthworm burrow systems using CAT scan images of soil cores. Biology and Fertility of Soils, 1998, 27, 51-59.	2.3	94

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73	Calibration and Visualization of Wall-Thickness and Porosity Distributions of Ceramics Using X-radiography and Image Processing. Journal of Archaeological Science, 1996, 23, 419-428.	1.2	28
74	Quantification of Orientation of Pore Patterns in X-ray Images of Deformed Clay. Microscopy Microanalysis Microstructures, 1996, 7, 421-431.	0.4	13