Klaus Reichardt

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1306905/publications.pdf

Version: 2024-02-01

108	2,105	279798	289244
papers	citations	23 h-index	40 g-index

111	111	111	1920
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Watershed scale temporal stability of soil water content. Geoderma, 2010, 158, 181-198.	5.1	183
2	Time stability of soil water storage measured by neutron probe and the effects of calibration procedures in a small watershed. Catena, 2009, 79, 72-82.	5.0	119
3	Foliar and Seed Application of Amino Acids Affects the Antioxidant Metabolism of the Soybean Crop. Frontiers in Plant Science, 2017, 8, 327.	3.6	119
4	Using a New Criterion to Identify Sites for Mean Soil Water Storage Evaluation. Soil Science Society of America Journal, 2010, 74, 762-773.	2.2	91
5	Spatio-temporal variability behavior of land surface soil water content in shrub- and grass-land. Geoderma, 2011, 162, 260-272.	5.1	78
6	Twenty-five years of computed tomography in soil physics: A literature review of the Brazilian contribution. Soil and Tillage Research, 2010, 110, 197-210.	5.6	64
7	Toward sustainable soil and water resources use in China's highly erodible semi-arid loess plateau. Geoderma, 2010, 155, 93-100.	5.1	57
8	Gamma ray computed tomography to evaluate wetting/drying soil structure changes. Nuclear Instruments & Methods in Physics Research B, 2005, 229, 443-456.	1.4	55
9	State-space approach for the analysis of soil water content and temperature in a sugarcane crop. Scientia Agricola, 1999, 56, 1215-1221.	1.2	52
10	Soil water content temporal-spatial variability of the surface layer of a Loess Plateau hillside in China. Scientia Agricola, 2008, 65, 277-289.	1.2	52
11	Assessment of soil structure repair due to wetting and drying cycles through 2D tomographic image analysis. Soil and Tillage Research, 2007, 94, 537-545.	5.6	51
12	Spatial variability of soil hydraulic properties on a steep slope in the loess plateau of China. Scientia Agricola, 2008, 65, 268-276.	1.2	48
13	Seed and Foliar Application of Amino Acids Improve Variables of Nitrogen Metabolism and Productivity in Soybean Crop. Frontiers in Plant Science, 2018, 9, 396.	3.6	48
14	Soil water retention curve determined by gamma-ray beam attenuation. Soil and Tillage Research, 2005, 82, 89-97.	5.6	44
15	Soil porous system changes quantified by analyzing soil water retention curve modifications. Soil and Tillage Research, 2008, 100, 72-77.	5.6	44
16	Field spatial and temporal patterns of soil water content and bulk density changes. Scientia Agricola, 2006, 63, 55-64.	1.2	43
17	Fertilizer nitrogen in fertigated coffee crop: Absorption changes in plant compartments over time. Field Crops Research, 2011, 124, 369-377.	5.1	34
18	Straw Removal Effects on Soil Water Dynamics, Soil Temperature, and Sugarcane Yield in South-Central Brazil. Bioenergy Research, 2019, 12, 749-763.	3.9	32

#	Article	IF	Citations
19	Variability of water balance components in a coffee crop in Brazil. Scientia Agricola, 2006, 63, 105-114.	1.2	30
20	Method to estimate soil macroporosity and microporosity based on sand content and bulk density. Revista Brasileira De Ciencia Do Solo, 2011, 35, 447-459.	1.3	30
21	State-space approach to evaluate effects of land levelling on the spatial relationships of soil properties of a lowland area. Soil and Tillage Research, 2015, 145, 135-147.	5.6	27
22	Amino Acids as Stress Reducers in Soybean Plant Growth Under Different Water-Deficit Conditions. Journal of Plant Growth Regulation, 2020, 39, 905-919.	5.1	26
23	Damage to soil physical properties caused by soil sampler devices as assessed by gamma ray computed tomography. Soil Research, 2004, 42, 857.	1.1	25
24	General procedure to initialize the cyclic soil water balance by the Thornthwaite and Mather method. Scientia Agricola, 2010, 67, 87-95.	1.2	25
25	Hydraulic variability in space and time in a dark red latosol of the tropics. Geoderma, 1993, 60, 159-168.	5.1	24
26	Volatilization of Ammonia Derived from Fertilizer and Its Reabsorption by Coffee Plants. Communications in Soil Science and Plant Analysis, 2007, 38, 1741-1751.	1.4	24
27	UNSATURATED HYDRAULIC CONDUCTIVITY DETERMINATION BY A SCALING TECHNIQUE. Soil Science, 1975, 120, 165-168.	0.9	23
28	Biomass and potential energy yield of perennial woody energy crops under reduced planting spacing. Renewable Energy, 2020, 153, 1238-1250.	8.9	23
29	Growth, development, and fertilizer-15N recovery by the coffee plant. Scientia Agricola, 2007, 64, 541-547.	1.2	19
30	Gamma-ray computed tomography to characterize soil surface sealing. Applied Radiation and Isotopes, 2002, 57, 375-380.	1.5	18
31	Gamma-ray-computed tomography to investigate compaction on sewage-sludge-treated soil. Applied Radiation and Isotopes, 2003, 59, 17-25.	1.5	18
32	Application of Î³-ray computed tomography to analysis of soil structure before density evaluations. Applied Radiation and Isotopes, 2005, 63, 505-511.	1.5	18
33	Fertilizer 15N balance in a coffee cropping system: a case study in Brazil. Revista Brasileira De Ciencia Do Solo, 2008, 32, 1459-1469.	1.3	17
34	Pore system changes of damaged Brazilian oxisols and nitosols induced by wet-dry cycles as seen in 2-D micromorphologic image analysis. Anais Da Academia Brasileira De Ciencias, 2009, 81, 151-161.	0.8	17
35	Multivariate and geostatistical analyses to evaluate lowland soil levelling effects on physico-chemical properties. Soil and Tillage Research, 2016, 156, 63-73.	5.6	17
36	An Emerging Technology for Scaling Field Soil-Water Behavior. , 1998, , 136-166.		16

#	Article	IF	Citations
37	New Analytic Solution Related to the Richards, Philip, and Greenâ€“Ampt Equations for Infiltration. Vadose Zone Journal, 2009, 8, 127-135.	2.2	16
38	Growing degree-days for the â€˜Niagara Rosadaâ€™ grapevine pruned in different seasons. International Journal of Biometeorology, 2012, 56, 823-830.	3.0	16
39	Nitrogen fertilizer (15N) leaching in a central pivot fertigated coffee crop. Revista Ceres, 2012, 59, 466-475.	0.4	16
40	Identifying regionalized co-variate driving factors to assess spatial distributions of saturated soil hydraulic conductivity using multivariate and state-space analyses. Catena, 2020, 191, 104583.	5.0	16
41	Revisiting Field Capacity (FC): variation of definition of FC and its estimation from pedotransfer functions. Revista Brasileira De Ciencia Do Solo, 2014, 38, 1750-1764.	1.3	16
42	Nitrogen dynamics in a soil-sugar cane system. Scientia Agricola, 2000, 57, 467-472.	1.2	15
43	The use of gamma ray computed tomography to investigate soil compaction due to core sampling devices. Brazilian Journal of Physics, 2004, 34, 728-731.	1.4	15
44	Pedotransfer functions related to spatial variability of water retention attributes for lowland soils. Revista Brasileira De Ciencia Do Solo, 2010, 34, 669-680.	1.3	15
45	Temporal changes of an alfalfa succession and related soil physical properties on the Loess Plateau, China. Pesquisa Agropecuaria Brasileira, 2009, 44, 189-196.	0.9	14
46	Spatial variability of 7Be fallout for erosion evaluation. Radiation Physics and Chemistry, 2013, 83, 1-7.	2.8	14
47	Response to â€œComments on â€˜Simultaneous Measurement of Soil Penetration Resistance and Water Content with a Combined Penetrometerâ€“TDR Moisture Probeâ€™ and â€˜A Dynamic Cone Penetrometer for Measuring Soil Penetration Resistanceâ€™â€• Soil Science Society of America Journal, 2005, 69, 927-929.	2.2	14
48	Neural network and state-space models for studying relationships among soil properties. Scientia Agricola, 2006, 63, 386-395.	1.2	13
49	DistribuiÃ§Ã£o do sistema radicular de uma cultura de aveia forrageira. Scientia Agricola, 1999, 56, 1091-1100.	1.2	12
50	New Analytic Solution of Boltzmann Transform for Horizontal Water Infiltration into Sand. Vadose Zone Journal, 2008, 7, 1170-1177.	2.2	12
51	Scaling to generalize a single solution of Richards' equation for soil water redistribution. Scientia Agricola, 2011, 68, 582-591.	1.2	12
52	Impacts of land leveling on lowland soil physical properties. Revista Brasileira De Ciencia Do Solo, 2014, 38, 315-326.	1.3	12
53	Sowing Dates and Seeding Rates Affect Soybean Grain Composition. International Journal of Plant Production, 2018, 12, 181-189.	2.2	12
54	Random and systematic spatial variability of 137Cs inventories at reference sites in South-Central Brazil. Scientia Agricola, 2005, 62, 173-178.	1.2	11

#	Article	IF	Citations
55	On the use of soil hydraulic conductivity functions in the field. Soil and Tillage Research, 2007, 93, 162-170.	5.6	11
56	Comparison between climatological and field water balances for a coffee crop. Scientia Agricola, 2007, 64, 215-220.	1.2	11
57	State-space analysis of soil data: an approach based on space-varying regression models. Scientia Agricola, 2003, 60, 371-376.	1.2	10
58	Chemical and biological attributes of a lowland soil affected by land leveling. Pesquisa Agropecuaria Brasileira, 2013, 48, 1489-1497.	0.9	10
59	Maize dry matter production and macronutrient extraction model as a new approach for fertilizer rate estimation. Anais Da Academia Brasileira De Ciencias, 2017, 89, 705-716.	0.8	10
60	InteraÃ§Ã£o solo-planta avaliada por modelagem estatÃstica de espaÃ§o de estados. Scientia Agricola, 2000, 57, 751-760.	1.2	9
61	Riparian forest potential to retain sediment and carbon evaluated by the 137Cs fallout and carbon isotopic ratio techniques. Anais Da Academia Brasileira De Ciencias, 2009, 81, 271-279.	0.8	9
62	Chemical migration during soil water retention curve evaluation. Anais Da Academia Brasileira De Ciencias, 2011, 83, 1097-1108.	0.8	9
63	Nitrogen Balance and Fertigation Use Efficiency in a Field Coffee Crop. Journal of Plant Nutrition, 2015, 38, 2055-2076.	1.9	9
64	Soybean Yield in Different Sowing Dates and Seeding Rates in a Subtropical Environment. International Journal of Plant Production, 2019, 13, 117-128.	2.2	9
65	4D X-Ray Computed Tomography in Soil Science: an Overview and Future Perspectives at Mogno/Sirius. Brazilian Journal of Physics, 2022, 52, 1.	1.4	9
66	Application of Î³-ray computed tomography to evaluate the radius of influence of soil solution extractors and tensiometers. Nuclear Instruments & Methods in Physics Research B, 2007, 259, 969-974.	1.4	8
67	Funil de haines modificado: curvas de retenÃ§Ã£o de solos prÃ³ximos Ã saturaÃ§Ã£o. Revista Brasileira De Ciencia Do Solo, 2008, 32, 2555-2562.	1.3	8
68	Energy flow in castor bean (Ricinus communis L.) production systems. Scientia Agricola, 2010, 67, 737-742.	1.2	8
69	Deep drainage modeling for a fertigated coffee plantation in the Brazilian savanna. Agricultural Water Management, 2015, 148, 130-140.	5.6	8
70	Intercropping Simulation Using the SWAP Model: Development of a 2Ã—1D Algorithm. Agriculture (Switzerland), 2019, 9, 126.	3.1	8
71	Soil water extraction by roots and Kc for the coffee crop. Revista Brasileira De Engenharia Agricola E Ambiental, 2009, 13, 257-261.	1.1	8
72	Soil profile internal drainage for a central pivot fertigated coffee crop. Revista Ceres, 2011, 58, 723-728.	0.4	7

#	Article	IF	Citations
73	Climate analysis for agricultural improvement of the Economic Community of West African States according to Kppen and Thornthwaite. African Journal of Agricultural Research Vol Pp, 2018, 13, 1198-1212.	0.5	6
74	TranspiraÃ§Ã£o e crescimento foliar de crisÃ¢ntemo em funÃ§Ã£o da fraÃ§Ã£o de Ã¡gua transpirÃ¡vel no substrato. Pesquisa Agropecuaria Brasileira, 2015, 50, 735-744.	0.9	5
75	THE USE OF A SURFACE GAMMA-NEUTRON GAUGE TO EXPLORE COMPACTED SOIL LAYERS. Soil Science, 2000, 165, 665-676.	0.9	5
76	Modelagem matemÃ¡tica como metodologia de anÃ¡lise do crescimento e arquitetura de sistemas radiculares. Scientia Agricola, 2000, 57, 683-691.	1.2	4
77	AlteraÃ§Ãµes estruturais do sistema radicular de soja em resposta Ã disponibilidade de fÃ³sforo no solo. Scientia Agricola, 2001, 58, 55-60.	1.2	4
78	Soil spatial variability and the estimation of the irrigation water depth. Scientia Agricola, 2001, 58, 549-553.	1.2	4
79	Environmental benefits of reducing N rates for coffee in the Cerrado. Soil and Tillage Research, 2017, 166, 76-83.	5.6	4
80	Preliminary Studies to Characterize the Temporal Variation of Micronutrient Composition of the Above Ground Organs of Maize and Correlated Uptake Rates. Frontiers in Plant Science, 2017, 8, 1482.	3.6	4
81	How Plants Absorb Nutrients from the Soil. , 2020, , 313-330.		4
82	Examining the implications of spatial variability of saturated soil hydraulic conductivity on direct surface runoff hydrographs. Catena, 2021, 207, 105693.	5.0	4
83	The spatial variability of Amazonian soils under natural forest and pasture. Geo Journal, 1989, 19, 423.	3.1	3
84	Evaluation of Pigeon Pea Lines for Biological Soil Decompaction. International Journal of Agronomy, 2009, 2009, 1-7.	1.2	3
85	Nitrate leaching through climatologic water balance in a fertigated coffee plantation. Revista Ceres, 2013, 60, 785-792.	0.4	3
86	Vigor and oxidation reactions in soybean seedlings submitted to different seed chemical treatments. Journal of Seed Science, 0, 43, .	0.7	3
87	Uso da radiaÃ§Ã£o gama na determinaÃ§Ã£o da densidade aparente e da umidade do solo. Anais Da Escola Superior De Agricultura Luiz De Queiroz, 1965, 22, 195-198.	0.0	3
88	Dados climÃ¡ticos simulados e produtividade potencial do milho. Pesquisa Agropecuaria Brasileira, 2006, 41, 731-737.	0.9	3
89	Evaluating the tillage management direction effects on soil attributes by space series analysis (case) Tj ETQq1 1 0.784314 rgBT /Over	2.7	3
90	Scaling of soil hydraulic properties in the evaluation of hydraulic conductivity determination methods. Soil and Tillage Research, 1989, 2, 163-170.	0.4	2

#	Article	IF	Citations
91	SOIL SPATIAL VARIABILITY AND SYMBIOTIC NITROGEN FIXATION BY LEGUMES. Soil Science, 1990, 150, 579-587.	0.9	2
92	Stochastic Estimation of Potential and Depleted Productivity of Soybean Grain and Oil. International Journal of Plant Production, 2019, 13, 103-116.	2.2	2
93	Performance of maize hybrids as a function of spatial arrangements during second growth season under irrigation. Bragantia, 0, 80, .	1.3	2
94	Physiological and yield responses of soybean under water deficit. Journal of Crop Science and Biotechnology, 0, , .	1.5	2
95	Aspects of soil physics in Brazil. Soil and Tillage Research, 1988, 1, 93-94.	0.4	1
96	A software to calculate soil hydraulic conductivity in internal drainage experiments (SHC, Version) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.3	1
97	State-Space Approach to Understand Soil-Plant-Atmosphere Relationships. , 2014, , 91-129.		1
98	The recent similarity hypotheses to describe water infiltration into homogeneous soils. Scientia Agricola, 2016, 73, 379-383.	1.2	1
99	The Soil as a Water Reservoir for Plants. , 2020, , 15-48.		1
100	Water Redistribution After Infiltration into the Soil. , 2020, , 241-257.		1
101	Root attributes and seedling biomass of old and modern soybean cultivars under water deficit. Emirates Journal of Food and Agriculture, 0, , 688.	1.0	1
102	Water Infiltration into the Soil. , 2020, , 217-240.		0
103	How Soil, Plant, and Atmosphere Properties Vary in Space and Time in the SPAS: An Approach to Geostatistics. , 2020, , 331-366.		0
104	Micro-morphological analysis of the effect of sampling by the volumetric ring method on soil structure. Progress in Agricultural Engineering Sciences, 2007, 3, 1-19.	0.3	0
105	Dimensional Analysis, Scaling, and Fractals. , 2020, , 423-444.		0
106	The Equilibrium State of Water in the Systems. , 2020, , 81-132.		0
107	The Water Balance in Agricultural and Natural Systems. , 2020, , 289-312.		0
108	Spatial and Temporal Variability of SPAS Attributes: Analysis of Spatial and Temporal Series. , 2020, , 367-422.		0