

Klaus Reichardt

List of Publications by Year in descending order

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Version: 2024-02-01

108
papers

2,105
citations

279798

23
h-index

289244

40
g-index

111
all docs

111
docs citations

111
times ranked

1920
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | 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 |
| 2 | Examining the implications of spatial variability of saturated soil hydraulic conductivity on direct surface runoff hydrographs. Catena, 2021, 207, 105693. | 5.0 | 4 |
| 3 | Evaluating the tillage management direction effects on soil attributes by space series analysis (case) Tj ETQq1 1 0.784314 rgBT /Over | 2.7 | 3 |
| 4 | 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 |
| 5 | Water Infiltration into the Soil. , 2020, , 217-240. | | 0 |
| 6 | How Soil, Plant, and Atmosphere Properties Vary in Space and Time in the SPAS: An Approach to Geostatistics. , 2020, , 331-366. | | 0 |
| 7 | How Plants Absorb Nutrients from the Soil. , 2020, , 313-330. | | 4 |
| 8 | Biomass and potential energy yield of perennial woody energy crops under reduced planting spacing. Renewable Energy, 2020, 153, 1238-1250. | 8.9 | 23 |
| 9 | 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 |
| 10 | The Soil as a Water Reservoir for Plants. , 2020, , 15-48. | | 1 |
| 11 | Water Redistribution After Infiltration into the Soil. , 2020, , 241-257. | | 1 |
| 12 | Dimensional Analysis, Scaling, and Fractals. , 2020, , 423-444. | | 0 |
| 13 | The Equilibrium State of Water in the Systems. , 2020, , 81-132. | | 0 |
| 14 | The Water Balance in Agricultural and Natural Systems. , 2020, , 289-312. | | 0 |
| 15 | Spatial and Temporal Variability of SPAS Attributes: Analysis of Spatial and Temporal Series. , 2020, , 367-422. | | 0 |
| 16 | Intercropping Simulation Using the SWAP Model: Development of a 2D–1D Algorithm. Agriculture (Switzerland), 2019, 9, 126. | 3.1 | 8 |
| 17 | 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 |
| 18 | Stochastic Estimation of Potential and Depleted Productivity of Soybean Grain and Oil. International Journal of Plant Production, 2019, 13, 103-116. | 2.2 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | 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 |
| 20 | 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 |
| 21 | Sowing Dates and Seeding Rates Affect Soybean Grain Composition. International Journal of Plant Production, 2018, 12, 181-189. | 2.2 | 12 |
| 22 | 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 |
| 23 | Environmental benefits of reducing N rates for coffee in the Cerrado. Soil and Tillage Research, 2017, 166, 76-83. | 5.6 | 4 |
| 24 | 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 |
| 25 | 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 |
| 26 | 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 |
| 27 | The recent similarity hypotheses to describe water infiltration into homogeneous soils. Scientia Agricola, 2016, 73, 379-383. | 1.2 | 1 |
| 28 | 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 |
| 29 | Transpiração e crescimento foliar de crisântemo em função da fração de água transpirável no substrato. Pesquisa Agropecuária Brasileira, 2015, 50, 735-744. | 0.9 | 5 |
| 30 | Nitrogen Balance and Fertigation Use Efficiency in a Field Coffee Crop. Journal of Plant Nutrition, 2015, 38, 2055-2076. | 1.9 | 9 |
| 31 | Deep drainage modeling for a fertigated coffee plantation in the Brazilian savanna. Agricultural Water Management, 2015, 148, 130-140. | 5.6 | 8 |
| 32 | 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 |
| 33 | Impacts of land leveling on lowland soil physical properties. Revista Brasileira De Ciencia Do Solo, 2014, 38, 315-326. | 1.3 | 12 |
| 34 | State-Space Approach to Understand Soil-Plant-Atmosphere Relationships. , 2014, , 91-129. | | 1 |
| 35 | 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 |
| 36 | Spatial variability of ⁷ Be fallout for erosion evaluation. Radiation Physics and Chemistry, 2013, 83, 1-7. | 2.8 | 14 |

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|----|---|-----|-----------|
| 37 | Chemical and biological attributes of a lowland soil affected by land leveling. Pesquisa Agropecuaria Brasileira, 2013, 48, 1489-1497. | 0.9 | 10 |
| 38 | Nitrate leaching through climatologic water balance in a fertigated coffee plantation. Revista Ceres, 2013, 60, 785-792. | 0.4 | 3 |
| 39 | Growing degree-days for the "Niagara Rosada"™ grapevine pruned in different seasons. International Journal of Biometeorology, 2012, 56, 823-830. | 3.0 | 16 |
| 40 | Nitrogen fertilizer (15N) leaching in a central pivot fertigated coffee crop. Revista Ceres, 2012, 59, 466-475. | 0.4 | 16 |
| 41 | Spatio-temporal variability behavior of land surface soil water content in shrub- and grass-land. Geoderma, 2011, 162, 260-272. | 5.1 | 78 |
| 42 | 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 |
| 43 | Scaling to generalize a single solution of Richards' equation for soil water redistribution. Scientia Agricola, 2011, 68, 582-591. | 1.2 | 12 |
| 44 | Soil profile internal drainage for a central pivot fertigated coffee crop. Revista Ceres, 2011, 58, 723-728. | 0.4 | 7 |
| 45 | Chemical migration during soil water retention curve evaluation. Anais Da Academia Brasileira De Ciencias, 2011, 83, 1097-1108. | 0.8 | 9 |
| 46 | Fertilizer nitrogen in fertigated coffee crop: Absorption changes in plant compartments over time. Field Crops Research, 2011, 124, 369-377. | 5.1 | 34 |
| 47 | 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 |
| 48 | 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 |
| 49 | General procedure to initialize the cyclic soil water balance by the Thornthwaite and Mather method. Scientia Agricola, 2010, 67, 87-95. | 1.2 | 25 |
| 50 | Energy flow in castor bean (Ricinus communis L.) production systems. Scientia Agricola, 2010, 67, 737-742. | 1.2 | 8 |
| 51 | Toward sustainable soil and water resources use in China's highly erodible semi-arid loess plateau. Geoderma, 2010, 155, 93-100. | 5.1 | 57 |
| 52 | Watershed scale temporal stability of soil water content. Geoderma, 2010, 158, 181-198. | 5.1 | 183 |
| 53 | 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 |
| 54 | 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 |

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|----|--|-----|-----------|
| 55 | Pore system changes of damaged Brazilian oxisols and nitosols induced by wet-dry cycles as seen in 2-D micromorphologic image analysis. <i>Anais Da Academia Brasileira De Ciencias</i> , 2009, 81, 151-161. | 0.8 | 17 |
| 56 | Temporal changes of an alfalfa succession and related soil physical properties on the Loess Plateau, China. <i>Pesquisa Agropecuaria Brasileira</i> , 2009, 44, 189-196. | 0.9 | 14 |
| 57 | Evaluation of Pigeon Pea Lines for Biological Soil Decompaction. <i>International Journal of Agronomy</i> , 2009, 2009, 1-7. | 1.2 | 3 |
| 58 | Time stability of soil water storage measured by neutron probe and the effects of calibration procedures in a small watershed. <i>Catena</i> , 2009, 79, 72-82. | 5.0 | 119 |
| 59 | New Analytic Solution Related to the Richards, Philip, and Green's Ampt Equations for Infiltration. <i>Vadose Zone Journal</i> , 2009, 8, 127-135. | 2.2 | 16 |
| 60 | Soil water extraction by roots and Kc for the coffee crop. <i>Revista Brasileira De Engenharia Agricola E Ambiental</i> , 2009, 13, 257-261. | 1.1 | 8 |
| 61 | Soil porous system changes quantified by analyzing soil water retention curve modifications. <i>Soil and Tillage Research</i> , 2008, 100, 72-77. | 5.6 | 44 |
| 62 | Funil de haines modificado: curvas de retenção de solos próximos à saturação. <i>Revista Brasileira De Ciencia Do Solo</i> , 2008, 32, 2555-2562. | 1.3 | 8 |
| 63 | New Analytic Solution of Boltzmann Transform for Horizontal Water Infiltration into Sand. <i>Vadose Zone Journal</i> , 2008, 7, 1170-1177. | 2.2 | 12 |
| 64 | Fertilizer 15N balance in a coffee cropping system: a case study in Brazil. <i>Revista Brasileira De Ciencia Do Solo</i> , 2008, 32, 1459-1469. | 1.3 | 17 |
| 65 | Soil water content temporal-spatial variability of the surface layer of a Loess Plateau hillside in China. <i>Scientia Agricola</i> , 2008, 65, 277-289. | 1.2 | 52 |
| 66 | Spatial variability of soil hydraulic properties on a steep slope in the loess plateau of China. <i>Scientia Agricola</i> , 2008, 65, 268-276. | 1.2 | 48 |
| 67 | Volatilization of Ammonia Derived from Fertilizer and Its Reabsorption by Coffee Plants. <i>Communications in Soil Science and Plant Analysis</i> , 2007, 38, 1741-1751. | 1.4 | 24 |
| 68 | 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 |
| 69 | Assessment of soil structure repair due to wetting and drying cycles through 2D tomographic image analysis. <i>Soil and Tillage Research</i> , 2007, 94, 537-545. | 5.6 | 51 |
| 70 | On the use of soil hydraulic conductivity functions in the field. <i>Soil and Tillage Research</i> , 2007, 93, 162-170. | 5.6 | 11 |
| 71 | Application of $\hat{\nu}$ -ray computed tomography to evaluate the radius of influence of soil solution extractors and tensiometers. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007, 259, 969-974. | 1.4 | 8 |
| 72 | Comparison between climatological and field water balances for a coffee crop. <i>Scientia Agricola</i> , 2007, 64, 215-220. | 1.2 | 11 |

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|----|--|-----|-----------|
| 73 | Growth, development, and fertilizer-15N recovery by the coffee plant. <i>Scientia Agricola</i> , 2007, 64, 541-547. | 1.2 | 19 |
| 74 | Micro-morphological analysis of the effect of sampling by the volumetric ring method on soil structure. <i>Progress in Agricultural Engineering Sciences</i> , 2007, 3, 1-19. | 0.3 | 0 |
| 75 | Variability of water balance components in a coffee crop in Brazil. <i>Scientia Agricola</i> , 2006, 63, 105-114. | 1.2 | 30 |
| 76 | Field spatial and temporal patterns of soil water content and bulk density changes. <i>Scientia Agricola</i> , 2006, 63, 55-64. | 1.2 | 43 |
| 77 | Dados climáticos simulados e produtividade potencial do milho. <i>Pesquisa Agropecuaria Brasileira</i> , 2006, 41, 731-737. | 0.9 | 3 |
| 78 | Neural network and state-space models for studying relationships among soil properties. <i>Scientia Agricola</i> , 2006, 63, 386-395. | 1.2 | 13 |
| 79 | Application of ^{137}Cs -ray computed tomography to analysis of soil structure before density evaluations. <i>Applied Radiation and Isotopes</i> , 2005, 63, 505-511. | 1.5 | 18 |
| 80 | Gamma ray computed tomography to evaluate wetting/drying soil structure changes. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2005, 229, 443-456. | 1.4 | 55 |
| 81 | Soil water retention curve determined by gamma-ray beam attenuation. <i>Soil and Tillage Research</i> , 2005, 82, 89-97. | 5.6 | 44 |
| 82 | Random and systematic spatial variability of ^{137}Cs inventories at reference sites in South-Central Brazil. <i>Scientia Agricola</i> , 2005, 62, 173-178. | 1.2 | 11 |
| 83 | Response to "Comments on "Simultaneous Measurement of Soil Penetration Resistance and Water Content with a Combined Penetrometer" TDR Moisture Probe" and "A Dynamic Cone Penetrometer for Measuring Soil Penetration Resistance". <i>Soil Science Society of America Journal</i> , 2005, 69, 927-929. | 2.2 | 14 |
| 84 | The use of gamma ray computed tomography to investigate soil compaction due to core sampling devices. <i>Brazilian Journal of Physics</i> , 2004, 34, 728-731. | 1.4 | 15 |
| 85 | Damage to soil physical properties caused by soil sampler devices as assessed by gamma ray computed tomography. <i>Soil Research</i> , 2004, 42, 857. | 1.1 | 25 |
| 86 | Gamma-ray-computed tomography to investigate compaction on sewage-sludge-treated soil. <i>Applied Radiation and Isotopes</i> , 2003, 59, 17-25. | 1.5 | 18 |
| 87 | State-space analysis of soil data: an approach based on space-varying regression models. <i>Scientia Agricola</i> , 2003, 60, 371-376. | 1.2 | 10 |
| 88 | Gamma-ray computed tomography to characterize soil surface sealing. <i>Applied Radiation and Isotopes</i> , 2002, 57, 375-380. | 1.5 | 18 |
| 89 | Alterações estruturais do sistema radicular de soja em resposta à disponibilidade de ^{13}C no solo. <i>Scientia Agricola</i> , 2001, 58, 55-60. | 1.2 | 4 |
| 90 | Soil spatial variability and the estimation of the irrigation water depth. <i>Scientia Agricola</i> , 2001, 58, 549-553. | 1.2 | 4 |

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|-----|--|-----|-----------|
| 91 | Nitrogen dynamics in a soil-sugar cane system. <i>Scientia Agricola</i> , 2000, 57, 467-472. | 1.2 | 15 |
| 92 | Modelagem matemática como metodologia de análise do crescimento e arquitetura de sistemas radiculares. <i>Scientia Agricola</i> , 2000, 57, 683-691. | 1.2 | 4 |
| 93 | Interação solo-planta avaliada por modelagem estatística de espaço de estados. <i>Scientia Agricola</i> , 2000, 57, 751-760. | 1.2 | 9 |
| 94 | THE USE OF A SURFACE GAMMA-NEUTRON GAUGE TO EXPLORE COMPACTED SOIL LAYERS. <i>Soil Science</i> , 2000, 165, 665-676. | 0.9 | 5 |
| 95 | Distribuição do sistema radicular de uma cultura de aveia forrageira. <i>Scientia Agricola</i> , 1999, 56, 1091-1100. | 1.2 | 12 |
| 96 | State-space approach for the analysis of soil water content and temperature in a sugarcane crop. <i>Scientia Agricola</i> , 1999, 56, 1215-1221. | 1.2 | 52 |
| 97 | An Emerging Technology for Scaling Field Soil-Water Behavior. , 1998, , 136-166. | | 16 |
| 98 | Hydraulic variability in space and time in a dark red latosol of the tropics. <i>Geoderma</i> , 1993, 60, 159-168. | 5.1 | 24 |
| 99 | SOIL SPATIAL VARIABILITY AND SYMBIOTIC NITROGEN FIXATION BY LEGUMES. <i>Soil Science</i> , 1990, 150, 579-587. | 0.9 | 2 |
| 100 | The spatial variability of Amazonian soils under natural forest and pasture. <i>Geo Journal</i> , 1989, 19, 423. | 3.1 | 3 |
| 101 | Scaling of soil hydraulic properties in the evaluation of hydraulic conductivity determination methods. <i>Soil and Tillage Research</i> , 1989, 2, 163-170. | 0.4 | 2 |
| 102 | Aspects of soil physics in Brazil. <i>Soil and Tillage Research</i> , 1988, 1, 93-94. | 0.4 | 1 |
| 103 | UNSATURATED HYDRAULIC CONDUCTIVITY DETERMINATION BY A SCALING TECHNIQUE. <i>Soil Science</i> , 1975, 120, 165-168. | 0.9 | 23 |
| 104 | Uso da radiação gama na determinação da densidade aparente e da umidade do solo. <i>Anais Da Escola Superior De Agricultura Luiz De Queiroz</i> , 1965, 22, 195-198. | 0.0 | 3 |
| 105 | Vigor and oxidation reactions in soybean seedlings submitted to different seed chemical treatments. <i>Journal of Seed Science</i> , 0, 43, . | 0.7 | 3 |
| 106 | Performance of maize hybrids as a function of spatial arrangements during second growth season under irrigation. <i>Bragantia</i> , 0, 80, . | 1.3 | 2 |
| 107 | Root attributes and seedling biomass of old and modern soybean cultivars under water deficit. <i>Emirates Journal of Food and Agriculture</i> , 0, , 688. | 1.0 | 1 |
| 108 | Physiological and yield responses of soybean under water deficit. <i>Journal of Crop Science and Biotechnology</i> , 0, , . | 1.5 | 2 |