Sabine Grunwald

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6713296/publications.pdf

Version: 2024-02-01

120 papers	6,507 citations	81900 39 h-index	66911 78 g-index
124 all docs	124 docs citations	124 times ranked	6132 citing authors

#	Article	IF	Citations
1	Holistic aboveground ecological productivity efficiency modeling using data envelopment analysis in the southeastern U.S. Science of the Total Environment, 2022, 824, 153802.	8.0	2
2	The Brazilian Soil Spectral Service (BraSpecS): A User-Friendly System for Global Soil Spectra Communication. Remote Sensing, 2022, 14, 740.	4.0	11
3	Regional Assessment of Carbon Pool Response to Intensive Silvicultural Practices in Loblolly Pine Plantations. Forests, 2022, 13, 36.	2.1	5
4	Predicting Soil Properties and Interpreting Vis-NIR Models from across Continental United States. Sensors, 2022, 22, 3187.	3.8	11
5	Embodied Liberation in Participatory Theory and Buddhist Modernism VajrayÄna. Journal of Dharma Studies, 2021, 4, 159-177.	0.2	1
6	Emergence of the Pedo-Econometric Approach. Frontiers in Soil Science, 2021, 1, .	2.2	2
7	Developmental History of Soil Concepts from a Scientific Perspective. Applied Sciences (Switzerland), 2021, 11, 4275.	2.5	6
8	Soil depth prediction by digital soil mapping and its impact in pine forestry productivity in South Brazil. Forest Ecology and Management, 2021, 488, 118983.	3.2	11
9	Sensitivity assessment of metafrontier data envelopment analysis for soil carbon sequestration efficiency. Ecological Indicators, 2021, 125, 107602.	6.3	8
10	Environmental covariates improve the spectral predictions of organic carbon in subtropical soils in southern Brazil. Geoderma, 2021, 393, 114981.	5.1	16
11	Grand Challenges in Pedometrics-AI Research. Frontiers in Soil Science, 2021, 1, .	2.2	3
12	Effect of Mississippi River discharge and local hydrological variables on salinity of nearby estuaries using a machine learning algorithm. Estuarine, Coastal and Shelf Science, 2021, 263, 107628.	2.1	5
13	Modeling paddy field soil conditions in East Java, Indonesia. Soil Security, 2021, 5, 100025.	2.3	0
14	Integrative environmental modeling of soil carbon fractions based on a new latent variable model approach. Science of the Total Environment, 2020, 711, 134566.	8.0	6
15	Accounting for two-billion tons of stabilized soil carbon. Science of the Total Environment, 2020, 703, 134615.	8.0	12
16	When does stratification of a subtropical soil spectral library improve predictions of soil organic carbon content?. Science of the Total Environment, 2020, 737, 139895.	8.0	26
17	The Brazilian Soil Spectral Library (BSSL): A general view, application and challenges. Geoderma, 2019, 354, 113793.	5.1	100
18	Fusing environmental variables into soil spectroscopy modeling using a novel two-step regression method. IOP Conference Series: Earth and Environmental Science, 2019, 393, 012100.	0.3	0

#	Article	IF	Citations
19	Digital mapping of soil carbon fractions with machine learning. Geoderma, 2019, 339, 40-58.	5.1	178
20	Evaluation of calibration subsetting and new chemometric methods on the spectral prediction of key soil properties in a dataâ€limited environment. European Journal of Soil Science, 2019, 70, 107-126.	3.9	15
21	New Indication Method Using Pedo-Econometric Approach. Data Envelopment Analysis Journal, 2019, 4, 207-241.	0.6	6
22	Regression kriging as a workhorse in the digital soil mapper's toolbox. Geoderma, 2018, 326, 22-41.	5.1	127
23	Effects of image pansharpening on soil total nitrogen prediction models in South India. Geoderma, 2018, 320, 52-66.	5.1	29
24	Estimating soil total nitrogen in smallholder farm settings using remote sensing spectral indices and regression kriging. Catena, 2018, 163, 111-122.	5.0	41
25	A systematic study on the application of scatter-corrective and spectral-derivative preprocessing for multivariate prediction of soil organic carbon by Vis-NIR spectra. Geoderma, 2018, 314, 262-274.	5.1	168
26	Transferability and Scalability of Soil Total Carbon Prediction Models in Florida, USA. Pedosphere, 2018, 28, 856-872.	4.0	12
27	Total soil carbon assessment: linking field, lab, and landscape through VNIR modelling. Landscape Ecology, 2018, 33, 2137-2152.	4.2	3
28	New Soil Index Development and Integration with Econometric Theory. Soil Science Society of America Journal, 2018, 82, 1017-1032.	2.2	16
29	The Importance of Self-Reflection and Awareness for Human Development in Hard Times. Research in Human Development, 2018, 15, 187-199.	1.3	26
30	Estimating the value of ecosystem services in a mixed-use watershed: A choice experiment approach. Ecosystem Services, 2017, 23, 228-237.	5.4	55
31	Evaluating the effect of remote sensing image spatial resolution on soil exchangeable potassium prediction models in smallholder farm settings. Journal of Environmental Management, 2017, 200, 423-433.	7.8	30
32	Two preprocessing techniques to reduce model covariables in soil property predictions by Vis-NIR spectroscopy. Soil and Tillage Research, 2017, 172, 59-68.	5.6	62
33	Spatial downscaling of soil prediction models based on weighted generalized additive models in smallholder farm settings. Environmental Monitoring and Assessment, 2017, 189, 502.	2.7	1
34	Integrating New Perspectives to Address Global Soil Security: Ideas from Integral Ecology. Progress in Soil Science, 2017, , 319-329.	0.8	11
35	Semiparametric regression models for spatial prediction and uncertainty quantification of soil attributes. Stochastic Environmental Research and Risk Assessment, 2017, 31, 2691-2703.	4.0	6
36	Incorporation of satellite remote sensing pan-sharpened imagery into digital soil prediction and mapping models to characterize soil property variability in small agricultural fields. ISPRS Journal of Photogrammetry and Remote Sensing, 2017, 123, 1-19.	11.1	47

#	Article	IF	Citations
37	Prediction of Soil Physical and Chemical Properties by Visible and Near-Infrared Diffuse Reflectance Spectroscopy in the Central Amazon. Remote Sensing, 2017, 9, 293.	4.0	106
38	The Meta Soil Model: An Integrative Multi-model Framework for Soil Security. Progress in Soil Science, 2017, , 305-317.	0.8	8
39	Applying the Meta Soil Model: The Complexities of Soil and Water Security in a Permanent Protection Area in Brazil. Progress in Soil Science, 2017, , 331-340.	0.8	0
40	Assessment of Carbon Stocks in the Topsoil Using Random Forest and Remote Sensing Images. Journal of Environmental Quality, 2016, 45, 1910-1918.	2.0	23
41	Examining the Relationship between Flower Thrips (Thysanoptera: Thripidae) Spatial Distribution and Blueberry (Ericales: Ericaceae) Flower Density. Florida Entomologist, 2016, 99, 128-129.	0.5	1
42	Scale-dependent variability of soil organic carbon coupled to land use and land cover. Soil and Tillage Research, 2016, 160, 101-109.	5.6	9
43	A global spectral library to characterize the world's soil. Earth-Science Reviews, 2016, 155, 198-230.	9.1	546
44	Spatial Assessment of Soil Organic Carbon Using Bayesian Maximum Entropy and Partial Least Square Regression Model. Springer Environmental Science and Engineering, 2016, , 141-152.	0.1	0
45	Estimation of the Actual and Attainable Terrestrial Carbon Budget. Springer Environmental Science and Engineering, 2016, , 153-164.	0.1	1
46	The Meta Soil Modelâ€"An Integrative Framework to Model Soil Carbon Across Various Ecosystems and Scales. Springer Environmental Science and Engineering, 2016, , 165-179.	0.1	2
47	Transferability and Scaling of VNIR Prediction Models for Soil Total Carbon in Florida. Springer Environmental Science and Engineering, 2016, , 259-273.	0.1	2
48	Land use, land use change and soil carbon sequestration in the St. Johns River Basin, Florida, USA. Geoderma Regional, 2016, 7, 19-28.	2.1	15
49	Inverse Modeling of CO2 Evolved During Laboratory Soil Incubation to Link Modeled Pools in CENTURY With Measured Soil Properties. Soil Science, 2015, 180, 28-32.	0.9	3
50	Soil Phosphorus Landscape Models for Precision Soil Conservation. Journal of Environmental Quality, 2015, 44, 739-753.	2.0	4
51	Fusion of Soil and Remote Sensing Data to Model Soil Properties. Advances in Agronomy, 2015, 131, 1-109.	5.2	65
52	Assessing uncertainty in soil organic carbon modeling across a highly heterogeneous landscape. Geoderma, 2015, 251-252, 105-116.	5.1	25
53	Predicting the Distribution of Naturally Occurring Phosphatic Soils across a Countywide Landscape, Florida, USA. Communications in Soil Science and Plant Analysis, 2015, 46, 1391-1410.	1.4	2
54	Modelling soil carbon fractions with visible near-infrared (VNIR) and mid-infrared (MIR) spectroscopy. Geoderma, 2015, 239-240, 229-239.	5.1	116

#	Article	IF	Citations
55	Modeling Soil Organic Carbon at Regional Scale by Combining Multi-Spectral Images with Laboratory Spectra. PLoS ONE, 2015, 10, e0142295.	2.5	69
56	Development and Update Process of VNIR-Based Models Built to Predict Soil Organic Carbon. Soil Science Society of America Journal, 2014, 78, 903-913.	2.2	12
57	AUTOMATIC CALIBRATION OF A HYDROLOGIC MODEL FOR SIMULATING GROUNDWATER TABLE FLUCTUATIONS ON FARMS IN THE EVERGLADES AGRICULTURAL AREA OF SOUTH FLORIDA. Irrigation and Drainage, 2014, 63, 538-549.	1.7	1
58	Soil Phosphorus and Nitrogen Predictions Across Spatial Escalating Scales in an Aquatic Ecosystem Using Remote Sensing Images. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 6724-6737.	6.3	21
59	Interaction effects of climate and land use/land cover change on soil organic carbon sequestration. Science of the Total Environment, 2014, 493, 974-982.	8.0	99
60	Holistic environmental soil-landscape modeling of soil organic carbon. Environmental Modelling and Software, 2014, 57, 202-215.	4.5	100
61	Overview of the U.S. Rapid Carbon Assessment Project: Sampling Design, Initial Summary and Uncertainty Estimates. , 2014, , 95-104.		19
62	Part IIIâ€"Integration of data to work towards a Meta Soil Carbon Model in the U.S.. , 2014, , 239-244.		2
63	Spatiotemporal modeling of soil organic carbon stocks across a subtropical region. Science of the Total Environment, 2013, 461-462, 149-157.	8.0	34
64	Land Use Influence on Carbon, Nitrogen, and Phosphorus in Size Fractions of Sandy Surface Soils. Soil Science, 2013, 178, 654-661.	0.9	6
65	Soil Security: Solving the Global Soil Crisis. Global Policy, 2013, 4, 434-441.	1.7	219
66	Multiâ€scale Modeling of Soil Series Using Remote Sensing in a Wetland Ecosystem. Soil Science Society of America Journal, 2012, 76, 2327-2341.	2.2	20
67	Loblolly and slash pine control organic carbon in soil aggregates and carbon mineralization. Forest Ecology and Management, 2012, 263, 1-8.	3.2	6
68	Linking complex forest fuel structure and fire behaviour at fine scales. International Journal of Wildland Fire, 2012, 21, 882.	2.4	75
69	Influence of the spatial extent and resolution of input data on soil carbon models in Florida, USA. Journal of Geophysical Research, 2012, 117, .	3.3	15
70	Digital Soil Mapping. , 2012, , 665-709.		35
71	Soil total carbon analysis in Hawaiian soils with visible, near-infrared and mid-infrared diffuse reflectance spectroscopy. Geoderma, 2012, 189-190, 312-320.	5.1	90
72	Effects of Subsetting by Carbon Content, Soil Order, and Spectral Classification on Prediction of Soil Total Carbon with Diffuse Reflectance Spectroscopy. Applied and Environmental Soil Science, 2012, 2012, 1-14.	1.7	29

#	Article	IF	Citations
73	Total and available soil carbon fractions under the perennial grass Cynodon dactylon (L.) Pers and the bioenergy crop ArundoÂdonax L.. Biomass and Bioenergy, 2012, 41, 122-130.	5.7	27
74	Associations between soil carbon and ecological landscape variables at escalating spatial scales in Florida, USA. Landscape Ecology, 2012, 27, 355-367.	4.2	41
75	Comparison of soil reflectance spectra and calibration models obtained using multiple spectrometers. Geoderma, 2011, 161, 202-211.	5.1	84
76	Comparison and detection of total and available soil carbon fractions using visible/near infrared diffuse reflectance spectroscopy. Geoderma, 2011, 164, 22-32.	5.1	63
77	Peak functions for modeling high resolution soil profile data. Geoderma, 2011, 166, 74-83.	5.1	29
78	Spatial distributions and eco-partitioning of soil biogeochemical properties in the Everglades National Park. Environmental Monitoring and Assessment, 2011, 183, 395-408.	2.7	32
79	Examining the Spatial Distribution of Flower Thrips in Southern Highbush Blueberries by Utilizing Geostatistical Methods. Environmental Entomology, 2011, 40, 893-903.	1.4	13
80	Digital Soil Mapping and Modeling at Continental Scales: Finding Solutions for Global Issues. Soil Science Society of America Journal, 2011, 75, 1201-1213.	2.2	233
81	Human-Soil Relations are Changing Rapidly: Proposals from SSSA's Cross-Divisional Soil Change Working Group. Soil Science Society of America Journal, 2011, 75, 2079-2084.	2.2	70
82	Spectroscopic Models of Soil Organic Carbon in Florida, USA. Journal of Environmental Quality, 2010, 39, 923-934.	2.0	88
83	Upscaling of Dynamic Soil Organic Carbon Pools in a Northâ€Central Florida Watershed. Soil Science Society of America Journal, 2010, 74, 870-879.	2.2	26
84	Modeling of Phosphorus Loads in Sugarcane in a Lowâ€Relief Landscape Using Ontologyâ€based Simulation. Journal of Environmental Quality, 2010, 39, 1751-1761.	2.0	3
85	Current State of Digital Soil Mapping and What Is Next. , 2010, , 3-12.		18
86	Regional modelling of soil carbon at multiple depths within a subtropical watershed. Geoderma, 2010, 156, 326-336.	5.1	83
87	Ontology-based simulation in agricultural systems modeling. Agricultural Systems, 2010, 103, 463-477.	6.1	27
88	Ontology-based simulation of water flow in organic soils applied to Florida sugarcane. Agricultural Water Management, 2010, 97, 112-122.	5.6	12
89	Combining Proximal and Penetrating Soil Electrical Conductivity Sensors for High-Resolution Digital Soil Mapping. , 2010, , 233-243.		5
90	Evaluation of the Transferability of a Knowledge-Based Soil-Landscape Model. , 2010, , 165-178.		3

#	Article	IF	Citations
91	Longâ€term Water Quality Trends after Implementing Best Management Practices in South Florida. Journal of Environmental Quality, 2009, 38, 1683-1693.	2.0	32
92	Tree-based modeling of complex interactions of phosphorus loadings and environmental factors. Science of the Total Environment, 2009, 407, 3772-3783.	8.0	25
93	Carbon Mineralization and Labile Organic Carbon Pools in the Sandy Soils of a North Florida Watershed. Ecosystems, 2009, 12, 672-685.	3.4	76
94	Integrating spectral indices into prediction models of soil phosphorus in a subtropical wetland. Remote Sensing of Environment, 2009, 113, 2389-2402.	11.0	46
95	Multi-criteria characterization of recent digital soil mapping and modeling approaches. Geoderma, 2009, 152, 195-207.	5.1	270
96	Modeling of Soil Organic Carbon Fractions Using Visibleâ€“Nearâ€Infrared Spectroscopy. Soil Science Society of America Journal, 2009, 73, 176-184.	2.2	102
97	Ontology-Based Simulation Applied to Soil, Water, and Nutrient Management. Springer Optimization and Its Applications, 2009, , 209-242.	0.9	3
98	Inferences from fluctuations in the local variogram about the assumption of stationarity in the variance. Geoderma, 2008, 143, 123-132.	5.1	31
99	Temporal trajectories of phosphorus and pedo-patterns mapped in Water Conservation Area 2, Everglades, Florida, USA. Geoderma, 2008, 146, 1-13.	5.1	25
100	Comparison of multivariate methods for inferential modeling of soil carbon using visible/near-infrared spectra. Geoderma, 2008, 146, 14-25.	5.1	316
101	Soil nitrate-nitrogen in forested versus non-forested ecosystems in a mixed-use watershed. Geoderma, 2008, 148, 220-231.	5.1	12
102	Fit-for-purpose analysis of uncertainty using split-sampling evaluations. Hydrological Sciences Journal, 2008, 53, 1090-1103.	2.6	42
103	Disaggregation and scientific visualization of earthscapes considering trends and spatial dependence structures. New Journal of Physics, 2008, 10, 125011.	2.9	0
104	Spatial Behavior of Phosphorus and Nitrogen in a Subtropical Wetland. Soil Science Society of America Journal, 2008, 72, 1174-1183.	2.2	9
105	CHARACTERIZATION OF THE SPATIAL DISTRIBUTION OF SOIL PROPERTIES IN WATER CONSERVATION AREA 2A, EVERGLADES, FLORIDA. Soil Science, 2007, 172, 149-166.	0.9	40
106	Incorporation of spectral data into multivariate geostatistical models to map soil phosphorus variability in a Florida wetland. Geoderma, 2007, 140, 428-443.	5.1	46
107	Modeling of the spatial variability of biogeochemical soil properties in a freshwater ecosystem. Ecological Modelling, 2007, 201, 521-535.	2.5	34
108	Recent Changes in Soil Total Phosphorus in the Everglades: Water Conservation Area 3. Environmental Monitoring and Assessment, 2007, 129, 379-395.	2.7	38

#	Article	IF	Citations
109	Regional hybrid geospatial modeling of soil nitrateâ€“nitrogen in the Santa Fe River Watershed. Geoderma, 2006, 135, 233-247.	5.1	20
110	A global sensitivity analysis tool for the parameters of multi-variable catchment models. Journal of Hydrology, 2006, 324, 10-23.	5.4	980
111	Assessment of the Spatial Distribution of Soil Properties in a Northern Everglades Marsh. Journal of Environmental Quality, 2006, 35, 938-949.	2.0	69
112	Spatial Distribution of Soil Properties in Water Conservation Area 3 of the Everglades. Soil Science Society of America Journal, 2006, 70, 1662-1676.	2.2	65
113	Incorporation of Auxiliary Information in the Geostatistical Simulation of Soil Nitrate Nitrogen. Vadose Zone Journal, 2006, 5, 391-404.	2.2	18
114	Spatial Patterns of Labile Forms of Phosphorus in a Subtropical Wetland. Journal of Environmental Quality, 2006, 35, 378-389.	2.0	37
115	GIS-BASED WATER QUALITY MODELING IN THE SANDUSKY WATERSHED, OHIO, USA. Journal of the American Water Resources Association, 2006, 42, 957-973.	2.4	33
116	A WebGIS and geodatabase for Florida's wetlands. Computers and Electronics in Agriculture, 2005, 47, 69-75.	7.7	53
117	GIS-BASED HYDROLOGIC MODELING IN THE SANDUSKY WATERSHED USING SWAT. Transactions of the American Society of Agricultural Engineers, 2005, 48, 169-180.	0.9	52
118	Development of an environmental virtual field laboratory. Computers and Education, 2005, 45, 21-34.	8.3	139
119	Spatial variability, distribution and uncertainty assessment of soil phosphorus in a south Florida wetland. Environmetrics, 2004, 15, 811-825.	1.4	42
120	Uncertainty in the model parameters due to spatial variability of rainfall. Journal of Hydrology, 1999, 220, 48-61.	5.4	156