

Richard H Grant

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2138311/publications.pdf>

Version: 2024-02-01

96
papers

1,661
citations

279798

23
h-index

330143

37
g-index

98
all docs

98
docs citations

98
times ranked

1425
citing authors

#	ARTICLE	IF	CITATIONS
1	Emissions of H ₂ S from Hog Finisher Farm Anaerobic Manure Treatment Lagoons: Physical, Chemical and Biological Influence. <i>Atmosphere</i> , 2022, 13, 153.	2.3	1
2	Hydrogen sulfide emissions from a midwestern manure slurry storage basin. <i>Journal of Environmental Quality</i> , 2022, 51, 152-161.	2.0	2
3	Forecasting solar photosynthetic photon flux density under cloud cover effects: novel predictive model using convolutional neural network integrated with long short-term memory network. <i>Stochastic Environmental Research and Risk Assessment</i> , 2022, 36, 3183-3220.	4.0	4
4	Emissions of hydrogen sulfide from a western open-lot dairy. <i>Journal of Environmental Quality</i> , 2022, 51, 622-631.	2.0	2
5	Variation in hydrogen sulfide emissions from a U.S. Midwest anaerobic dairy lagoon. <i>Journal of Environmental Quality</i> , 2021, 50, 1063-1073.	2.0	3
6	Ammonia Emissions from a Western Open-Lot Dairy. <i>Atmosphere</i> , 2020, 11, 913.	2.3	1
7	Measuring N ₂ O Emissions from Multiple Sources Using a Backward Lagrangian Stochastic Model. <i>Atmosphere</i> , 2020, 11, 1277.	2.3	0
8	Ammonia Emissions from Differing Manure Storage Facilities at Two Midwestern Free-Stall Dairies. <i>Atmosphere</i> , 2020, 11, 1108.	2.3	11
9	Sources of error in open-path FTIR measurements of N ₂ O and CO ₂ emitted from agricultural fields. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 2001-2013.	3.1	6
10	Surface flux estimates derived from UAS-based mole fraction measurements by means of a nocturnal boundary layer budget approach. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 1671-1692.	3.1	9
11	Application of open-path Fourier transform infrared spectroscopy (OP-FTIR) to measure greenhouse gas concentrations from agricultural fields. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 3403-3415.	3.1	15
12	Surface Temperature Inversions and Risk of Off-Target Herbicide Damage in the Soybean- and Cotton-Growing Regions of the US. <i>Crop, Forage and Turfgrass Management</i> , 2019, 5, 180078.	0.6	5
13	Estimation of nocturnal CO ₂ and N ₂ O soil emissions from changes in surface boundary layer mass storage. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 2119-2133.	3.1	4
14	Ammonia emissions from an in-ground finisher hog manure tank. <i>Atmospheric Environment</i> , 2018, 190, 43-52.	4.1	11
15	Ammonia emissions from anaerobic waste lagoons at pork production operations: Influence of climate. <i>Agricultural and Forest Meteorology</i> , 2016, 228-229, 73-84.	4.8	9
16	Manure Ammonia and Hydrogen Sulfide Emissions from a Western Dairy Storage Basin. <i>Journal of Environmental Quality</i> , 2015, 44, 127-136.	2.0	18
17	Methane and carbon dioxide emissions from manure storage facilities at two free-stall dairies. <i>Agricultural and Forest Meteorology</i> , 2015, 213, 102-113.	4.8	27
18	Inhomogeneity of methane emissions from a dairy waste lagoon. <i>Journal of the Air and Waste Management Association</i> , 2015, 65, 1306-1316.	1.9	2

#	ARTICLE	IF	CITATIONS
19	Ammonia Emission Model for Whole Farm Evaluation of Dairy Production Systems. <i>Journal of Environmental Quality</i> , 2014, 43, 1143-1158.	2.0	56
20	Modeling of urban trees' effects on reducing human exposure to UV radiation in Seoul, Korea. <i>Urban Forestry and Urban Greening</i> , 2014, 13, 785-792.	5.3	27
21	Comparison of a backward-Lagrangian stochastic and vertical radial plume mapping methods for estimating animal waste lagoon emissions. <i>Agricultural and Forest Meteorology</i> , 2013, 180, 236-248.	4.8	12
22	Ammonia emissions from anaerobic treatment lagoons at sow and finishing farms in Oklahoma. <i>Agricultural and Forest Meteorology</i> , 2013, 180, 203-210.	4.8	20
23	Hydrogen Sulfide Emissions from Sow Farm Lagoons across Climate Zones. <i>Journal of Environmental Quality</i> , 2013, 42, 1674-1683.	2.0	12
24	Areal-averaged trace gas emission rates from long-range open-path measurements in stable boundary layer conditions. <i>Atmospheric Measurement Techniques</i> , 2012, 5, 1571-1583.	3.1	9
25	Assessment of ammonia emissions from swine facilities in the U.S.—Application of knowledge from experimental research. <i>Environmental Science and Policy</i> , 2012, 22, 25-35.	4.9	8
26	Physiological Impacts of Short-Term UV Irradiance Exposures on Cultivars of Glycine Max. , 2010, , 458-487.		1
27	Precipitation and dew in a soybean canopy: Spatial variations in leaf wetness and implications for <i>Phakopsora pachyrhizi</i> infection. <i>Agricultural and Forest Meteorology</i> , 2009, 149, 1621-1627.	4.8	23
28	Multi-waveband Solar Irradiance on Tree-shaded Vertical and Horizontal Surfaces: Cloud-free and Partly Cloudy Skies. <i>Photochemistry and Photobiology</i> , 2007, 73, 24-31.	2.5	2
29	Estimation of Pedestrian Level UV Exposure Under Trees. <i>Photochemistry and Photobiology</i> , 2007, 75, 369-376.	2.5	4
30	Effect of Cloud Cover on UVB Exposure Under Tree Canopies: Will Climate Change Affect UVB Exposure?. <i>Photochemistry and Photobiology</i> , 2006, 82, 487.	2.5	12
31	Estimation of Ultraviolet-A Irradiance from Measurements of 368-nm Spectral Irradiance. <i>Journal of Atmospheric and Oceanic Technology</i> , 2005, 22, 1853-1863.	1.3	13
32	Short-term impacts of elevated UV-B radiation on soybeans. , 2005, , .		0
33	The measurement and modeling of broadband UV-A irradiance. , 2005, 5886, 101.		0
34	High UV-B Exposures in the Continental USA: Towards Realistic Short-term Exposure Regimes for Plant-effects Research. <i>Photochemistry and Photobiology</i> , 2005, 81, 1038.	2.5	3
35	Biologically effective UV-B exposures of an oak-hickory forest understory during leaf-out. <i>Agricultural and Forest Meteorology</i> , 2005, 132, 28-43.	4.8	20
36	Ability to predict daily solar radiation values from interpolated climate records for use in crop simulation models. <i>Agricultural and Forest Meteorology</i> , 2004, 127, 65-75.	4.8	30

#	ARTICLE	IF	CITATIONS
37	Estimation of Photosynthetic Photon Flux Density from 368-nm Spectral Irradiance*. Journal of Atmospheric and Oceanic Technology, 2004, 21, 481-487.	1.3	15
38	Response of different crop growth and yield to enhanced UV-B radiation under field conditions. , 2004, 5545, 102.		0
39	Impact of cloud cover on erythemal UV-B exposure under vegetation canopies. , 2004, , .		3
40	Effect of enhanced UV-B radiation combined with other climate stressors on winter wheat. , 2004, , .		0
41	Effects of Supplementary Ultraviolet-B Irradiance on Maize Yield and Qualities: A Field Experiment. Photochemistry and Photobiology, 2004, 80, 127.	2.5	58
42	Effects of Supplementary Ultraviolet-B Irradiance on Maize Yield and Qualities: A Field Experiment. Photochemistry and Photobiology, 2004, 80, 127-131.	2.5	2
43	Solar Ultraviolet-B Radiation in Urban Environments: The Case of Baltimore, Maryland. Photochemistry and Photobiology, 2004, 80, 422-428.	2.5	2
44	UV Radiation Penetration in Plant Canopies. , 2004, , 1261-1264.		1
45	Solar Ultraviolet-B Radiation in Urban Environments: The Case of Baltimore, Maryland. Photochemistry and Photobiology, 2004, 80, 422.	2.5	1
46	Spatial variability in UV radiation during the growing season across the continental USA. Theoretical and Applied Climatology, 2003, 74, 167-177.	2.8	7
47	Diffuse fraction of UV radiation under partly cloudy skies as defined by the Automated Surface Observation System (ASOS). Journal of Geophysical Research, 2003, 108, .	3.3	23
48	Ultraviolet radiation and its impacts on agriculture and forests. Agricultural and Forest Meteorology, 2003, 120, 3-7.	4.8	12
49	Digital measurement of heliotropic leaf response in soybean cultivars and leaf exposure to solar UVB radiation. Agricultural and Forest Meteorology, 2003, 120, 161-175.	4.8	8
50	Yield and yield formation of field winter wheat in response to supplemental solar ultraviolet-B radiation. Agricultural and Forest Meteorology, 2003, 120, 279-283.	4.8	31
51	Individual- and scattered-tree influences on ultraviolet irradiance. Agricultural and Forest Meteorology, 2003, 120, 113-126.	4.8	29
52	Ultraviolet leaf reflectance of common urban trees and the prediction of reflectance from leaf surface characteristics. Agricultural and Forest Meteorology, 2003, 120, 127-139.	4.8	98
53	Ultraviolet-B radiation in a row-crop canopy: an extended 1-D model. Agricultural and Forest Meteorology, 2003, 120, 141-151.	4.8	7
54	Growth analytic simulation of soybean and winter wheat crops under different doses of UV-B irradiance. , 2003, , .		1

#	ARTICLE	IF	CITATIONS
55	Effect of epicuticular wax on UV scattering of sorghum leaves and canopies. , 2003, 5156, 236.		2
56	Defining the probabilities of solar UV event exposures for plant effects research. , 2003, , .		0
57	Spatial correlations of daily and weekly maximum day exposure of solar UV radiation in the continental United States. , 2003, , .		1
58	Solar ultraviolet-B radiation in urban environments: Baltimore, Maryland. , 2003, , .		0
59	Inclusion of an ultraviolet radiation transfer component in an urban forest effects model for predicting tree influences on potential below-canopy exposure to UVB radiation. , 2003, , .		4
60	<title>Modeling ultraviolet-B radiation in a maize canopy</title>. , 2002, , .		2
61	<title>Urban tree influences on ultraviolet irradiance</title>. , 2002, , .		3
62	<title>Estimating the UV diffuse fraction of solar radiation under partly cloudy skies</title>. , 2002, , .		1
63	Estimation of Pedestrian Level UV Exposure Under Trees. Photochemistry and Photobiology, 2002, 75, 369.	2.5	41
64	A Geometric Ultraviolet-B Radiation Transfer Model Applied to Vegetation Canopies. Agronomy Journal, 2002, 94, 475-482.	1.8	21
65	Estimating climate effects on the atmospheric contribution to the potential available inorganic nitrogen in eastern United States soils. Atmospheric Environment, 2002, 36, 1619-1630.	4.1	0
66	<title>Yield and yield formation of winter wheat in response to enhanced solar ultraviolet-B radiation</title>. , 2002, , .		2
67	A Geometric Ultraviolet-B Radiation Transfer Model Applied to Vegetation Canopies. Agronomy Journal, 2002, 94, 475.	1.8	4
68	Multi-waveband Solar Irradiance on Tree-shaded Vertical and Horizontal Surfaces: Cloud-free and Partly Cloudy Skies. Photochemistry and Photobiology, 2001, 73, 24.	2.5	20
69	Estimation of Ultraviolet-B Irradiance under Variable Cloud Conditions. Journal of Applied Meteorology and Climatology, 2000, 39, 904-916.	1.7	52
70	ODOR IMPACT DISTANCE GUIDELINE FOR SWINE PRODUCTION SYSTEMS. Proceedings of the Water Environment Federation, 2000, 2000, 773-788.	0.0	10
71	Ultraviolet radiation in urban ecosystems with consideration of effects on human health. Urban Ecosystems, 2000, 4, 193-229.	2.4	53
72	Potential Effect of Soybean Heliotropism on Ultraviolet-B Irradiance and Dose. Agronomy Journal, 1999, 91, 1017-1023.	1.8	11

#	ARTICLE	IF	CITATIONS
73	Ultraviolet-B and photosynthetically active radiation environment of inclined leaf surfaces in a maize canopy and implications for modeling. <i>Agricultural and Forest Meteorology</i> , 1999, 95, 187-201.	4.8	10
74	Ozone profiles over a suburban neighborhood. <i>Atmospheric Environment</i> , 1998, 33, 51-63.	4.1	7
75	Ultraviolet irradiance of inclined planes at the top of plant canopies. <i>Agricultural and Forest Meteorology</i> , 1998, 89, 281-293.	4.8	18
76	Obscured Overcast Sky Radiance Distributions for Ultraviolet and Photosynthetically Active Radiation. <i>Journal of Applied Meteorology and Climatology</i> , 1997, 36, 1336-1345.	1.7	66
77	Shadow-band corrections for photosynthetically-active radiation under clear and overcast conditions. <i>Agricultural and Forest Meteorology</i> , 1997, 87, 213-222.	4.8	5
78	Biologically Active Radiation in the Vicinity of a Single Tree. <i>Photochemistry and Photobiology</i> , 1997, 65, 974-982.	2.5	52
79	Partitioning of biologically active radiation in plant canopies. <i>International Journal of Biometeorology</i> , 1997, 40, 26-40.	3.0	107
80	Ultraviolet sky radiance distributions of translucent overcast skies. <i>Theoretical and Applied Climatology</i> , 1997, 58, 129-139.	2.8	32
81	Clear sky radiance distributions in ultraviolet wavelength bands. <i>Theoretical and Applied Climatology</i> , 1997, 56, 123-135.	2.8	56
82	Partitioning of biologically active radiation in plant canopies. <i>International Journal of Biometeorology</i> , 1997, 40, 26-40.	3.0	61
83	Photosynthetically-active radiation: sky radiance distributions under clear and overcast conditions. <i>Agricultural and Forest Meteorology</i> , 1996, 82, 267-292.	4.8	68
84	Solar ultraviolet-B and photosynthetically active irradiance in the urban sub-canopy: A survey of influences. <i>International Journal of Biometeorology</i> , 1996, 39, 201-212.	3.0	34
85	Scattering of ultraviolet and photosynthetically active radiation by sorghum bicolor: influence of epicuticular wax. <i>Agricultural and Forest Meteorology</i> , 1995, 75, 263-281.	4.8	36
86	Aerosol transmission of a viable virus affecting swine: Explanation of an epizootic of pseudorabies. <i>International Journal of Biometeorology</i> , 1994, 38, 33-39.	3.0	25
87	Wind Flow within Open-Top Growth Chambers and the Gas Exchange Implications. <i>Journal of Environmental Quality</i> , 1992, 21, 49-56.	2.0	6
88	The translation of turbulent wind energy to individual corn plant motion during senescence. <i>Boundary-Layer Meteorology</i> , 1991, 55, 161-176.	2.3	16
89	Ultraviolet and Photosynthetically Active Bands: Plane Surface Irradiance at Corn Canopy Base. <i>Agronomy Journal</i> , 1991, 83, 391-396.	1.8	29
90	The vertical movement of adult western corn rootworms (<i>Diabrotica virgifera virgifera</i>) relative to the transport of momentum and heat. <i>Agricultural and Forest Meteorology</i> , 1990, 49, 191-203.	4.8	15

#	ARTICLE	IF	CITATIONS
91	Full-scale comparison of a wind-tunnel simulation of windy locations in an urban area. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 1988, 31, 335-341.	3.9	8
92	The intermittent vertical heat flux over a spruce forest canopy. <i>Boundary-Layer Meteorology</i> , 1986, 35, 317-330.	2.3	15
93	The influence of the physical attributes of a spruce shoot on momentum transfer. <i>Agricultural and Forest Meteorology</i> , 1985, 36, 7-18.	4.8	9
94	The influence of the sky radiance distribution on the flux density in the shadow of a tree crown. <i>Agricultural and Forest Meteorology</i> , 1985, 35, 59-70.	4.8	20
95	The mutual interference of spruce canopy structural elements. <i>Agricultural and Forest Meteorology</i> , 1984, 32, 145-156.	4.8	21
96	The scaling of flow in vegetative structures. <i>Boundary-Layer Meteorology</i> , 1983, 27, 171-184.	2.3	30