

Derrick Yf Lai

List of Publications by Year in descending order

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73
papers

2,487
citations

218677

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223800

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all docs

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docs citations

77
times ranked

2657
citing authors

#	ARTICLE	IF	CITATIONS
1	Environmental drivers of nitrous oxide emission factor for a coastal reservoir and its catchment areas in southeastern China. <i>Environmental Pollution</i> , 2022, 294, 118568.	7.5	6
2	Changes in sediment methanogenic archaea community structure and methane production potential following conversion of coastal marsh to aquaculture ponds. <i>Environmental Pollution</i> , 2022, 305, 119276.	7.5	11
3	Fire frequency and type regulate the response of soil carbon cycling and storage to fire across soil depths and ecosystems: A meta-analysis. <i>Science of the Total Environment</i> , 2022, 825, 153921.	8.0	12
4	Biosphere-atmosphere exchange of CO ₂ and CH ₄ in mangrove forests and salt marshes. , 2022, , 93-132.		0
5	Effects of applying different carbon substrates on nutrient removal and greenhouse gas emissions by constructed wetlands treating carbon-depleted hydroponic wastewater. <i>Bioresource Technology</i> , 2022, 357, 127312.	9.6	20
6	Biophysical Controls of Ecosystemâ€Scale Methane Fluxes From a Subtropical Estuarine Mangrove: Multiscale, Nonlinearity, Asynchrony and Causality. <i>Global Biogeochemical Cycles</i> , 2022, 36, .	4.9	5
7	Insights into the farming-season carbon budget of coastal earthen aquaculture ponds in southeastern China. <i>Agriculture, Ecosystems and Environment</i> , 2022, 335, 107995.	5.3	12
8	The response of soil-atmosphere greenhouse gas exchange to changing plant litter inputs in terrestrial forest ecosystems. <i>Science of the Total Environment</i> , 2022, 838, 155995.	8.0	6
9	Problems and Management of Acacia-Dominated Urban Forests on Man-Made Slopes in a Subtropical, High-Density City. <i>Forests</i> , 2021, 12, 323.	2.1	4
10	Long-term effects of biochar application on greenhouse gas production and microbial community in temperate forest soils under increasing temperature. <i>Science of the Total Environment</i> , 2021, 767, 145021.	8.0	27
11	Diffusive CH ₄ fluxes from aquaculture ponds using floating chambers and thin boundary layer equations. <i>Atmospheric Environment</i> , 2021, 253, 118384.	4.1	7
12	Impacts of wetting-drying cycles on short-term carbon and nitrogen dynamics in <i>Amynthas</i> earthworm casts. <i>Pedosphere</i> , 2021, 31, 423-432.	4.0	14
13	Large variations in indirect N ₂ O emission factors (EF ₅) from coastal aquaculture systems in China from plot to regional scales. <i>Water Research</i> , 2021, 200, 117208.	11.3	13
14	FLUXNET-CH ₄ : a global, multi-ecosystem dataset and analysis of methane seasonality from freshwater wetlands. <i>Earth System Science Data</i> , 2021, 13, 3607-3689.	9.9	79
15	Seven years of wetter and delayed wet season enhanced soil methane uptake during the dry season in a tropical monsoon forest. <i>Catena</i> , 2021, 203, 105276.	5.0	5
16	Coastal reservoirs as a source of nitrous oxide: Spatio-temporal patterns and assessment strategy. <i>Science of the Total Environment</i> , 2021, 790, 147878.	8.0	9
17	Gap-filling eddy covariance methane fluxes: Comparison of machine learning model predictions and uncertainties at FLUXNET-CH ₄ wetlands. <i>Agricultural and Forest Meteorology</i> , 2021, 308-309, 108528.	4.8	33
18	Spatial variations in CO ₂ fluxes in a subtropical coastal reservoir of Southeast China were related to urbanization and land-use types. <i>Journal of Environmental Sciences</i> , 2021, 109, 206-218.	6.1	12

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19	Annual CO ₂ and CH ₄ fluxes in coastal earthen ponds with <i>Litopenaeus vannamei</i> in southeastern China. <i>Aquaculture</i> , 2021, 545, 737229.	3.5	21
20	Assessing nutrient budgets and environmental impacts of coastal land-based aquaculture system in southeastern China. <i>Agriculture, Ecosystems and Environment</i> , 2021, 322, 107662.	5.3	29
21	Large contribution of non-aquaculture period fluxes to the annual N ₂ O emissions from aquaculture ponds in Southeast China. <i>Journal of Hydrology</i> , 2020, 582, 124550.	5.4	21
22	Ebullition was a major pathway of methane emissions from the aquaculture ponds in southeast China. <i>Water Research</i> , 2020, 184, 116176.	11.3	56
23	Anaerobic oxidation of methane with denitrification in sediments of a subtropical estuary: Rates, controlling factors and environmental implications. <i>Journal of Environmental Management</i> , 2020, 273, 111151.	7.8	17
24	Large increase in diffusive greenhouse gas fluxes from subtropical shallow aquaculture ponds during the passage of typhoons. <i>Journal of Hydrology</i> , 2020, 583, 124643.	5.4	14
25	Effects of Land Use Types on CH ₄ and CO ₂ Production Potentials in Subtropical Wetland Soils. <i>Water (Switzerland)</i> , 2020, 12, 1856.	2.7	3
26	Long-term increase in rainfall decreases soil organic phosphorus decomposition in tropical forests. <i>Soil Biology and Biochemistry</i> , 2020, 151, 108056.	8.8	23
27	Large Spatial Variations in Diffusive CH ₄ Fluxes from a Subtropical Coastal Reservoir Affected by Sewage Discharge in Southeast China. <i>Environmental Science & Technology</i> , 2020, 54, 14192-14203.	10.0	26
28	Light grazing facilitates carbon accumulation in subsoil in Chinese grasslands: A meta-analysis. <i>Global Change Biology</i> , 2020, 26, 7186-7197.	9.5	42
29	Variability and controls of soil CO ₂ fluxes under different tillage and crop residue managements in a wheat-maize double-cropping system. <i>Environmental Science and Pollution Research</i> , 2020, 27, 45722-45736.	5.3	0
30	Spatial Variations of N ₂ O Fluxes Across the Water-Air Interface of Mariculture Ponds in a Subtropical Estuary in Southeast China. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2019JG005605.	3.0	9
31	Methane emissions reduce the radiative cooling effect of a subtropical estuarine mangrove wetland by half. <i>Global Change Biology</i> , 2020, 26, 4998-5016.	9.5	31
32	The Difference of Litter Decay, Litter- and Sediment-Associated Hydrolytic Enzymes between Brackish and Freshwater Tidal Marshes. <i>Estuaries and Coasts</i> , 2019, 42, 1328-1341.	2.2	3
33	Short-term changes in simulated inundation frequency differentially affect inorganic nitrogen, nitrification, and denitrification in estuarine marshes. <i>Ecological Indicators</i> , 2019, 107, 105571.	6.3	3
34	Production and uptake of dissolved carbon, nitrogen, and phosphorus in overlying water of aquaculture shrimp ponds in subtropical estuaries, China. <i>Environmental Science and Pollution Research</i> , 2019, 26, 21565-21578.	5.3	14
35	Subtropical mangrove wetland is a stronger carbon dioxide sink in the dry than wet seasons. <i>Agricultural and Forest Meteorology</i> , 2019, 278, 107644.	4.8	43
36	Simultaneous Abiotic Production of Greenhouse Gases (CO ₂ , CH ₄ , and Tj ETQq0 0 0 rgBT /Overlock 10 Tf 00 1977-1987.	3.0	9

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37	Methane Dynamics of Aquaculture Shrimp Ponds in Two Subtropical Estuaries, Southeast China: Dissolved Concentration, Net Sediment Release, and Water Oxidation. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 1430-1445.	3.0	20
38	Large Fine-scale Spatiotemporal Variations of CH ₄ Diffusive Fluxes From Shrimp Aquaculture Ponds Affected by Organic Matter Supply and Aeration in Southeast China. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 1290-1307.	3.0	33
39	Optimal Coupling of Straw and Synthetic Fertilizers Incorporation on Soil Properties, Active Fe Dynamics, and Greenhouse Gas Emission in <i>Jasminum sambac</i> (L.) Field in Southeastern China. <i>Sustainability</i> , 2019, 11, 1092.	3.2	4
40	Carbon dioxide dynamics from sediment, sediment-water interface and overlying water in the aquaculture shrimp ponds in subtropical estuaries, southeast China. <i>Journal of Environmental Management</i> , 2019, 236, 224-235.	7.8	12
41	Methane dynamics in an estuarine brackish <i>Cyperus malaccensis</i> marsh: Production and porewater concentration in soils, and net emissions to the atmosphere over five years. <i>Geoderma</i> , 2019, 337, 132-142.	5.1	18
42	Effects of steel slag and biochar amendments on CO ₂ , CH ₄ , and N ₂ O flux, and rice productivity in a subtropical Chinese paddy field. <i>Environmental Geochemistry and Health</i> , 2019, 41, 1419-1431.	3.4	24
43	Fluxes of carbon dioxide and methane across the water-atmosphere interface of aquaculture shrimp ponds in two subtropical estuaries: The effect of temperature, substrate, salinity and nitrate. <i>Science of the Total Environment</i> , 2018, 635, 1025-1035.	8.0	67
44	Effect of drainage on CO ₂ , CH ₄ , and N ₂ O fluxes from aquaculture ponds during winter in a subtropical estuary of China. <i>Journal of Environmental Sciences</i> , 2018, 65, 72-82.	6.1	38
45	Spatial Variations in the Chemical Composition of Eolian Sediments in Hyperarid Regions: a Case Study from the Badain Jaran Desert, Northwestern China. <i>Journal of Sedimentary Research</i> , 2018, 88, 290-300.	1.6	20
46	Separation of soil respiration: a site-specific comparison of partition methods. <i>Soil</i> , 2018, 4, 141-152.	4.9	13
47	Effects of Steel Slag and Biochar Incorporation on Active Soil Organic Carbon Pools in a Subtropical Paddy Field. <i>Agronomy</i> , 2018, 8, 135.	3.0	28
48	Temporal variations and temperature sensitivity of ecosystem respiration in three brackish marsh communities in the Min River Estuary, southeast China. <i>Geoderma</i> , 2018, 327, 138-150.	5.1	19
49	Soil heterotrophic respiration assessment using minimally disturbed soil microcosm cores. <i>MethodsX</i> , 2018, 5, 834-840.	1.6	17
50	Spatiotemporal analysis of regional socio-economic vulnerability change associated with heat risks in Canada. <i>Applied Geography</i> , 2018, 95, 61-70.	3.7	48
51	Dynamics of dissolved nutrients in the aquaculture shrimp ponds of the Min River estuary, China: Concentrations, fluxes and environmental loads. <i>Science of the Total Environment</i> , 2017, 603-604, 256-267.	8.0	99
52	Effects of industrial and agricultural waste amendment on soil greenhouse gas production in a paddy field in Southeastern China. <i>Atmospheric Environment</i> , 2017, 164, 239-249.	4.1	23
53	Effects of coastal marsh conversion to shrimp aquaculture ponds on CH ₄ and N ₂ O emissions. <i>Estuarine, Coastal and Shelf Science</i> , 2017, 199, 125-131.	2.1	49
54	Changes in Soil Organic Carbon Dynamics in a Native C ₄ Plant-Dominated Tidal Marsh Following <i>Spartina alterniflora</i> Invasion. <i>Pedosphere</i> , 2017, 27, 856-867.	4.0	24

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55	Straw Application Strategy to Optimize Nutrient Release in a Southeastern China Rice Cropland. <i>Agronomy</i> , 2017, 7, 84.	3.0	14
56	Factors Related with CH ₄ and N ₂ O Emissions from a Paddy Field: Clues for Management implications. <i>PLoS ONE</i> , 2017, 12, e0169254.	2.5	57
57	Effects of inorganic amendments, rice cultivars and cultivation methods on greenhouse gas emissions and rice productivity in a subtropical paddy field. <i>Ecological Engineering</i> , 2016, 95, 770-778.	3.6	18
58	Variations in Temperature Sensitivity (Q ₁₀) of CH ₄ Emission from a Subtropical Estuarine Marsh in Southeast China. <i>PLoS ONE</i> , 2015, 10, e0125227.	2.5	14
59	The effect of floating vegetation on CH ₄ and N ₂ O emissions from subtropical paddy fields in China. <i>Paddy and Water Environment</i> , 2015, 13, 425-431.	1.8	19
60	Rice straw incorporation affects global warming potential differently in early vs. late cropping seasons in Southeastern China. <i>Field Crops Research</i> , 2015, 181, 42-51.	5.1	43
61	Effects of rice straw incorporation on active soil organic carbon pools in a subtropical paddy field. <i>Soil and Tillage Research</i> , 2015, 152, 8-16.	5.6	180
62	The uncertain climate footprint of wetlands under human pressure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 4594-4599.	7.1	171
63	Effects of steel slag application on greenhouse gas emissions and crop yield over multiple growing seasons in a subtropical paddy field in China. <i>Field Crops Research</i> , 2015, 171, 146-156.	5.1	74
64	Steel slag amendment reduces methane emission and increases rice productivity in subtropical paddy fields in China. <i>Wetlands Ecology and Management</i> , 2014, 22, 683-691.	1.5	37
65	The spatial and temporal relationships between CO ₂ and CH ₄ exchange in a temperate ombrotrophic bog. <i>Atmospheric Environment</i> , 2014, 89, 249-259.	4.1	47
66	Spatial and temporal variations of methane flux measured by autochambers in a temperate ombrotrophic peatland. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014, 119, 864-880.	3.0	37
67	Phosphorus fractions and fluxes in the soils of a free surface flow constructed wetland in Hong Kong. <i>Ecological Engineering</i> , 2014, 73, 73-79.	3.6	20
68	The effect of atmospheric turbulence and chamber deployment period on autochamber CO ₂ and CH ₄ flux measurements in an ombrotrophic peatland. <i>Biogeosciences</i> , 2012, 9, 3305-3322.	3.3	71
69	Rule on papers puts China's PhDs at risk. <i>Nature</i> , 2011, 476, 152-152.	27.8	7
70	Modelling the effects of climate change on methane emission from a northern ombrotrophic bog in Canada. <i>Environmental Geology</i> , 2009, 58, 1197-1206.	1.2	6
71	Phosphorus sorption by sediments in a subtropical constructed wetland receiving stormwater runoff. <i>Ecological Engineering</i> , 2009, 35, 735-743.	3.6	89
72	Methane Dynamics in Northern Peatlands: A Review. <i>Pedosphere</i> , 2009, 19, 409-421.	4.0	305

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73	Phosphorus retention and release by sediments in the eutrophic Mai Po Marshes, Hong Kong. Marine Pollution Bulletin, 2008, 57, 349-356.	5.0	68