# Changchun Song

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5460015/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 93 papers | 2,376 citations | 201575 27 h-index | 243529 44 g-index |
| 96 all docs | 96 docs citations | 96 times ranked | 2243 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Ecosystemâ€“atmosphere exchange of CH<sub>4</sub> and N<sub>2</sub>O and ecosystem respiration in wetlands in the Sanjiang Plain, Northeastern China. Global Change Biology, 2009, 15, 692-705. | 4.2 | 232 |
| 2 | Loss and Fragmentation of Marshes in the Sanjiang Plain, Northeast China, 1954â€“2005. Wetlands, 2011, 31, 945-954. | 0.7 | 127 |
| 3 | Global pattern and controls of soil microbial metabolic quotient. Ecological Monographs, 2017, 87, 429-441. | 2.4 | 106 |
| 4 | Quantifying changes in multiple ecosystem services during 1992â€“2012 in the Sanjiang Plain of China. Science of the Total Environment, 2015, 514, 119-130. | 3.9 | 105 |
| 5 | Marshland conversion to cropland in northeast China from 1950 to 2000 reduced the greenhouse effect. Global Change Biology, 2010, 16, 680-695. | 4.2 | 101 |
| 6 | Large methane emission upon spring thaw from natural wetlands in the northern permafrost region. Environmental Research Letters, 2012, 7, 034009. | 2.2 | 61 |
| 7 | Effect of nitrogen addition on decomposition of Calamagrostis angustifolia litters from freshwater marshes of Northeast China. Ecological Engineering, 2011, 37, 1578-1582. | 1.6 | 56 |
| 8 | Shifts in soil bacterial and archaeal communities during freeze-thaw cycles in a seasonal frozen marsh, Northeast China. Science of the Total Environment, 2018, 625, 782-791. | 3.9 | 56 |
| 9 | Effects of warming on N2O fluxes in a boreal peatland of Permafrost region, Northeast China. Science of the Total Environment, 2018, 616-617, 427-434. | 3.9 | 54 |
| 10 | Short-term responses of soil enzyme activities and carbon mineralization to added nitrogen and litter in a freshwater marsh of Northeast China. European Journal of Soil Biology, 2014, 61, 72-79. | 1.4 | 52 |
| 11 | Effect of land-use change on CH4 and N2O emissions from freshwater marsh in Northeast China. Atmospheric Environment, 2009, 43, 3305-3309. | 1.9 | 50 |
| 12 | Soil dissolved organic carbon in terrestrial ecosystems: Global budget, spatial distribution and controls. Global Ecology and Biogeography, 2020, 29, 2159-2175. | 2.7 | 47 |
| 13 | Effects of temperature and root additions on soil carbon and nitrogen mineralization in a predominantly permafrost peatland. Catena, 2018, 165, 381-389. | 2.2 | 46 |
| 14 | Fluxes of carbon dioxide and methane from swamp and impact factors in Sanjiang Plain, China. Science Bulletin, 2003, 48, 2749-2753. | 1.7 | 45 |
| 15 | Nitrogen additions affect litter quality and soil biochemical properties in a peatland of Northeast China. Ecological Engineering, 2017, 100, 175-185. | 1.6 | 44 |
| 16 | Effects of exogenous nitrogen on freshwater marsh plant growth and N2O fluxes in Sanjiang Plain, Northeast China. Atmospheric Environment, 2007, 41, 1080-1090. | 1.9 | 42 |
| 17 | Plant functional group controls litter decomposition rate and its temperature sensitivity: An incubation experiment on litters from a boreal peatland in northeast China. Science of the Total Environment, 2018, 626, 678-683. | 3.9 | 42 |
| 18 | Effects of reclamation of natural wetlands to a rice paddy on dissolved carbon dynamics in the Sanjiang Plain, Northeastern China. Ecological Engineering, 2010, 36, 1417-1423. | 1.6 | 40 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Carbon exchange in a freshwater marsh in the Sanjiang Plain, northeastern China. Agricultural and Forest Meteorology, 2011, 151, 1131-1138. | 1.9 | 40 |
| 20 | Temporal and spatial variability of methane emissions in a northern temperate marsh. Atmospheric Environment, 2013, 81, 356-363. | 1.9 | 40 |
| 21 | Influence of nitrogen additions on litter decomposition, nutrient dynamics, and enzymatic activity of two plant species in a peatland in Northeast China. Science of the Total Environment, 2018, 625, 640-646. | 3.9 | 38 |
| 22 | Effects of long-term nitrogen and phosphorus addition on plant defence compounds in a freshwater wetland. Ecological Indicators, 2018, 94, 1-6. | 2.6 | 36 |
| 23 | Effects of nitrogen on the ecosystem respiration, CH4 and N2O emissions to the atmosphere from the freshwater marshes in northeast China. Environmental Geology, 2007, 52, 529-539. | 1.2 | 35 |
| 24 | Wetland changes in the Amur River Basin: Differing trends and proximate causes on the Chinese and Russian sides. Journal of Environmental Management, 2021, 280, 111670. | 3.8 | 35 |
| 25 | Plant zonation patterns reflected by the differences in plant growth, biomass partitioning and root traits along a water level gradient among four common vascular plants in freshwater marshes of the Sanjiang Plain, Northeast China. Ecological Engineering, 2015, 81, 158-164. | 1.6 | 32 |
| 26 | Short-term Effects of Nitrogen Additions and Increased Temperature on Wetland Soil Respiration, Sanjiang Plain, China. Wetlands, 2013, 33, 727-736. | 0.7 | 31 |
| 27 | Effect of continued nitrogen enrichment on greenhouse gas emissions from a wetland ecosystem in the Sanjiang Plain, Northeast China: A 5â€‰year nitrogen addition experiment. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 741-751. | 1.3 | 29 |
| 28 | Effects of freezingâ€“thawing cycle on peatland active organic carbon fractions and enzyme activities in the Da Xingâ€™anling Mountains, Northeast China. Environmental Earth Sciences, 2014, 72, 1853-1860. | 1.3 | 29 |
| 29 | Litter mass loss and nutrient dynamics of four emergent macrophytes during aerial decomposition in freshwater marshes of the Sanjiang plain, Northeast China. Plant and Soil, 2014, 385, 139-147. | 1.8 | 28 |
| 30 | Wetland-atmosphere methane exchange in Northeast China: A comparison of permafrost peatland and freshwater wetlands. Agricultural and Forest Meteorology, 2018, 249, 239-249. | 1.9 | 28 |
| 31 | Rising vegetation activity dominates growing water use efficiency in the Asian permafrost region from 1900 to 2100. Science of the Total Environment, 2020, 736, 139587. | 3.9 | 28 |
| 32 | Effects of warming on carbon emission and microbial abundances across different soil depths of a peatland in the permafrost region under anaerobic condition. Applied Soil Ecology, 2020, 156, 103712. | 2.1 | 27 |
| 33 | Short-Term Response of the Soil Microbial Abundances and Enzyme Activities to Experimental Warming in a Boreal Peatland in Northeast China. Sustainability, 2019, 11, 590. | 1.6 | 26 |
| 34 | Greenhouse Gas Emissions from Southward Transplanted Wetlands During Freezing-Thawing Periods in Northeast China. Wetlands, 2013, 33, 1075-1081. | 0.7 | 24 |
| 35 | Effects of water table changes on soil CO2, CH4 and N2O fluxes during the growing season in freshwater marsh of Northeast China. Environmental Earth Sciences, 2013, 69, 1963-1971. | 1.3 | 23 |
| 36 | Carbon release from Sphagnum peat during thawing in a montane area in China. Atmospheric Environment, 2013, 75, 77-82. | 1.9 | 23 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Growing season methane emissions from a permafrost peatland of northeast China: Observations using open-path eddy covariance method. Atmospheric Environment, 2017, 153, 135-149. | 1.9 | 23 |
| 38 | Soil carbon and nitrogen across wetland types in discontinuous permafrost zone of the Xiao Xing'an Mountains, northeastern China. Catena, 2013, 101, 31-37. | 2.2 | 21 |
| 39 | Effects of temperature increase and nitrogen addition on the early litter decomposition in permafrost peatlands. Catena, 2022, 209, 105801. | 2.2 | 21 |
| 40 | Effects of permafrost thaw on carbon emissions under aerobic and anaerobic environments in the Great Hing'an Mountains, China. Science of the Total Environment, 2014, 487, 604-610. | 3.9 | 20 |
| 41 | Two ultraviolet radiation datasets that cover China. Advances in Atmospheric Sciences, 2017, 34, 805-815. | 1.9 | 20 |
| 42 | CO<sub>2</sub> emissions from soils of different depths of a permafrost peatland, Northeast China: response to simulated freezingâ€“thawing cycles. Journal of Plant Nutrition and Soil Science, 2014, 177, 524-531. | 1.1 | 18 |
| 43 | Effects of nitrogen addition on plant functional traits in freshwater wetland of Sanjiang Plain, Northeast China. Chinese Geographical Science, 2014, 24, 674-681. | 1.2 | 18 |
| 44 | Phosphorus alleviation of nitrogenâ€suppressed methane sink in global grasslands. Ecology Letters, 2020, 23, 821-830. | 3.0 | 18 |
| 45 | Greenhouse gas emissions from different wetlands during the snow-covered season in Northeast China. Atmospheric Environment, 2012, 62, 328-335. | 1.9 | 17 |
| 46 | Phosphorus availability as a primary constraint on methane emission from a freshwater wetland. Atmospheric Environment, 2012, 59, 202-206. | 1.9 | 17 |
| 47 | CO2 evolution from standing litter of the emergent macrophyte Deyeuxia angustifolia in the Sanjiang Plain, Northeast China. Ecological Engineering, 2014, 63, 45-49. | 1.6 | 17 |
| 48 | Methane Emission Potential from Freshwater Marsh Soils of Northeast China: Response to Simulated Freezing-Thawing Cycles. Wetlands, 2017, 37, 437-445. | 0.7 | 16 |
| 49 | Regional Ecological Risk Assessment of Wetlands in the Sanjiang Plain with Respect to Human Disturbance. Sustainability, 2020, 12, 1974. | 1.6 | 15 |
| 50 | Effects of soil moisture, temperature, and nitrogen fertilization on soil respiration and nitrous oxide emission during maize growth period in northeast China. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2009, 59, 97-106. | 0.3 | 13 |
| 51 | Comparative Analysis of Two Machine Learning Algorithms in Predicting Site-Level Net Ecosystem Exchange in Major Biomes. Remote Sensing, 2021, 13, 2242. | 1.8 | 13 |
| 52 | Microbial abundance and enzymatic activity from tussock and shrub soil in permafrost peatland after 6-year warming. Ecological Indicators, 2021, 126, 107589. | 2.6 | 13 |
| 53 | Effect of nitrogen addition on soil organic carbon in freshwater marsh of Northeast China. Environmental Earth Sciences, 2013, 70, 1653-1659. | 1.3 | 12 |
| 54 | Influence of wetland reclamation on land-surface energy exchange and evapotranspiration in the Sanjiang plain, Northeast China. Agricultural and Forest Meteorology, 2021, 296, 108214. | 1.9 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Labile carbon addition alters soil organic carbon mineralization but not its temperature sensitivity in a freshwater marsh of Northeast China. Applied Soil Ecology, 2021, 160, 103844. | 2.1 | 12 |
| 56 | Temperature, soil moisture, and microbial controls on <scp>CO<sub>2</sub></scp> and <scp>CH<sub>4</sub></scp> emissions from a permafrost peatland. Environmental Progress and Sustainable Energy, 2021, 40, . | 1.3 | 11 |
| 57 | A recommended nitrogen application strategy for high crop yield and low environmental pollution at a basin scale. Science of the Total Environment, 2021, 792, 148464. | 3.9 | 11 |
| 58 | Response of regeneration diversity of Carex Lasiocarpa community to different water levels in Sanjiang Plain, China. Chinese Geographical Science, 2010, 20, 37-42. | 1.2 | 10 |
| 59 | Short-term Effect of Nitrogen Addition on Litter and Soil Properties in Calamagrostis angustifolia Freshwater Marshes of Northeast China. Wetlands, 2013, 33, 505-513. | 0.7 | 10 |
| 60 | Comparing differences in early-stage decay of macrophyte shoots between in the air and on the sediment surface in a temperate freshwater marsh. Ecological Engineering, 2015, 81, 14-18. | 1.6 | 9 |
| 61 | Plant defence allocation patterns following an increasing water level gradient in a freshwater wetland. Ecological Indicators, 2019, 107, 105542. | 2.6 | 9 |
| 62 | Seasonal changes in the contribution of root respiration to total soil respiration in a freshwater marsh in Sanjiang Plain, Northeast China. Environmental Earth Sciences, 2016, 75, 1. | 1.3 | 8 |
| 63 | The spatiotemporal distribution of dissolved carbon in the main stems and their tributaries along the lower reaches of Heilongjiang River Basin, Northeast China. Environmental Science and Pollution Research, 2016, 23, 206-219. | 2.7 | 8 |
| 64 | Hydrological processes and permafrost regulate magnitude, source and chemical characteristics of dissolved organic carbon export in a peatland catchment of northeastern China. Hydrology and Earth System Sciences, 2018, 22, 1081-1093. | 1.9 | 8 |
| 65 | Warming effects on the flux of CH4 from peatland mesocosms are regulated by plant species composition: Richness and functional types. Science of the Total Environment, 2022, 806, 150831. | 3.9 | 8 |
| 66 | Dominant species and evenness level co-regulate litter mixture decomposition in a boreal peatland. Plant and Soil, 2022, 474, 423-436. | 1.8 | 8 |
| 67 | Temperature sensitivity of carbon dioxide production in aggregates and their responses to nitrogen addition in a freshwater marsh, Sanjiang Plain. Soil Science and Plant Nutrition, 2013, 59, 953-960. | 0.8 | 7 |
| 68 | Annual Carbon Gas Emissions from a Boreal Peatland in Continuous Permafrost Zone, Northeast China. Clean - Soil, Air, Water, 2016, 44, 456-463. | 0.7 | 7 |
| 69 | Multi-element fingerprinting of soils can reveal conversion of wetlands to croplands. Science of the Total Environment, 2021, 752, 141997. | 3.9 | 7 |
| 70 | Effect of Nitrogen Addition on Soil Microbial Functional Gene Abundance and Community Diversity in Permafrost Peatland. Microorganisms, 2021, 9, 2498. | 1.6 | 7 |
| 71 | Nitrogen addition in a freshwater marsh alters the quality of senesced leaves, promoting decay rates and changing nutrient dynamics during the standing-dead phase. Plant and Soil, 2017, 417, 511-521. | 1.8 | 6 |
| 72 | Export of dissolved nitrogen in catchments underlain by permafrost in northeast China. Science of the Total Environment, 2019, 660, 1210-1218. | 3.9 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Effect of nitrogen and phosphorus on tissue nutrition and biomass of freshwater wetland plant in Sanjiang Plain, Northeast China. Chinese Geographical Science, 2006, 16, 270-275. | 1.2 | 5 |
| 74 | Effects of long-term land use change on dissolved carbon characteristics in the permafrost streams of northeast China. Environmental Sciences: Processes and Impacts, 2014, 16, 2496-2506. | 1.7 | 5 |
| 75 | Study on Soil Water and Heat Transport Characteristic Responses to Land Use Change in Sanjiang Plain. Sustainability, 2019, 11, 157. | 1.6 | 5 |
| 76 | Towards an improved utilization of eddy covariance data: Growing season CO2 exchange from a permafrost peatland in the Great Hing'an Mountains, Northeast China. Ecological Indicators, 2020, 115, 106427. | 2.6 | 5 |
| 77 | Estimation of Soil Organic Carbon Storage in Palustrine Wetlands, China. International Journal of Environmental Research and Public Health, 2020, 17, 4646. | 1.2 | 5 |
| 78 | Response of methane emissions to litter input manipulation in a temperate freshwater marsh, Northeast China. Ecological Indicators, 2020, 115, 106377. | 2.6 | 5 |
| 79 | Responses of Above-ground Biomass, Plant Diversity, and Dominant Species to Habitat Change in a Freshwater Wetland of Northeast China. Russian Journal of Ecology, 2020, 51, 57-63. | 0.3 | 4 |
| 80 | Six-year warming decreased amino sugar accumulation in the deep rhizosphere soil of permafrost peatland. Applied Soil Ecology, 2022, 171, 104316. | 2.1 | 4 |
| 81 | Effects of Water Regimes on Methane Emissions in Peatland and Gley Marsh. Vadose Zone Journal, 2018, 17, 180017. | 1.3 | 3 |
| 82 | Is Moss Stoichiometry Influenced by Microtopography in a Boreal Peatland of Northeast China?. Chinese Geographical Science, 2018, 28, 1038-1047. | 1.2 | 3 |
| 83 | Response of Methane and Nitrous Oxide Emissions from Peatlands to Permafrost Thawing in Xiaoxingâ€™an Mountains, Northeast China. Atmosphere, 2021, 12, 222. | 1.0 | 3 |
| 84 | Investigation into effects of warmer conditions on seasonal runoff and dissolved carbon fluxes in permafrost catchments in northeast China. Environmental Sciences: Processes and Impacts, 2021, 23, 890-902. | 1.7 | 3 |
| 85 | Effect of different factors dominated by water level environment on wetland carbon emissions. Environmental Science and Pollution Research, 2022, 29, 74150-74162. | 2.7 | 3 |
| 86 | Effects of plant community diversity on soil microbial functional groups in permafrost peatlands of Greater Khingan Mountains, Northeast China. Wetlands Ecology and Management, 2022, 30, 595-606. | 0.7 | 3 |
| 87 | Long-term nitrogen addition alters peatland plant community structure and nutrient resorption efficiency. Science of the Total Environment, 2022, 844, 157176. | 3.9 | 3 |
| 88 | Short-term response of CO2 emissions to various leaf litters: a case study from freshwater marshes of Northeast China. Wetlands Ecology and Management, 2017, 25, 119-128. | 0.7 | 1 |
| 89 | How to Improve Cumulative Methane and Nitrous Oxide Flux Estimations of the Nonâ€Steadyâ€State Chamber Method?. Journal of Geophysical Research G: Biogeosciences, 2022, 127, . | 1.3 | 1 |
| 90 | Modeling methane dynamics in three wetlands in Northeastern China by using the CLM-Microbe model. Ecosystem Health and Sustainability, 2022, 8, . | 1.5 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Genetic types and characteristics of ground ice in Northeast China. Chinese Geographical Science, 1999, 9, 166-171. | 1.2 | 0 |
| 92 | The Effects of Water Levels and Interspecific Competition on Two Carex Species in a Temperate Wetland of Northeast China. Sustainability, 2020, 12, 10654. | 1.6 | 0 |
| 93 | Comparing the Impacts of Sedimentâ€Spiked Cadmium on Chironomidae Larvae in Laboratory Bioassays and Field Microcosms and the Implications for Field Validation of Siteâ€Specific Threshold Concentrations. Environmental Toxicology and Chemistry, 2021, 40, 2450-2462. | 2.2 | 0 |