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Research Interests

- **Cropland carbon sequestration and fertility improvement**
- **Carbon and nitrogen cycle and interaction**
- **Greenhouse gas mitigation**

Publication

Nitrous oxide emissions in response to straw incorporation is regulated by historical fertilization, Environmental Pollution, 2020, DOI: 10.1016/j.envpol.2020.115292

Soil carbon balance by priming differs with single versus repeated addition of glucose and soil fertility level, Soil Biology and Biochemistry, 2020, DOI: 10.1016/j.soilbio.2020.107913

Soil organic matter priming and carbon balance after straw addition is regulated by long-term fertilization, Soil Biology and Biochemistry, 2019, DOI: 10.1016/j.soilbio.2019.06.003

Carbon budget and greenhouse gas balance during the initial years after rice paddy conversion to vegetable cultivation, Science of the Total Environment, 2018, DOI: 10.1016/j.scitotenv.2018.01.207

Decrease in the annual emissions of CH₄ and N₂O following the initial land management change from rice to vegetable production, Environmental Science and Pollution Research, 2018,



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DOI: 10.1007/s11356-018-1559-4

Conversion from rice to vegetable production increases N₂O emission via increased soil organic matter mineralization, Science of the Total Environment, 2017, DOI: 10.1016/j.scitotenv.2017.01.050

Effect on greenhouse gas balance of converting rice paddies to vegetable production, Acta Geochim, 2017, DOI: 10.1007/s11631-017-0152-8

Greenhouse gas emission during the initial years after rice paddy conversion to vegetable cultivation(CN), Scientia Agricultura Sinica, 2020, DOI: 10.3864/j.issn.0578-1752.2020.24.008

Labile organic matter intensifies phosphorous mobilization in paddy soils by microbial iron (III) reduction, Geoderma, 2018, DOI: 10.1016/j.geoderma.2019.06.011

Substantial N₂O emission during the initial period of the wheat season due to the conversion of winter-flooded paddy to rice-wheat rotation, Atmospheric Environment, 2017, DOI: 10.1016/j.atmosenv. 2017.09.021