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Research Interests

- **Agricultural remote sensing**
- **Chlorophyll fluorescence remote Sensing**
- **Assimilation of crop model and remote sensing**
- **Carbon and nitrogen cycle simulation**
- **Greenhouse gas emission and climate change**

Publication

Influence of adjacency effect on high-spatial-1 resolution thermal infrared imagery: Implication for radiative transfer simulation and land surface temperature retrieval, Remote Sensing of Environment, 2020, DOI:10.1016/j.rse.2020.111852

Impact of 3-D Structures and Their Radiation on Thermal Infrared Measurements in Urban Areas, IEEE Transactions on Geoscience and Remote Sensing , 2020, DOI:10.1109/TGRS.2020.2987880

Hyperspectral Estimation of Soil Organic Matter Content using Different Spectral Preprocessing Techniques and PLSR Method, Remote Sensing, 2020, DOI:10.3390/rs12071206



Drought loss assessment combining remote sensing and a crop growth model for maize in Yunnan Province, China, International Journal of Remote Sensing, 2019, DOI:10.1080/01431161.2018.1519291

A practical approach for deriving all-weather soil moisture content using combined satellite and meteorological data, ISPRS Journal of Photogrammetry and Remote Sensing, 2017, DOI:10.1016/j.isprsjprs.2017.07.013

The development of China-DNDC and review of its applications for sustaining Chinese agriculture, Ecological Modelling, 2017, DOI:10.1016/j.ecolmodel.2017.01.003

Assessing impacts of alternative fertilizer management practices on both nitrogen loading and greenhouse gas emissions in rice cultivation, Atmospheric Environment, 2015, DOI:10.1016/j.atmosenv.2015.08.060

Modeling nitrogen loading from a watershed consisting of cropland and livestock farms in China using Manure-DNDC, Agriculture, Ecosystems & Environment, 2014, DOI:10.1016/j.agee.2013.10.023

Calibration of DNDC model for nitrate leaching from an intensively cultivated region of Northern China, Geoderma, 2014, DOI:10.1016/j.geoderma.2014.01.002

Remote Sensing of Agro-droughts in Guangdong Province of China Using MODIS Satellite Data, Sensors, 2008, DOI:10.3390/s8084687

Drought monitoring and early warning in the eastern Mongolian Plateau, Beijing/China Agricultural Science and Technology Press, 2019, ISBN:978-7-5116-4459-6

Estimation of evapotranspiration and drought losses based on multi-source data, Beijing/China Agricultural Science and Technology Press, 2018, ISBN:978-7-5116-3812-0

Retrieval of land surface temperature in China based on MODIS data, Beijing/China Agricultural Science and Technology Press, 2017, ISBN:978-7-5116-3343-9

Nitrogen removal potential and influencing factors of aquatic plants in ditches, Beijing/China Agricultural Science and Technology Press, 2016, ISBN:9787511628145

Study on Atmospheric Water Vapor and Surface Temperature Retrieved from Multi-source Remote Sensing, Beijing/China Agricultural Science and Technology Press, 2016, ISBN:9787511626752

Simulation of nitrogen pollution from agricultural non-point sources at watershed scale,



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Beijing/China Agricultural Science and Technology Press, 2015, ISBN:9787511621481

Simulation of livestock and poultry breeding and waste disposal process, Beijing/China
Agricultural Science and Technology Press, 2015, ISBN:978-7-5116-2255-6