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Water-Saving Irrigation Technology and Strategies for Crop Production

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Deadline for manuscript submissions: closed (25 June 2022)

Message from the Guest Editors

With the global climate change and population growth, the contradiction between the shortage of water resources and the increase in food demand has intensified. Agricultural irrigation needs to focus on the application of advanced water-saving irrigation technology and management strategies to improve agricultural water use efficiency and grain production capacity. In this context, it is particularly urgent to quantitatively reveal the response of processes driving crop water-saving and yield increase to irrigation technology and management strategies, aiming to put forward ways to improve crop yield and water use efficiency. This Special Issue invites relevant results of field measurement, model simulation, and macro strategy research on the following topics:

- Water-saving irrigation scheduling and management strategy;
- Soil water, fertilizer, salt, gas, and heat coupling and field energy balance under water-saving irrigation technology;
- The physiological response processes of evapotranspiration and crop growth under watersaving irrigation technology;
- Technology and strategies to improve crop yield and water use efficiency in agricultural irrigation.





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Message from the Editor-in-Chief

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