



The Application of AI, Big Data and Remote Sensors in Sustainable Agricultural Irrigation

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Message from the Guest Editors

Irrigated agriculture will face important challenges in the coming decades. The evolution of the irrigation systems into pressurized ones makes energy another key resource for the irrigation sector that represents a growing percentage of the total water costs and increases the carbon footprint of the irrigation activity. Additionally, the new water distribution systems for irrigation have been organized according to demand (water is continuously available to farmers) adding an extra degree of uncertainty to their management.

In this situation, irrigation is becoming an activity of precision in which the Artificial Intelligence (AI) techniques and Big Data analysis, both at the scale of the water distribution network and the farm, as well as other aspects related to new management strategies such as remote sensors, unmanned aerial vehicles (UAV) and new technologies, are generally becoming more relevant every day.

This Special Issue aims to provide a forum for discussion where researchers are invited to submit their novel approaches in modeling and management techniques based on AI, BigData and remote sensors for irrigation systems.





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