



**agriculture**



*Special Issue Reprint*

## Digital Innovations in Agriculture—Series II

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The significantly increased world population and accelerated climate change are strongly affecting agricultural production. These aspects, as well as the latest socio-economic limitations caused by the standoff following the COVID-19 pandemic, are part of the ongoing economic crisis bringing new challenges to modern agriculture and the need to have high production efficiency combined with high-quality products in accordance with the principles of sustainable production. These requirements are linked to all branches of agriculture: crop production, livestock production, and other links supporting the production of healthy food. To meet these challenges, advanced digital innovation techniques are more and more frequently being used, including those based on machine learning, artificial neural networks, Internet of Things (IoT), Big Data, and Digital Twins. They are widely applied in solving various optimization tasks in the agri-food production processes in the context of the increasing use of precision and digital farming technologies on the path from Agriculture 3.0 to 5.0. This Special Issue focused even more on the contribution of modern technology to the development and ongoing support of sustainable, regenerative, and balanced agriculture. The publications included original research, research concepts, communications, and reviews related to digital innovation, widely defined, in the agri-food sector.



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