Special Issue

Research Progress in Agricultural Robots in Arable Farming

Message from the Guest Editors

Global population growth, climate change, and labor shortages are reshaping food production. Agricultural robotics—central to smart farming—offers transformative solutions for arable farming through automation, precision, and intelligence. From precision seeding and fertilization to weed detection, crop monitoring, and smart harvesting, robotic systems are revolutionizing the entire production chain. This Special Issue invites submissions on recent advances in agricultural robots for arable farming. Topics include: advanced field sensing, crop phenotyping, weed/pest detection and localization, AI-based decision-making, swarm robotics, and integrated system testing. Contributions should aim to improve the productivity, efficiency, and sustainability of field agriculture.

Guest Editors

Dr. Xianping Guan

Key Laboratory of Modern Agricultural Equipment and Technology, Ministry of Education, Jiangsu University, Zhenjiang 212013, China

Dr. Wan-Soo Kim

Department of Smart Bio-Industrial Mechanical Engineering, Kyungpook National University (KNU), Daegu, 80 Daehak-ro, Buk-gu, Daegu, Republic of Korea

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Agronomy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agronomy@mdpi.com

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Editor-in-Chief

Prof. Dr. Leslie A. Weston
Gulbali Centre for Agriculture, Water and Environment Research, Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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