Special Issue

Beyond Agriculture 4.0: Design and Development of Modern Agricultural Machines and Production Systems

Message from the Guest Editors

An increase in production efficiency cannot take place by destroying the natural resources of farmland. As a consequence, it became necessary to develop machines that would be able to carry out agrotechnical treatments dedicated to individual plants. In this context, a very important role is the design and development of new equipment and technologies to support farmers with state-of-the-art solutions that include automation elements, sensors, information systems and real-time calculation of thresholds, design, low energy consumption, better working conditions for the operator, lower losses in the process, etc. This special edition focuses on the role that the synergistic interaction of classic mechanical systems with mechatronic and data management systems can play in increasing the productivity of agriculture while reducing its impact on the natural environment. In view of the above, highly interdisciplinary quality studies and research are encouraged in areas such as: agriculture, engineering design, simulation and modeling, mechatronics, autonomous vehicles, post harvesting systems, environment, and prevention of injury/health risks for the operator.

Guest Editors

Dr. Valentin Vladut

Prof. Dr. Biriş Sorin Ştefan

Prof. Dr. Adam Ekielski

Deadline for manuscript submissions

closed (15 November 2023)



Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/146418

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

mdpi.com/journal/agriculture





Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. Agriculture is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture, School of Life and Environmental Sciences, The University of Sydney, Sydney, NSW 2006, Australia

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, RePEc, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)

