



Laser in Agriculture

Guest Editor:

Prof. Dr. Roberto Alves Braga Júnior

Department of Automatica,
Federal University of Lavras
(UFLA), Caixa Postal 3037, Lavras
CEP 37200-900, MG, Brazil

Deadline for manuscript
submissions:

closed (15 December 2023)

Message from the Guest Editor

In agriculture, with broad potential applications as sensors, lasers can also be used to measure small changes in biological material through dynamic laser speckle, or biospeckle laser (BSL). The evaluation of seed viability and vigour or the identification of bruising in fruits and potatoes are some examples of biospeckle laser usage.

Similarly, the adoption of BSL to determine the bruising or maturity of fruits and the growth of roots in tissue cultures is often found in the literature. Other applications, such as the identification and control of parasites in wastewater from agricultural processes, can also be pointed out as a reliable use of biospeckle laser.

Besides interferometric techniques, it is possible to envision the application of a laser sheet (or line) to create a profile of samples and soil within a dedicated and commercial laser scanner or similar equipment developed in universities, as well as its use as a stimulating light to activate seed germination and other biological samples.

This Special Issue of Agriculture welcomes novel works regarding the use of lasers in agriculture, without any restrictions of their applications.





an Open Access Journal by MDPI

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

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. *Agriculture* is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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 - Q2 (*Plant Science*)

Contact Us

Agriculture Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/agriculture
agriculture@mdpi.com
[X@AgricultureMdpi](https://twitter.com/AgricultureMdpi)