



Laser in Agriculture

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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.





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Message from the Editor-in-Chief

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