



Rapid Screening in the Life Science Based on Photonics and Plasmonics Technology

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Message from the Guest Editors

Rapid screening is becoming an urgent need in life science. Efficient and cost-effective devices for fast identification of viral or bacterial fingerprints are crucial for the restoration of normal daily activities during and after the pandemic. Besides, monitoring of pharmacological treatments is of utmost importance in long-term healthcare and in preventing infections (such as sepsis or in the treatment of chronic wounds).

Sensing allergens, pathogens and contaminants fulfills a key role in food safety.

Photonics and plasmonics can support the development of integrated platforms enjoying the appropriate accuracy and complying with the design of compact, portable and easy-to-use devices for biosensors and biomarker recognition with fast response.

Keywords:

- biomarkers
- nanoparticles
- laser
- photoacoustics
- Raman
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- food safety
- wound healing
- infection
- viruses
- bacteria





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