



biosensors



Special Issue Reprint

Photonics for Bioapplications

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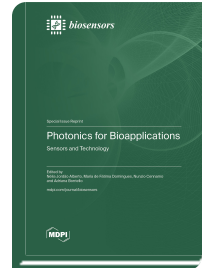
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This Special Issue explores advanced biosensing technologies, covering fluorescence, terahertz, photoelectrochemical, and optical fiber-based sensors. Topics include enzyme-assisted fluorescence biosensors for microRNA detection, NIR squaraine dye-peptide conjugates for trypsin detection, and metasurface-based terahertz sensors for tracing molecules. It discusses methods like backscattering Mueller matrix polarimetry for tissue imaging, SERS substrates for uric acid detection, and ternary heterojunction photoelectrochemical sensors for antioxidant quantification. Other highlights include hierarchical Ti-metal-organic framework microflowers for the detection and removal of the aluminum ion, analysis of the thermo-viscoelastometry of radiofrequency-wave-heated and ablated flesh tissues containing Au nanoparticles, and optical fiber sensors for thermal mapping in radiofrequency ablation. The Special Issue concludes with a review of cost-effective optical fiber solutions for biosensing, offering insights into biomedical and environmental applications.



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