

## Special Issue

# Biomedical Applications of Optical Coherence Tomography, Second Edition

### Message from the Guest Editor

The development of optical coherence tomography (OCT) represents a notable breakthrough in retinal imaging and ophthalmology. It provides internal information about the retinal, choroidal, posterior vitreous and even anterior segments of the eye. Since the first commercial OCT instrument was introduced in 1996, its basal technology has evolved from time-domain to spectral-domain (high-definition or Fourier domain) to swept-source technology. The latter method is indispensable in modern ophthalmology clinics. Furthermore, OCT applications are increasingly adopted in other medical fields, showing great potential for establishing novel biomarkers. This Special Issue will focus on the most recent biomedical applications of optical coherence tomography. The addressed topics include, but are not limited to, the following: Optical coherence tomography/ microscopy/ angiography/ elastography; OCT for basic research (ex vivo, in vitro or in vivo models); OCT for clinical studies in the field of biomedical research. Original research will be prioritized, but critical reviews about the state of the art, current limitations and future perspectives are also welcome.

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### Guest Editor

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### Deadline for manuscript submissions

30 November 2025



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### Editor-in-Chief

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