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# Optical Elastography: Current Status and Future Applications

Guest Editor:

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Deadline for manuscript submissions:
**closed (30 April 2022)**

## Message from the Guest Editor

Dear Colleagues,

Optical elastography uses optics to characterize elastic and viscoelastic mechanical properties of tissues and cells. This rapidly emerging field builds on and complements related methods for biomechanics, such as atomic force microscopy, traction force microscopy and microrheology, and the fields of ultrasound and magnetic resonance elastography.

This Special Issue aims to collect papers on biomedical optics, biophotonics, and biomechanical methods and technologies applied or related to estimation, monitoring, and functional assessment of the mechanical properties of normal and pathological biomaterials at all spatial scales, from cells and their constituents to tissues and organs. Relevant topics include (but are not limited to):

- Optical elastography methods in general;
- Optical coherence tomography/elastography;
- Brillouin spectroscopy;
- Multimodal elastography;
- Speckle and particle tracking, and holography;
- Signal processing methods for optical elastography quantitative methods, including combining modeling and measurement;
- Novel loading schemes.