



Journal of Medical Engineering

Special Issue on
**Recent Advancements and Applications of
Photoacoustic Imaging**

CALL FOR PAPERS

Photoacoustic imaging, also known as thermoacoustic or optoacoustic imaging, is a rapidly emerging imaging technique that holds great promise for biomedical imaging. This imaging modality is a hybrid technique that combines the high spatial resolution of ultrasonic imaging with the high optical contrast of biological tissue. Because optical contrast is dependent on hemoglobin concentration and related to the molecular constitution of tissue, photoacoustic imaging can reveal the pathological condition of the tissue and therefore facilitate a wide-range of diagnostic tasks. Now, photoacoustic imaging has reached the point of feasibility for routine clinical application and is being commercially developed to address a variety of important imaging problems, including early-cancer detection, functional or molecular imaging, and treatment monitoring.

We invite investigators to contribute original research articles as well as review articles that address a wide range of theoretical and applied issues in the fast-growing field of photoacoustic imaging.

Potential topics include, but are not limited to:

- ▶ Photoacoustic tomography
- ▶ Photoacoustic microscopy
- ▶ Photoacoustic endoscopy
- ▶ Thermoacoustics and microwave-induced imaging
- ▶ Signal processing and image reconstruction methods
- ▶ Molecular imaging
- ▶ Functional imaging
- ▶ Quantitative imaging
- ▶ High spatial/temporal resolution imaging
- ▶ Preclinical/clinical imaging and applications

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/jme/aapi/>.

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