



## IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology (J-ERM) Call for Papers for Special Issue on Microwave Thermoacoustics Applications

IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, sponsored by the IEEE Microwave Theory and Techniques Society (MTT-S), Antennas and Propagation Society (APS), Engineering in Medicine and Biology Society (EMBS), and Sensors Council (with 26 IEEE member societies), encourages the submission of manuscripts with scopes in state-of-the-art research and applications related to **microwave thermoacoustics**.

Microwave Thermoacoustic (TA) imaging is an emerging imaging modality bridging two different fields: microwave/RF and ultrasound. By ultrasonically detecting the thermoelastic wave induced by pulsed microwave/RF excitation, TA imaging enables rich spectroscopic microwave/RF absorption contrast with high resolution in deep biological tissues. Positioned at the transition boundary from technical development to preclinical/clinical translation stages, TA imaging is receiving great research interests in recent years owing to potentials to be developed as a cost-effective diagnostic tool with high accuracy and specificity.

The focuses of the journal are on unifying the sciences and applications of medicine and biology related to and/or utilizing electromagnetics, radio frequency signals, and microwaves/millimeter-waves. The manuscripts emphasize important features in biological studies and practical aspects in medical applications. Instrumentation, device fabrication and development, hardware, software, interface, simulation, mathematics, and physics described in the manuscripts are to support their implementation for biological and medical applications. Pre-clinical and clinical application papers enabled by novel methods utilizing electromagnetics are particularly encouraged.

The journal is in electronic format. There is no publication fee. The authors are asked to provide a Visual Summary with a figure to summarize the achievement of research in the manuscript; and “Take-Home Messages” with maximum five bullet-points to highlight the significance, innovation, and conclusion of the work. The details for manuscript submission are at the journal website.

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