



IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology (J-ERM) Call for Papers

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 Sensor Council (with 26 IEEE member societies), encourages the submission of manuscripts with scopes in state-of-the-art research related to electromagnetics theory, techniques and integration for medical and biological applications including but not limited to

- RF and microwave integrated circuits,
- antennas and sensors for wireless implants;
- diagnostic and therapeutic systems;
- electromagnetic imaging;
- magnetic resonance imaging; radiometry and thermography;
- the interaction of electromagnetic fields with biological materials at the tissue, cellular and molecular levels;
- bio-electric and bio-electromagnetic models;
- pathological, physiological and biochemical studies with electromagnetic waves;
- computational methods for bio-electromagnetics;
- electromagnetic safety studies and regulatory compliance;
- implantable and wearable diagnostic and therapeutic systems;
- radar for remote or noninvasive monitoring and tracking;
- wireless communication technologies and wireless power transfer for body-area networking;
- cellular and molecular level spectroscopy; and
- sensor, device and instrumentation development utilizing electromagnetic waves for biomedical applications.

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. The authors are asked to provide a visual summary with a figure to summarize the achievement of research in the manuscript; and a “take-home message” 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.

Journal website: <http://www.ieee-jerm.org>

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