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Recent Advances in Mathematical Modeling of Energy-Based Tumor Ablation

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Deadline for manuscript submissions:

closed (20 October 2023)

Message from the Guest Editors

This Special Issue will aim to collecting papers, which represent the state of the art of mathematical modeling for energy-based tumor ablation applications and provide further perspectives of this subject. The topics of this Special Issue include, but are not limited to:

- Principal-based mathematical modeling;
- Empirical-based mathematical modeling;
- Data-driven mathematical modeling;
- Monte Carlo simulation;
- Molecular dynamics simulation;
- Novel mathematical modeling concepts and techniques;
- Mechanisms of tumor ablation with different modalities;
- Bioheat transfer;
- Design of novel treatment modalities;
- Cellular responses to electric fields;
- Molecular responses to electric fields;
- Mathematical modeling of tissues and anatomy.



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Special Issue



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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