Special Issue

Application of Gel Dosimetry

Message from the Guest Editors

The increasing complexity of modern radiotherapy necessitates improved performance from dosimetric systems used for quality assurance. In recent decades, gel dosimeters have emerged as a promising technology for the experimental validation of individualized, complex treatment plans. Clinical and metrological interest in these devices is motivated by their high tissue equivalency and inherent three-dimensional radiation response. Notably, gel dosimeters might enable the manufacturing of personalized anthropomorphic phantoms, accurately replicating patient anatomy and tissue inhomogeneities, which is crucial for individualized dosimetry.

For this Special Issue, we invite submissions covering all aspects of gel dosimetry, including experimental studies on novel concepts and formulations, investigations into radiation chemistry, optimization and validation campaigns, advancements in imaging techniques, and computational studies.

Guest Editors

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About the Journal

Gels (ISSN 2310-2861) is recently established international, open access journal on physical and chemical gel-based materials. The journal aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. General topics include but not limited to synthesis, characterization and applications of new organogels, hydrogels and ionic gels made either from low molecular weight compounds or polymers, composite and hybrid materials where a metal is by some means incorporated into the gel network, and computational studies of these materials in order to provide a better understanding of gelation mechanism. We cordially invite you to consider publishing with us and contribute with your own grain of sand to the advance in this fascinating field.

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