

Special Issue

Nanoparticles in Medical Radiations

Message from the Guest Editor

Over the last 25 years, the use of nanoparticles in medical radiation techniques has grown significantly. Gold nanoparticles have been successfully used as imaging contrasting agents to improve image quality. Additionally, they have most significantly been used as radiation dose enhancers or “radiosensitisers”, capable of increasing the dose deposited by a clinical radiotherapy beam to a cancerous tumour when present, hence increasing the radiotherapy beam’s “killing potential”. Synergistically, these two properties make gold nanoparticles potential theranostic agents able to image and provide therapeutic benefit to cancer treatments. Understanding the properties of both nanoparticles and the cellular target (molecularly and biologically) is crucial in the advancement of the current applications of nanoparticles and radiation in modern medicine. Therefore, this issue will consider for publication any work involving nanomaterials (either organic or metallic) in medical radiation, including studies of image quality, radiotherapy and radiobiology, in the hopes of highlighting the ongoing efforts in this field.

Guest Editor

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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