

## Special Issue

# Applications of Nanoparticles in Tumor Therapy

### Message from the Guest Editors

Over the last two decades, a large number of nanoparticle delivery systems has been developed and approved for clinical use in cancer diagnosis and therapy. In contrast with the commonly used small molecule drugs that present a wide range of biodistribution, low specificity, and high toxicity, nanoparticles (NPs) can improve the pharmacological response. The importance of these macromolecules is based on their nanoscale attribute (1–100 nm), being accumulated in the tumor tissue through a passive mechanism known as enhanced permeability and retention (EPR) effect because of the increased vascular permeability in the tumor region. They include different classes, based on their structure, sizes or inorganic or organic natures depicting some of them, and biologically attractive properties such as biocompatibility and biodegradability. Furthermore, the incorporation of active targeting using molecules (ligands, antibodies, peptides, and RNA aptamers) that can be recognized specifically by receptors on the surface of the cell membrane has increased nanoparticle uptake by tumor cells.

### Guest Editors

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*Biomolecules* is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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