

Special Issue

Molecular Characterization and Applications of Nanomaterials in Nanomedicine and Cancer Therapy

Message from the Guest Editor

In the nanomedicine field, a special place is occupied by the diagnosis and therapy of cancer using methods based on nanomaterials as alternative techniques compared to currently used chemo- and radiotherapy, which are ineffective in many cases and are highly toxic for the body. Thus, nowadays, scientists are focusing on the use of biocompatible and biofunctionalized nanomaterials that target tumor cells in order to increase the effectiveness in their destruction and reduce or even eliminate cytotoxicity. A new technique called nanotheranostics is widely studied in the field of nanomedicine as a potential technique for both diagnosis and therapy. This technique is based on using nanomaterials and biofunctionalized magnetic nanoparticles together with novel medical imaging techniques, comprising ultrasensitive and real-time methods. These alternative techniques, which use biocompatible and biofunctionalized magnetic nanomaterials, could have a bright future in cancer therapy. Therefore, this Special Issue deals with presenting the results of current research in this field in the form of articles or reviews.

Guest Editor

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