Special Issue

From Nanotechnology to Nanomedicine: Past, Present and Future

Message from the Guest Editor

There are two ways of transferring information: 1) chronological, as a gradual evolutional accumulation of knowledge and 2) logical, which ranges from strict definitions to simple theory and more general concepts. Despite advances in nanotechnology and medical nanomaterials, there is no future without the past. The rapid progress in biopolymer isolation (proteins, polysaccharides, polyhydroxyalkanoates, polyphenols and nucleic acids) from natural sources, the chemical synthesis of novel biomimetics (nucleotides, amino acids, polymers and artificial enzymes) and composite materials (glycoproteins, proteoglycans, lipopolysaccharides and so on) as well as construction of inorganic and organic nanomaterials and even semisynthetic organisms (bacteria with six nucleotide bases instead of the classical four that encode 152 amino acids) open up new opportunities to attain higher levels of medicine and accelerate further development. Comparative analysis of the advantages and disadvantages of nanostructures for medical diagnostics, vaccines and treatment could greatly benefit the scientific community.

Guest Editor

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Message from the Editor-in-Chief

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