



## Characterisation and Application of Synthesized Gold Nanoparticles

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Deadline for manuscript  
submissions:  
**closed (10 November 2021)**

### Message from the Guest Editors

The development of nanotechnology has attracted a lot of interest since it offers new possibilities. Gold nanoparticles AuNPs are very attractive due to many potential applications. The first step is the synthesis. We can use different methods such as thermal or microwave synthesis, laser ablation, etc. Green synthesis (effect of polyphenols) opens the door for other applications. It has been found that some nanoparticle modifications exhibit the properties of biological molecules (especially enzymes). Such pseudo-enzymatic behavior brings advantages like significant physico-chemical stability compared to enzymes. Moreover, AuNPs belong to a group of nanomaterials with significant peroxidase-like activity. AuNPs are incorporated into many nanomedical applications, from diagnostic methods (they can be modified with antibodies, nucleic acids, polymers, etc.) to targeted nanotransporters (AuNPs can be modified to bind targeting molecules on their surface such as antibodies, nucleic acids, enzymes, but also low molecular weight substances such as cytostatics, etc.).





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## Message from the Editor-in-Chief

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