

# Nanochemistry and biotechnology

## Green synthesis of gold nanoforms in various structures

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Gold nanoforms have been gained interest over the last few decades due to their remarkably novel properties such as electrical and magnetic properties, thermal conductivity, chemical and bio-stability, catalytic and antimicrobial activities. For this reason it has not been difficult for them to find applications in a wide range of different areas which has also been mentioned in literatures [1-3]. However, although the conditions of their synthesis are very important for their structural differences, in any of these studies, the effect of structural differences of AuNPs to their goals have not been discussed yet. Here in, we synthesized gold nanoforms with different structures and sizes from various precursors. Synthesized structures were characterized by using UV-Vis spectroscopy and Scanning Electron Microscopy, and also their chemical and physical properties were compared. As a future plan of this research, the effect of the structural differences of gold nanoforms will be discussed in the point of biological activities.

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