


Response to Article “Bio-Inspired Synthesis of Gold Nanoparticles Using Leaf Extract of Jamun and Research on Its Biomedical Potential” [Letter]

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Dear editor

I am delighted to express my keen interest in the enlightening work published in the International Journal of Nanomedicine regarding the biosynthesis of gold nanoparticles (Au NPs) and their applications.¹

The paper reports on the utilization of the leaf extract of Jamun for the biosynthesis of gold nanoparticles (Au NPs) and explores their applications as well. The authors employed the aqueous leaf extract of Jamun to synthesize Au NPs and stated that the bioactive compounds present could enhance the biological potential of these nanoparticles. They investigated its biological potential from the perspectives of antioxidant, antidiabetic, antibacterial activities and the photocatalytic degradation of industrial dyes.

The authors delved into the application prospects of this material in combating diabetes, primarily concentrating on its inhibitory effects on α -glucosidase and α -amylase. According to the literature,² Au NPs possess glucose-oxidase activity. To conduct a more comprehensive assessment in the context of anti-diabetes, the author could take into account the role of its glucose oxidase-like activity in regulating blood glucose concentration.

Furthermore, it is worth mentioning that the size and morphology of Au NPs exert a significant influence on their catalytic performance and optical properties.³ Fortunately, the size and morphology of gold nanoparticles can be controlled.^{4,5} Hence, the controlled synthesis of gold nanoparticles using the leaf extract of Jamun might be essential for obtaining better performance from Au NPs.

Disclosure

The author reports no conflicts of interest in this communication.

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