

Innovative Solution-based Approach to Synthesize Gold Nanocrescent

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Due to their strong implication in biomedical applications, a wide variety of metallic nanoparticles with tunable optical properties and strong field enhancements has been fabricated. It is well known that plasmon resonance peak of the nanocrescent can be tuned into near-infrared and strong field enhancement can be accomplished by simply varying the nanocrescent geometry. To date, gold nanocrescent has been fabricated on a substrate with the aid of nanosphere lithography, suffering from poor yield. Here we propose an innovative solution-based approach to synthesize gold nanocrescent with high yield.