A facile method for synthesis of Co-core Au-shell nanohybrid

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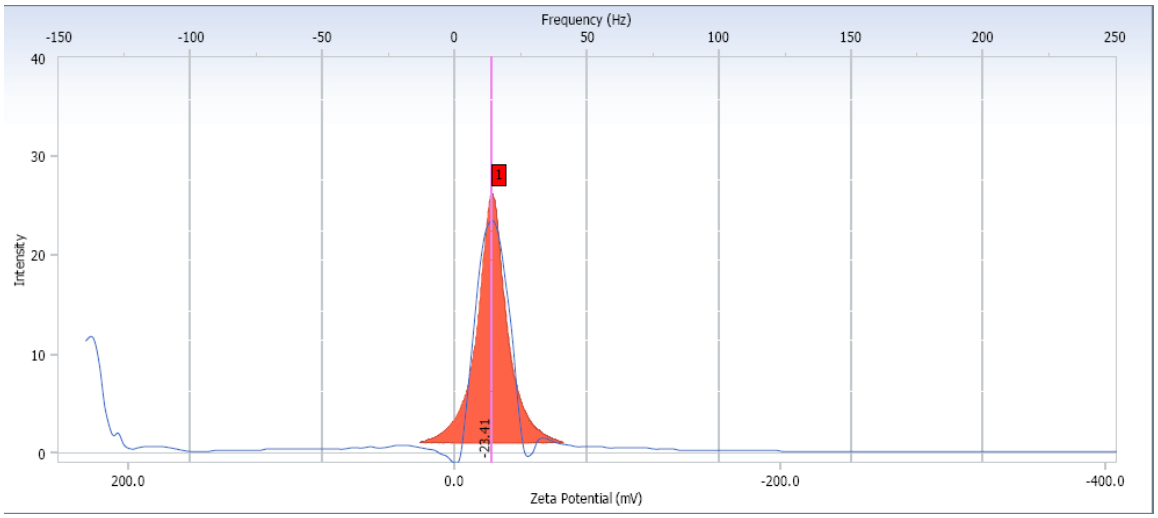
Supporting Information SI-1



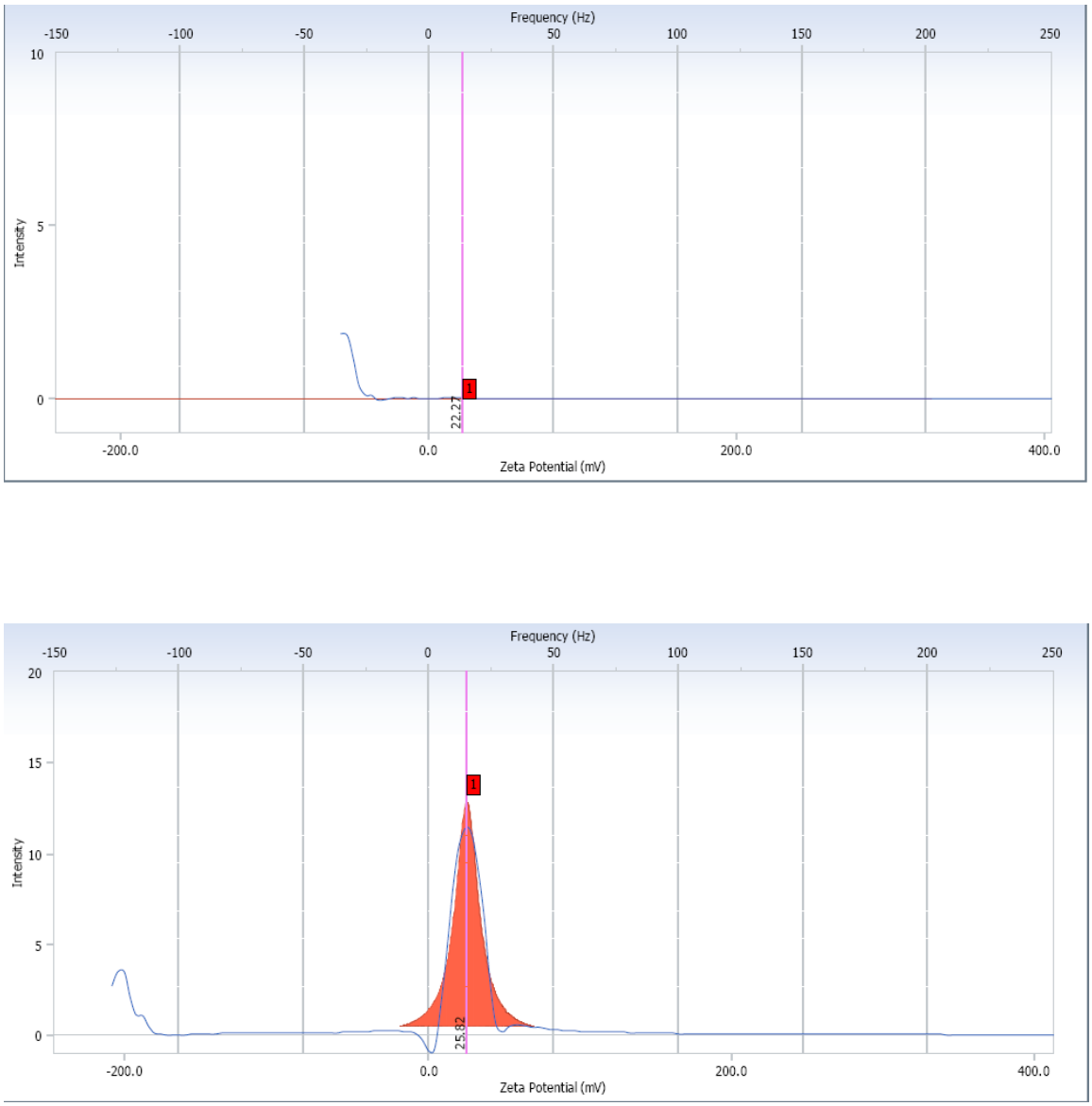


Fig. SI-1: Panel A: Raw data of Zeta potential of Co nanoparticles. Panel B: Zeta potential of Tryptophan modified Co nanoparticles. Panel C: Zeta potential of Co-Au nanoparticles.

Supporting Information SI-2

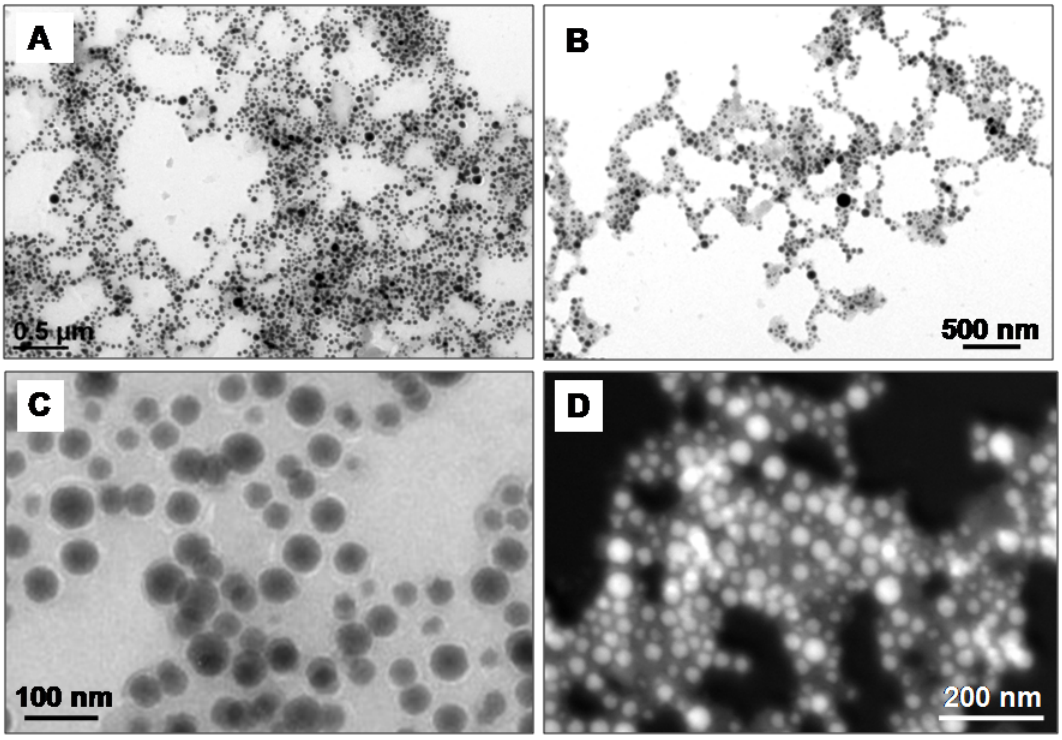


Fig. SI-2: TEM images of Co nanoparticles (A-C). STEM image of the same (D).

Supporting Information SI-3

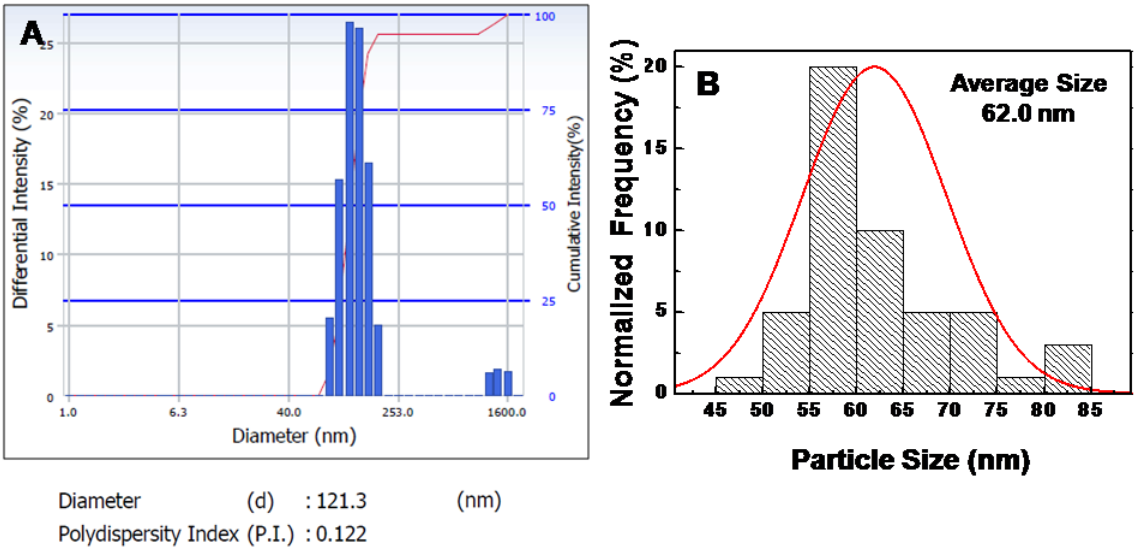


Fig. SI-3: The size distribution of as prepared Co nanoparticles, obtained from DLS measurements (A) and also from particle size analysis using TEM images (B).

Supporting Information SI-4

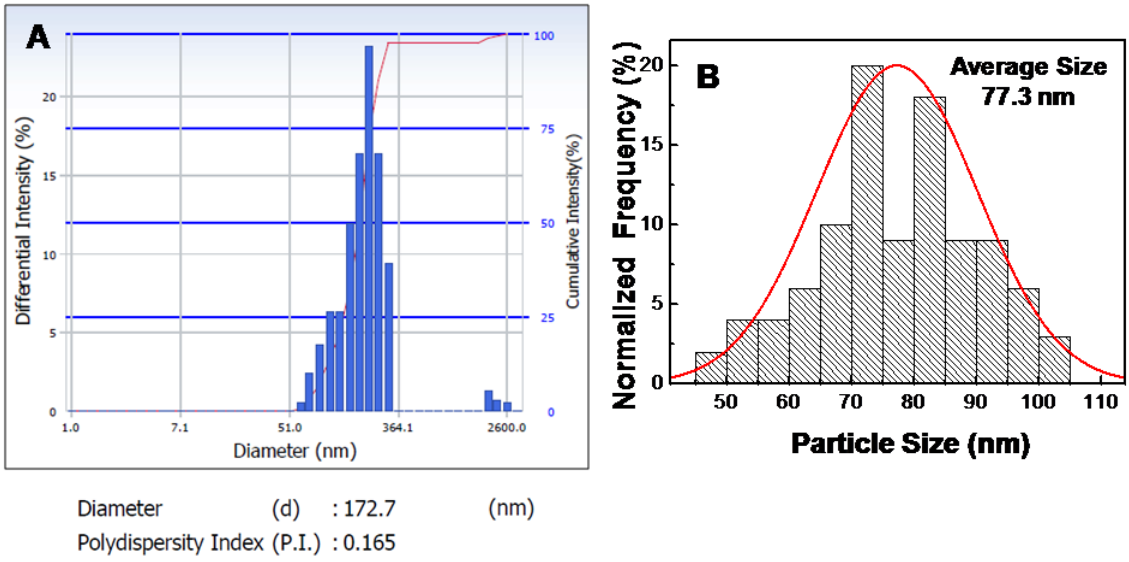


Fig. SI-4: The size distribution of Co-core Au-shell hybrid nanoparticles, obtained from DLS measurements (A) and also from particle size analysis using TEM images (B).The discrepancy in the average size as obtained by two different techniques (TEM and DLS) was obvious (Ref-1, SI-4). But in both cases we could find the increase in size after Au deposition as compared to pristine Co nanoparticles presented in Fig. SI-3.

Reference:

1. S.P. Moulik, B.K. Paul Adv. Colloid and Interface Sci., 1998, 78, 99.