

Figure S1 Thermal Lens experimental setup.

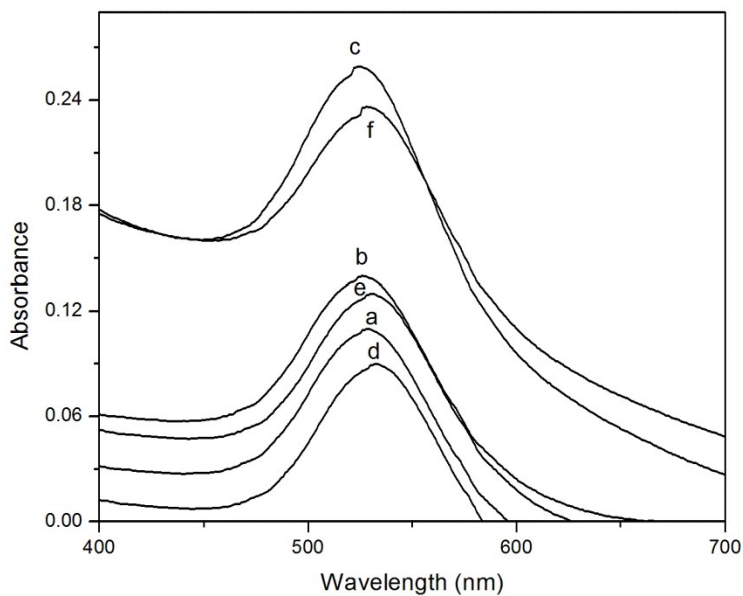


Figure S2 Absorption spectrum of AuNPs of lower concentration (0.26 nM) a) star shaped b) bean shaped c) spherical shaped and d,e,f) their corresponding ssDNA - AuNPs mixture.

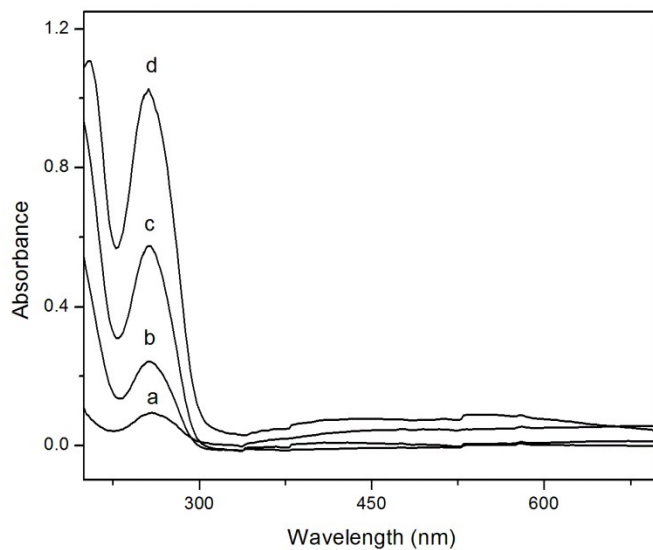


Figure S3 Absorption spectrum of a) 13.64 μM dsDNA and b) 34.8 μM c) 84.6 μM d) 153 μM of ssDNA.

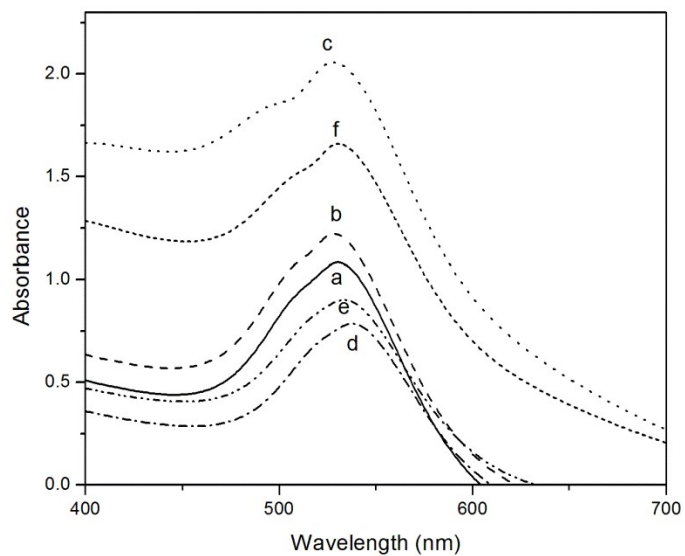


Figure S4 Absorption spectrum of AuNPs of higher concentration (2.31 nM) a) star shaped b) bean shaped c) spherical shaped and d,e,f) their corresponding ssDNA - AuNPs mixture.

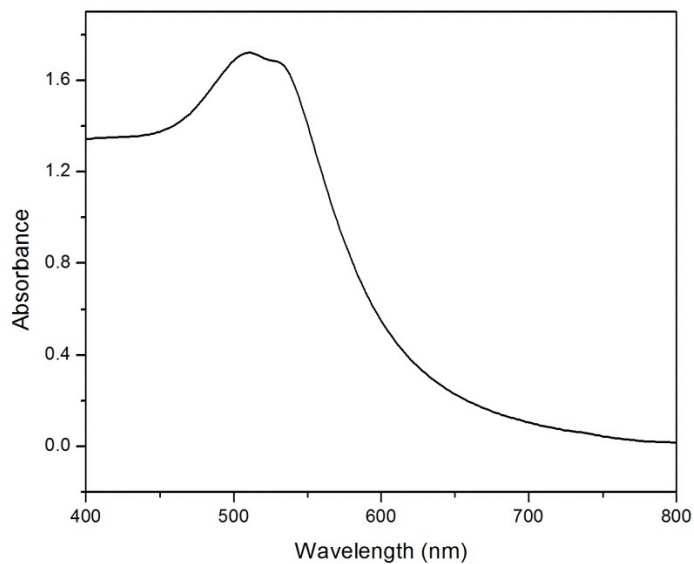


Figure S5 Absorption spectrum of citrate stabilized AuNPs.

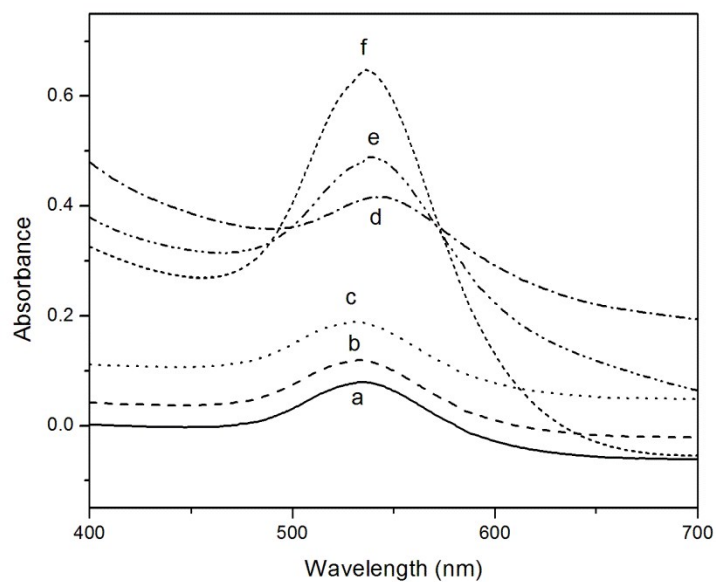


Figure S6 Absorption spectrum of ssDNA-AuNPs mixture with higher concentration of ssDNA and 0.26 nM of AuNPs having different shapes a) star shape b) bean shape c) spherical shape and higher concentration of ssDNA and 2.31nM of AuNPs having different shapes d) star shape e) bean shape f) spherical shape.