Highly efficient gold nano-flowered optical biosensor doped in sol-gel/PEG matrix for the determination of calcitonin biomarker in different serum samples

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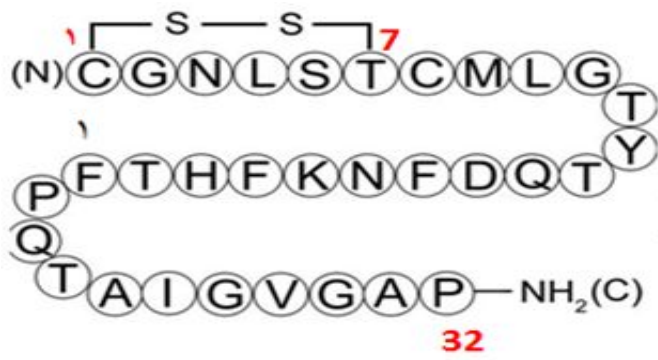mohd_mostafa@sci.asu.edu.eg, Tel: +(202) 1229867311, +(202) 1060818922

S1

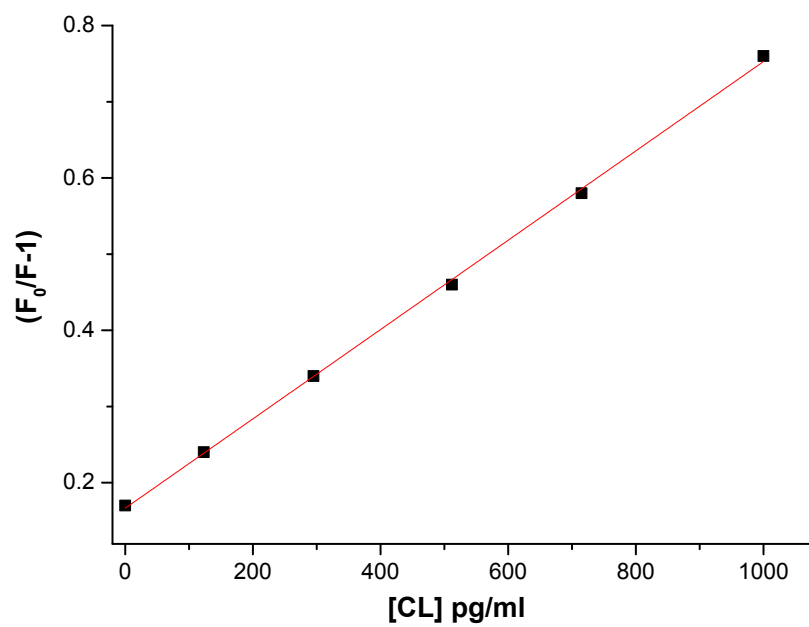Figure S.1. Structure of calcitonin

S2

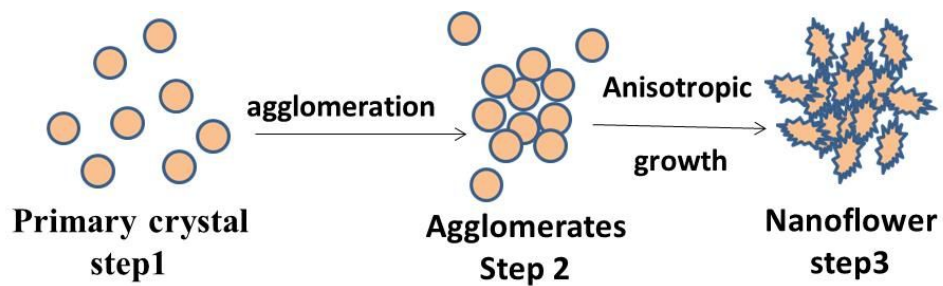Figure S2. Stern–Völmer plot.

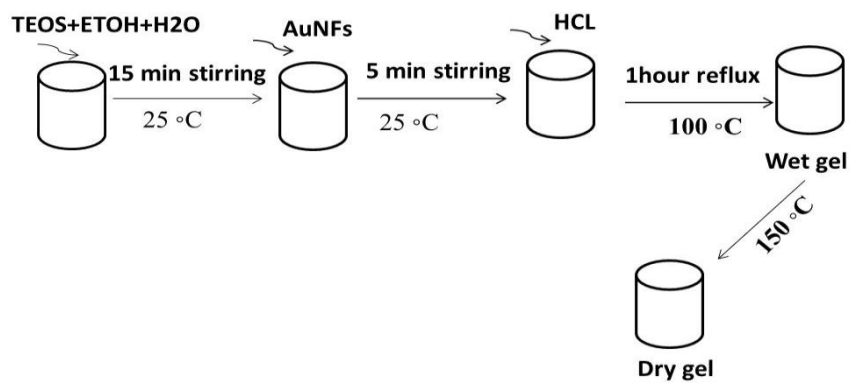Figure S3. Mechanism of AuNFs formation in HEPES

S4

Figure S4. Mechanism of synthesis of Au doped in sol gel

Table S1. Sensitivity and regression parameters for the proposed method

Parameter	Values
λ_{em} (nm)	360
Linear range, pg/mL	0. 01 -1000
Limit of detection (LOD), pg/mL	0.707
Limit of quantification (LOQ), pg/mL	2.14
Intercept (a) x 10^{-4}	5.80
Slope (b)	0.16
Standard deviation	0.03
Regression coefficient (r)	0.99