

Nano Curcumin-Multi-Walled Carbon Nanotube Composite as a Fluorescence Chemosensor for Trace Determination of Celecoxib in Serum Samples

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2.3. Synthesis of curcumin nanoparticles

The method described by Bhawana et al.²¹ was used for the fabrication of CUNPs after slight modification of the procedure.²² More details are presented in Supporting Information. Two solutions were prepared; (1) 125 mg of curcumin was dissolved in 25 mL of dichloromethane as the organic phase; (2) The aqueous phase was prepared by diluting 10 mL of Triton X-100 5% (v/v) to 90 mL of boiling water. Then 2 mL of the solution (1) was added dropwise (about 10 drops/min) to the solution (2) under ultrasonic action. The sonication was continued for another 20 min. The solution was stirred at 1500 rpm by a magnetic stirrer at room temperature for 20 min until a yellow colored solution was obtained. The prepared solution was placed in a rotary evaporator to remove dichloromethane completely. This solution was stored in a brown bottle.

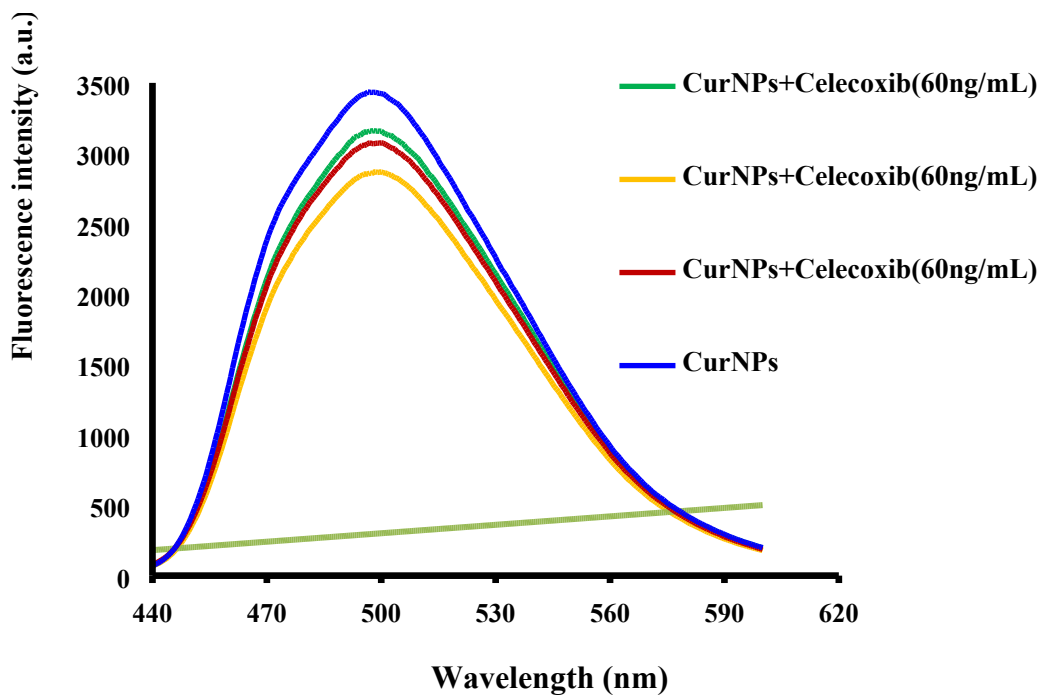


Fig. S1 The fluorescence spectra of CurNPs before and after adding three additions of same celecoxib concentration (60 ng mL^{-1}). RSD >10%

