Dye-Doped Cellulose Nanocrystals as Novel Dusting Powders for Visualizing Latent Fingerprints

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Calculation of adsorption capacity

$q = (C_0 - C_t)\, V/m$ (S1)

where q (mg g^{-1}) is the adsorption amounts, C_0 (mg L^{-1}) is the initial concentration of dyes, C_t (mg L^{-1}) is the remnant concentration of dyes, V (mL) is the volume of solution and m (g) is the mass of the cellulose nanocrystals.

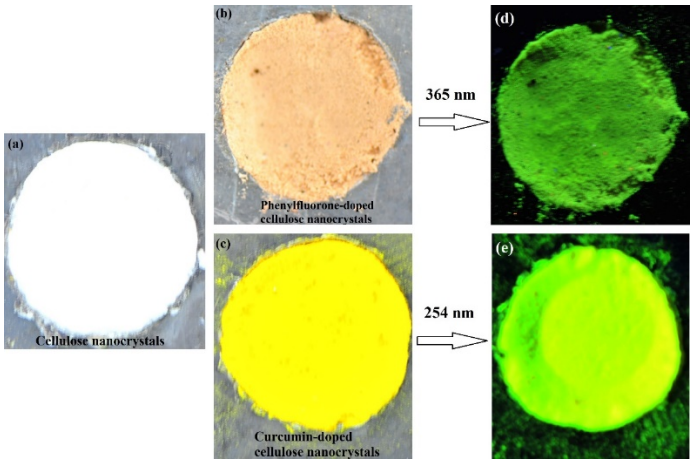

Figure S1 Appearance of (a) cellulose nanocrystals, (b) phenylfluorone-doped cellulose nanocrystals and (c) curcumin-doped cellulose nanocrystals in daylight, (d) phenylfluorone-doped cellulose nanocrystals irradiation with 365 nm UV-light, and (e) curcumin-doped cellulose nanocrystals irradiation with 254 nm UV-light.

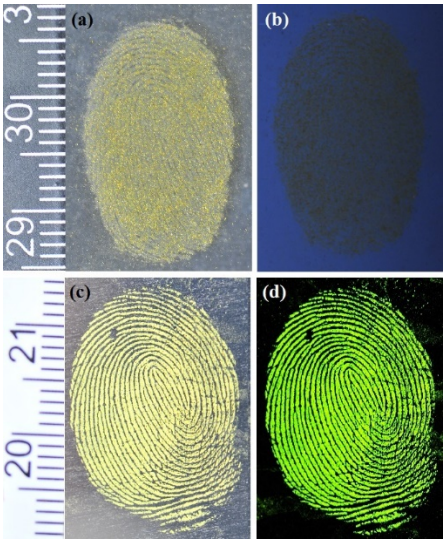

Figure S2 Comparative imaging of the LFPs by the pure curcumin (a and b) with the CDCN (c and d) under daylight and 254 nm UV-light.