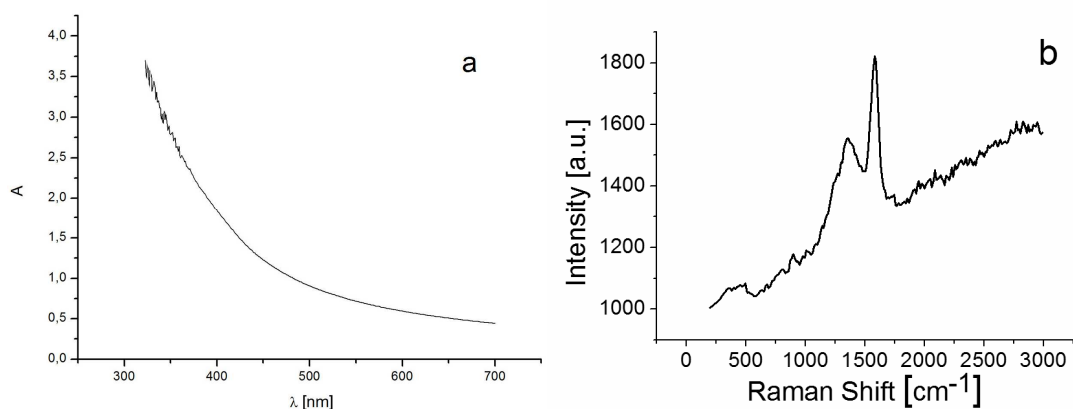
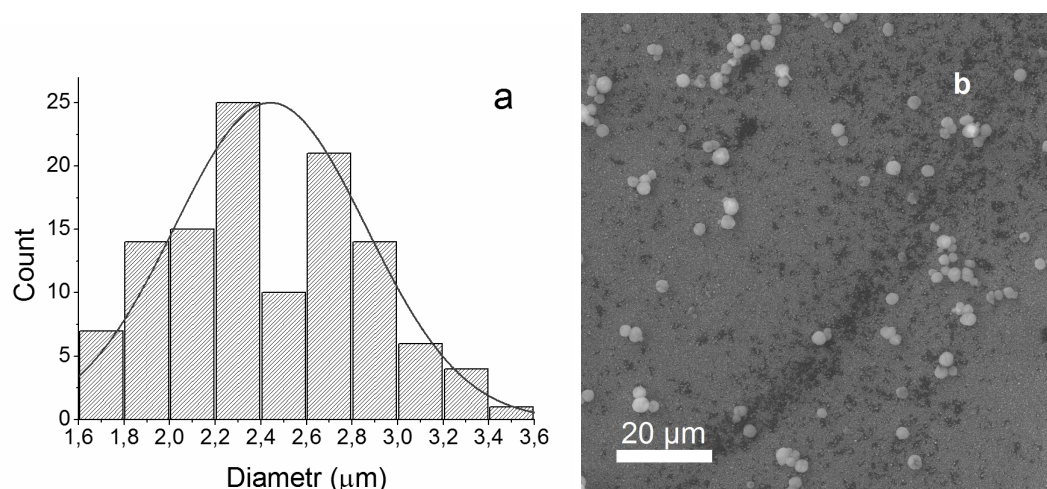


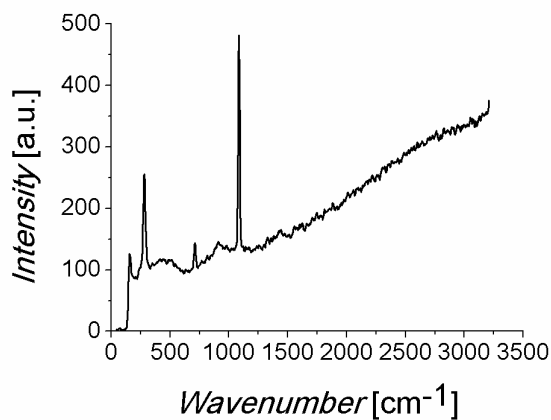
## Supporting Information.



**Figure S1.** Optical properties of astralen: a - adsorption spectrum of astralen water colloid; b - Raman spectrum of astralen nanoparticles



**Figure S2.** Distribution of CaCO<sub>3</sub> size (a) obtained by analysis SEM image of calcium carbonate cores (b) using ImageJ (NIH, <http://rsb.info.nih.gov/ij/>).



**Figure S3.** Raman spectrum of CaCO<sub>3</sub> cores at 473 nm and laser power of 1 mW.