In Vitro detection of calcium in bone by modified carbon dots

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Supporting Information

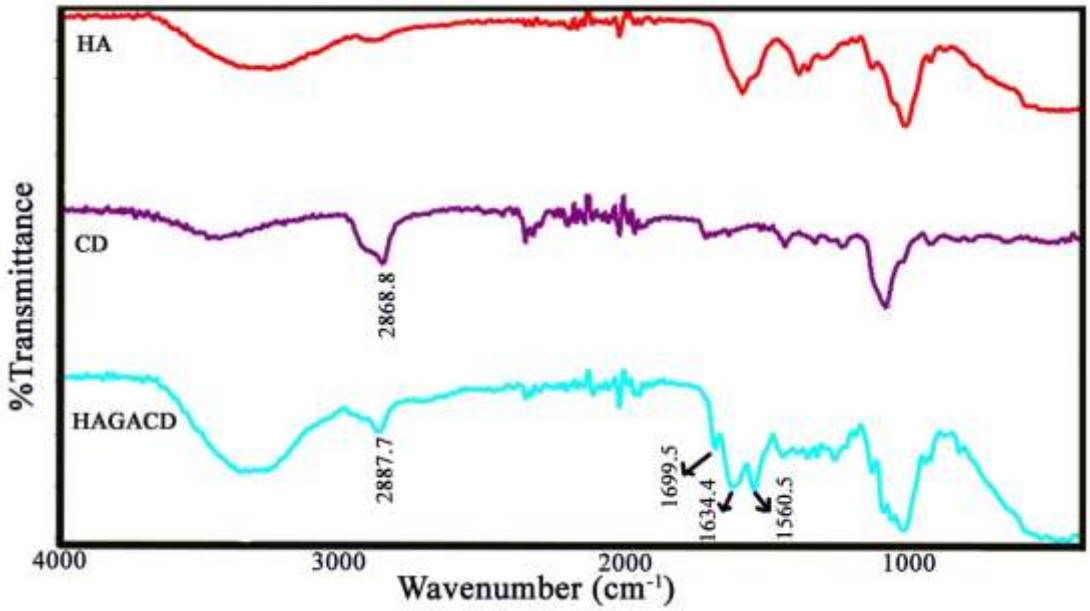

Fig S1. FTIR spectra of HA, CD and HAGACD

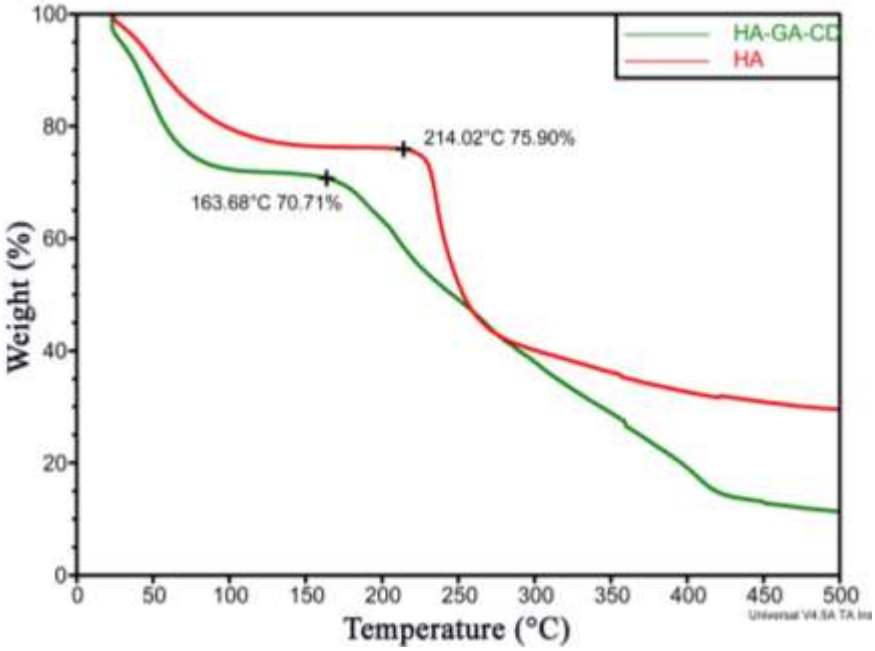

Fig S2. Thermograms of HA and HAGACD (at 10°C min^{-1}, in N_2 atmosphere)

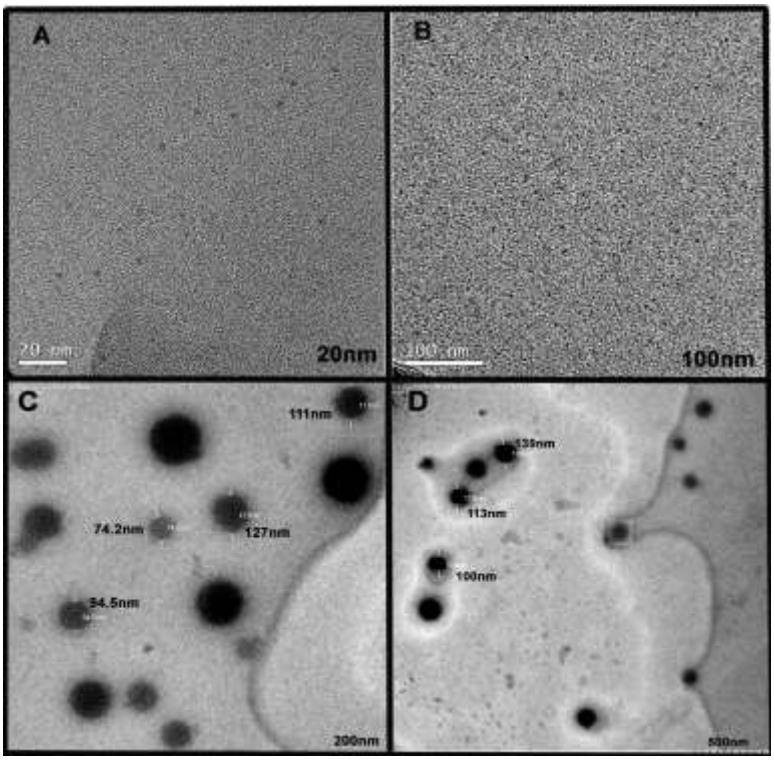

Fig S3. A and B HRTEM micrographs of CD and C and D TEM micrographs of HAGACD

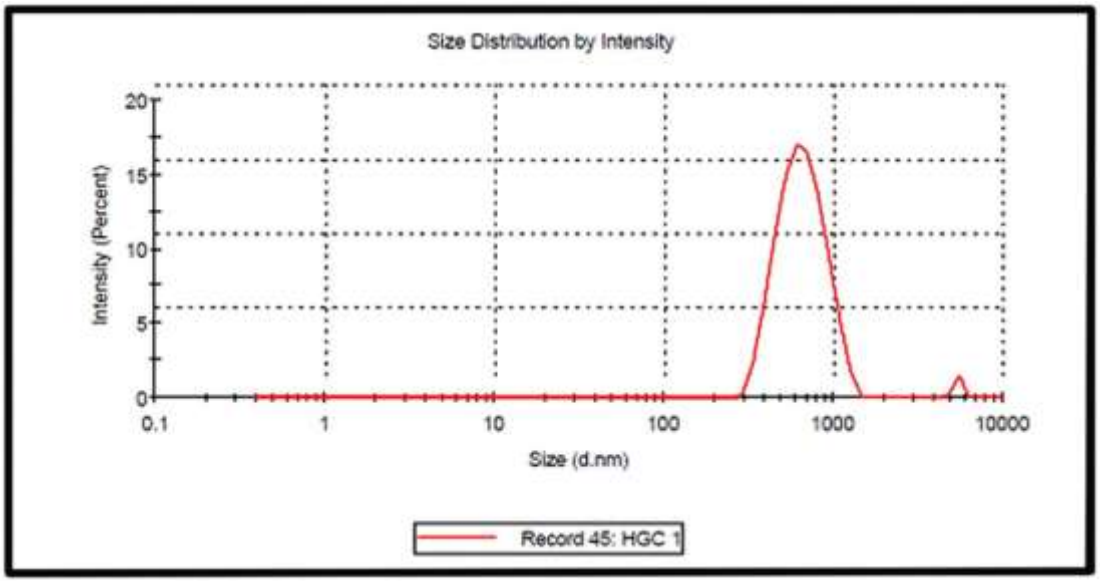

Fig S4. DLS profile of HAGACD

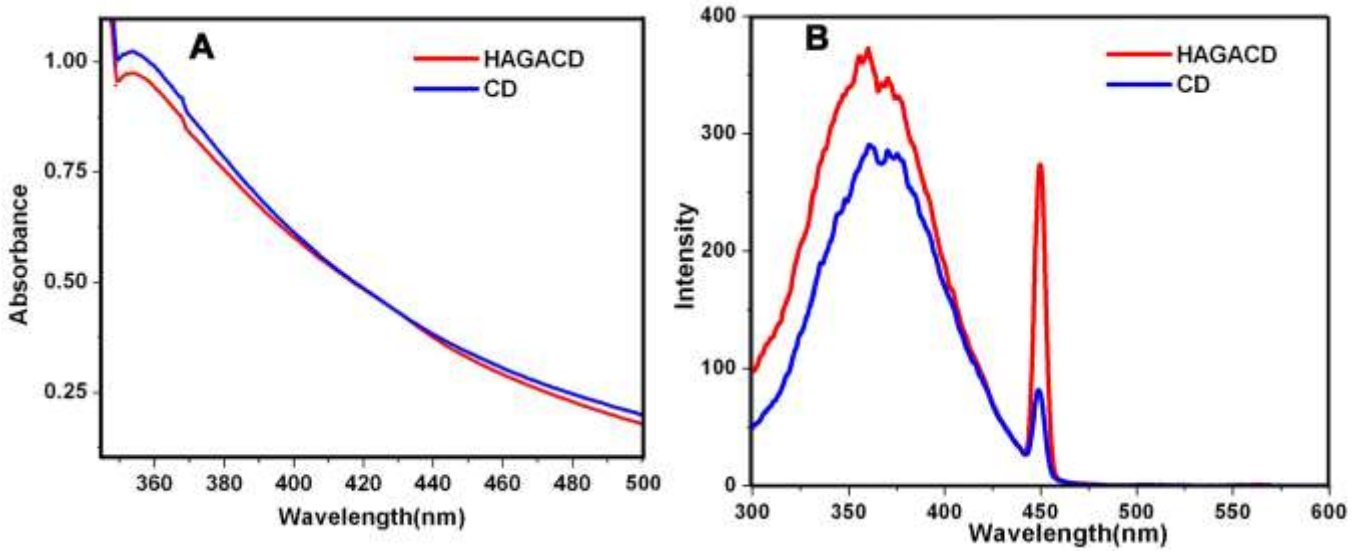

Fig S5. A) UV-Visible absorption and B) Fluorescence excitation spectra of CD and HAGACD

Fig S6. PVA films containing A) 0.02M Ca^{2+} B) 0.25M Ca^{2+} C) 0.5M Ca^{2+} incubated with HAGACD

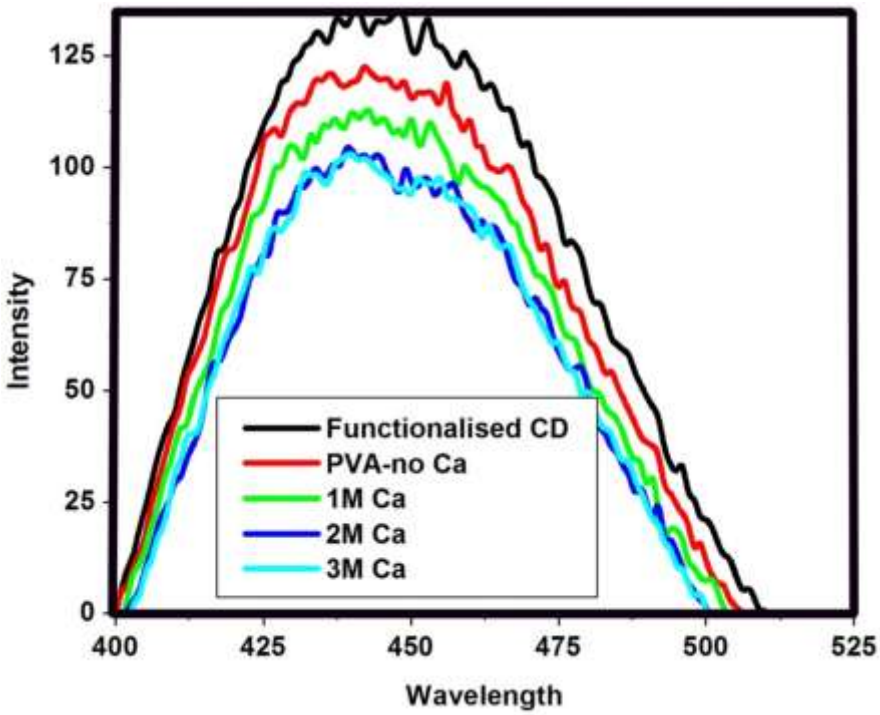

Fig S7. Fluorescence emission of HAGACD solutions after removing the incubated polymer strips. Intensity remains the same of solutions treated with polymer strips containing 2 M and 3 M reflecting saturation in binding.

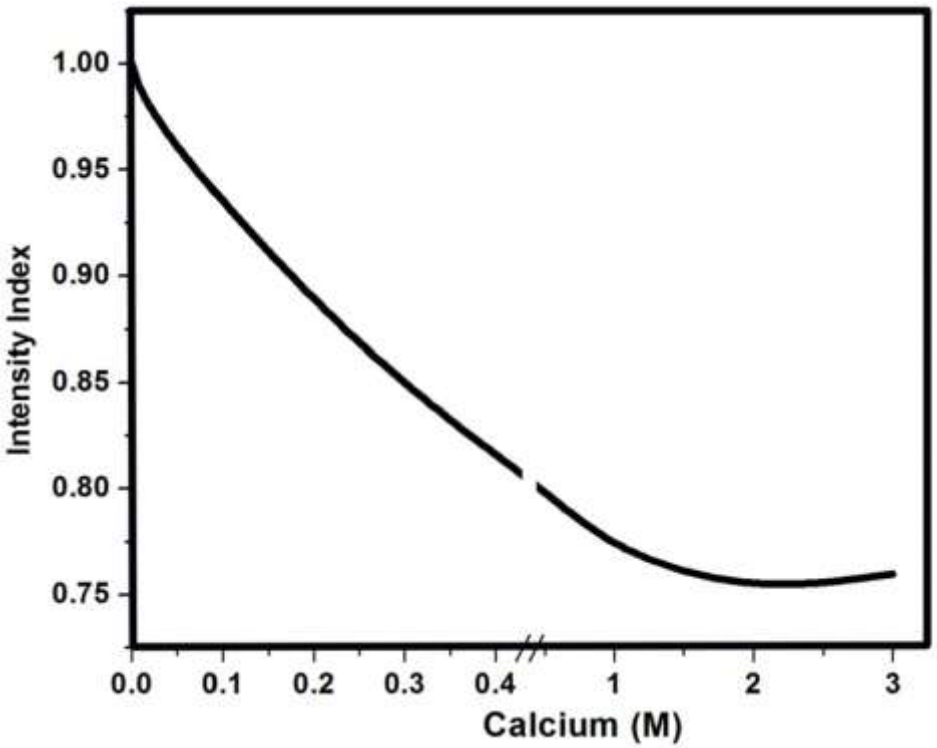

Fig S8. Intensity index Vs calcium ion concentration of the residual HAGACD

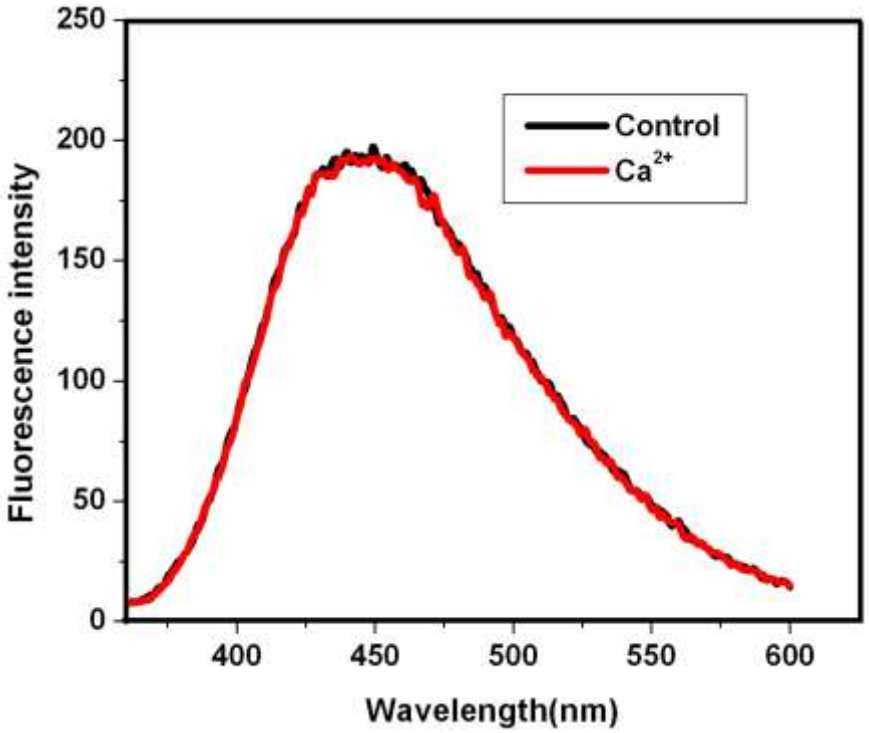

Fig S9. Fluorescence emission of HAGACD in presence of Ca

Table S1 Zeta Potential by Dynamic Light Scattering

Sample code	Zeta Potential (mV)
CD	-20.9
HAGACD	-0.579