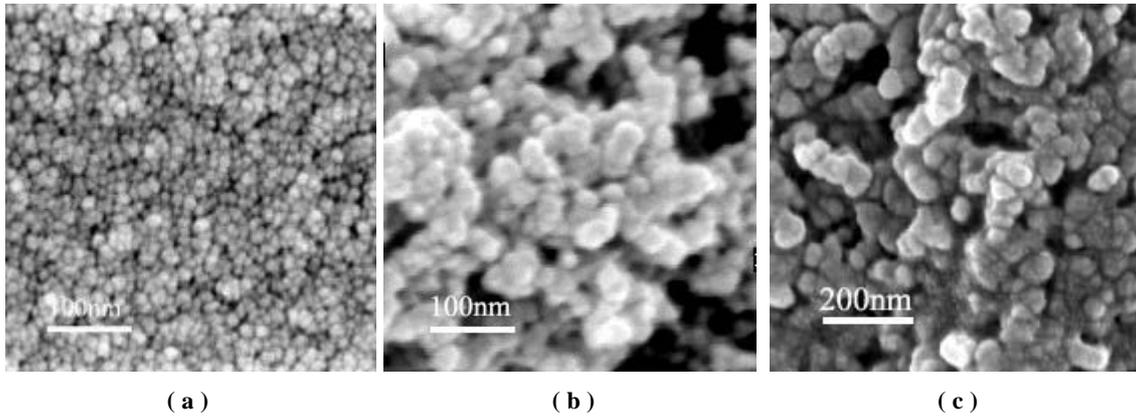
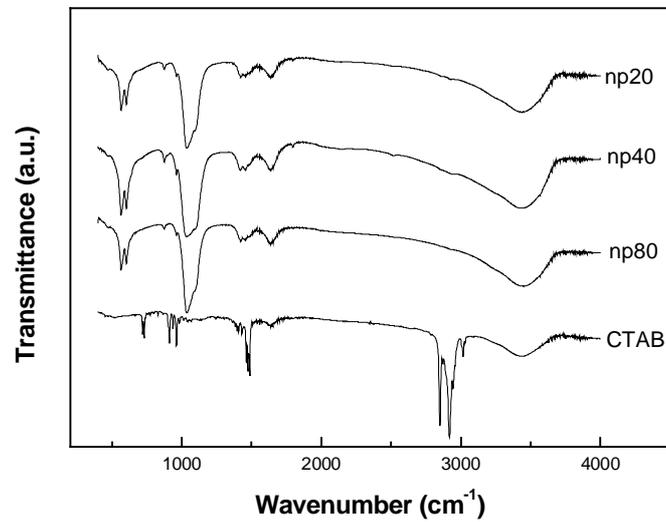


## Supplementary Information

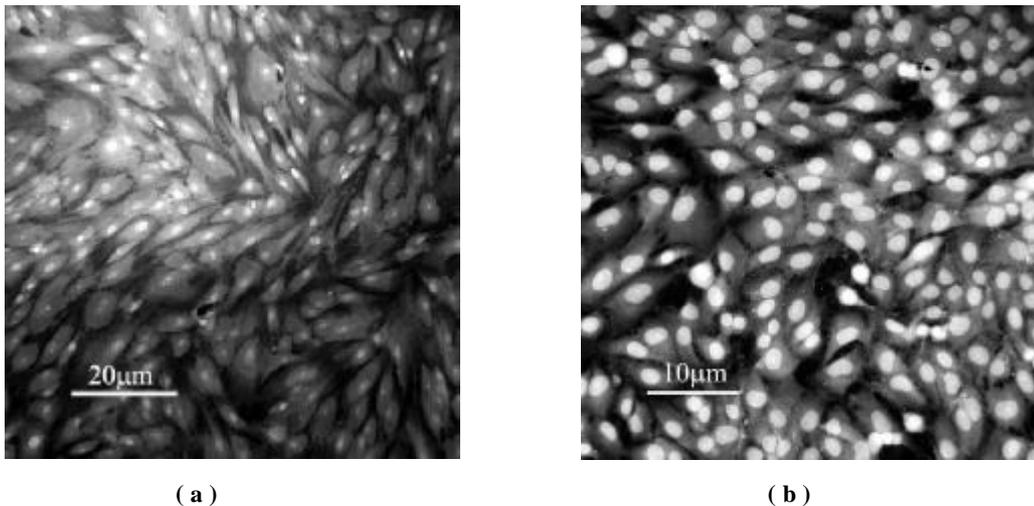
Yurong Cai *et al.*, "Role of Hydroxyapatite Nanoparticle Size in Bone Cell Proliferation"



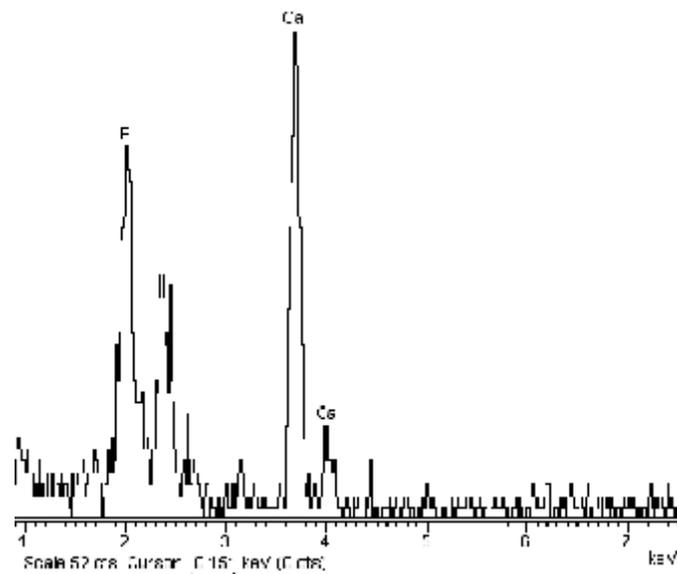
**Fig.S1** Scanning electron micrographs of np20 (a), np40 (b) and np80(c) films.



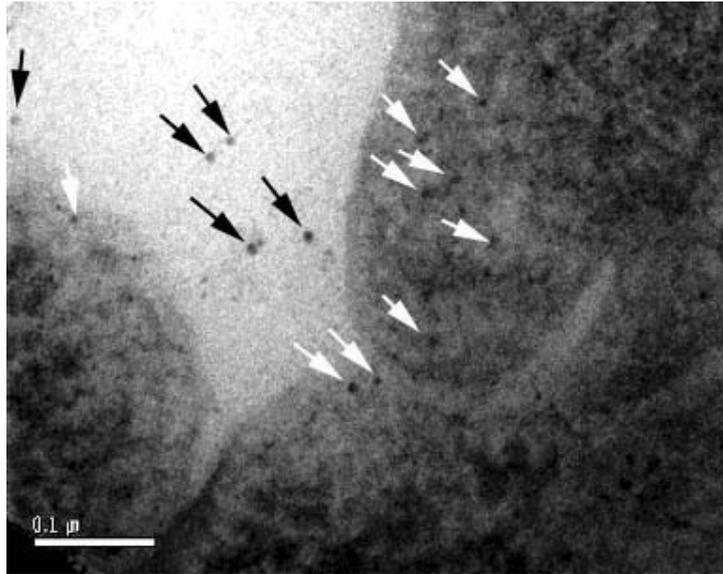
**Fig S2.** Fourier transformation infrared spectrum analysis of np20, np40, np80 and CTAB. The results showed that no band of CTAB was detected in the samples of np20, np40 and np80. The typical HAP patterns confirmed that the phase of these nano particles was HAP.



**Fig.S3** Parallel experimental results with the direct introduction of calcium and phosphate ions into the culture medium. Compared with the control results, the proliferations of MSCs (a) and U2OS (b) in the presence of calcium phosphate solutions were not altered significantly. Both cells were cultured for 7 days.



**Fig. S4** EDX pattern of intracellular nanoparticles in MSCs. Unlabelled peaks were belong to the elements of Cu and Pb, which were caused by the substrate and staining agents.



**Fig. S5** Typical TEM image of a U2OS cell after 7 days incubation on np20 film. The white arrows indicate the 20 nm sized nano HAP particles in the cells and on the membranes; the black arrows show the nano HAP in the extracellular medium.