In situ encapsulating silver nanocrystals into hydrogels. A “green” signaling platform for thiol-containing amino acids or small peptides

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Supporting Information
Chemicals and characterizations

All chemicals commercially available at AR grade were used as received.

Field emission scanning electron microscopy (FESEM) experiments were carried out on HITACHI S-4800 working at an accelerating voltage of 20 kV. Transmission electron microscopy (TEM) experiments were performed on HITACHI H-7650 system. X-Ray powder diffractions (XRD) were performed on Panalytical X’pert PRO diffractometer equipped with Cu Kα radiation (λ = 1.5418 Å) at room temperature.

![Fig. S1](image-url). The photos of NaCMC (0.8 %, wt) in the presence of Al(III), Pb(II), Fe(II), Fe(III), Cu(II), Mg(II), Cd(II), Ni(II), Co(II), Ca(II), and Zn(II), respectively. All metal ions concentrations are 0.045 M.
Fig. S2 TEM image of xerogel from the corresponding original irradiated hydrogel of NaCMC-Ag(I). The scale bar is 20 nm.

Fig. S3 Powder X-ray diffraction patterns of the xerogel from the corresponding original irradiated hydrogel of NaCMC-Ag(I) and of NaCMC.