

## Supporting Information

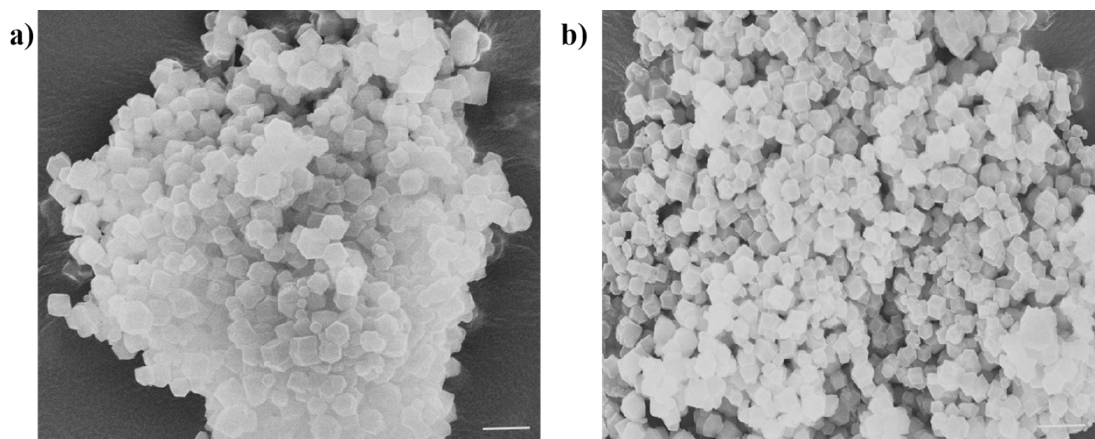
### Responsive ZIF-90 nanocomposite material: targeted delivery of 10-hydroxycamptothecin to enhance the therapeutic effect of colon cancer (HCT116) cells

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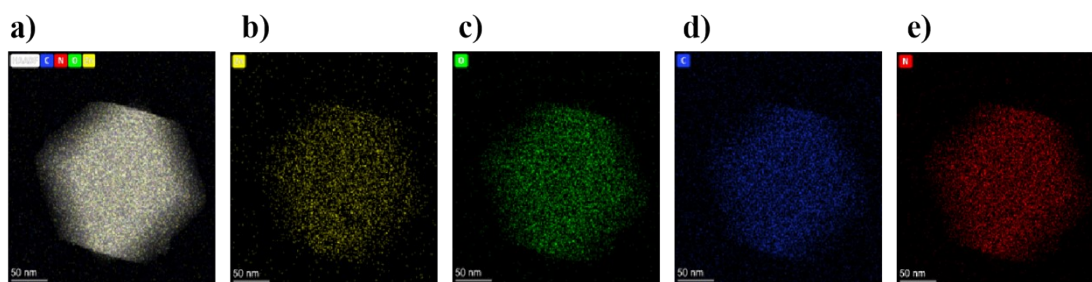
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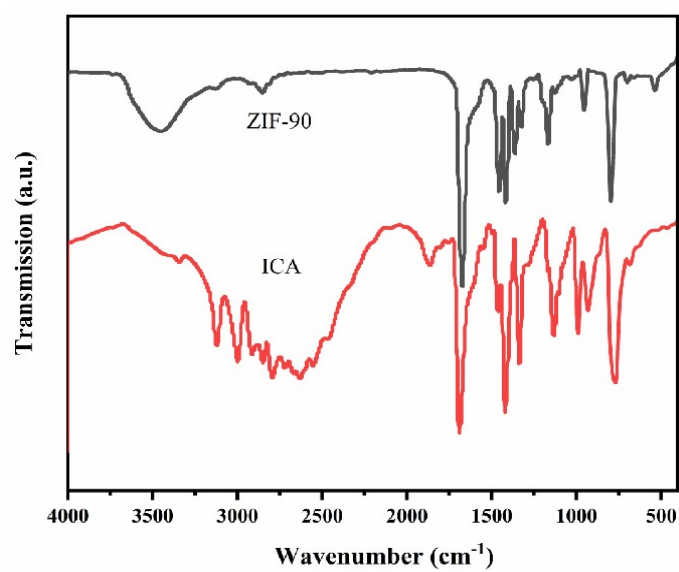
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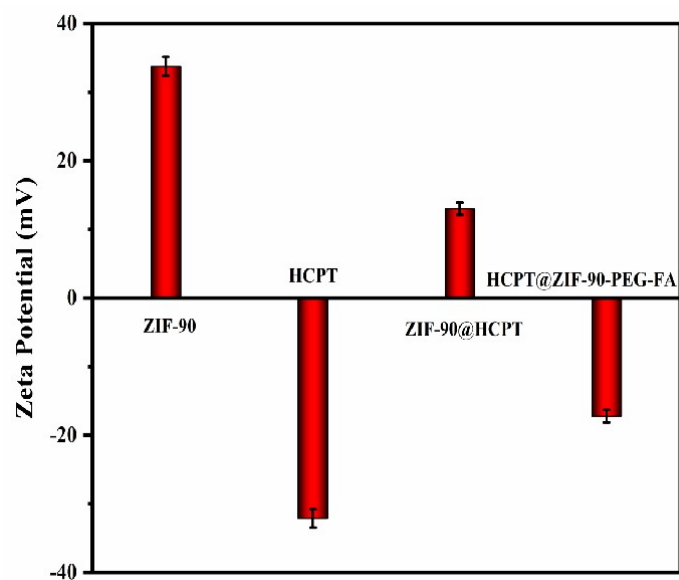
**Fig. S1** (a) SEM image of ZIF-90. (b) SEM image of HCPT@ZIF-90.



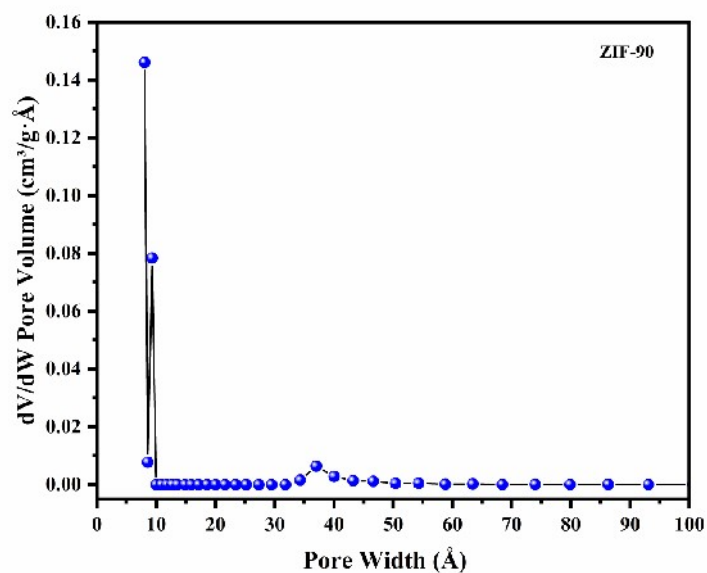
**Fig. S2** EDS elemental mapping of ZIF-90 (a), Zn (b), O (c), C (d), N(e).



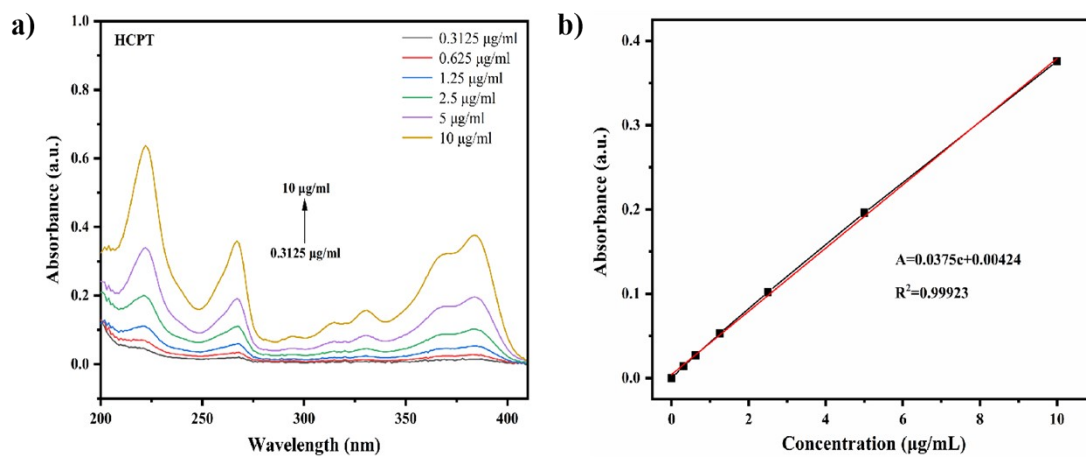
**Fig. S3** FT-IR spectra of ZIF-90 and ICA ligand.



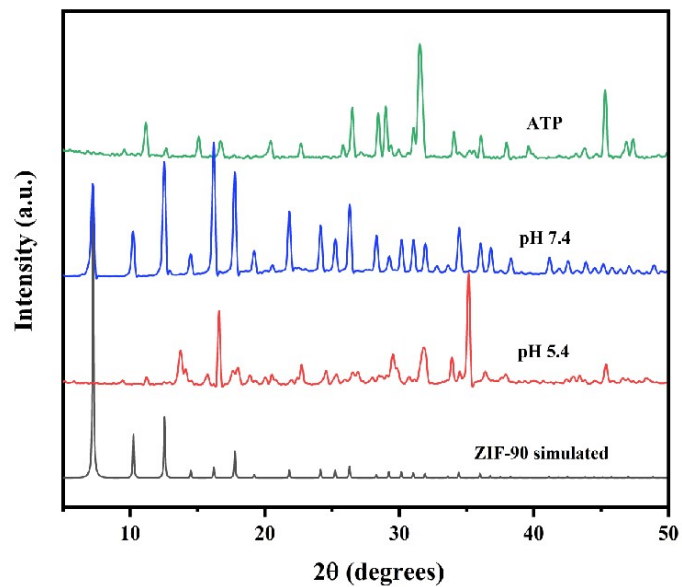
**Fig. S4** A sequence of changes in the sample zeta potentials obtained after each synthetic step.



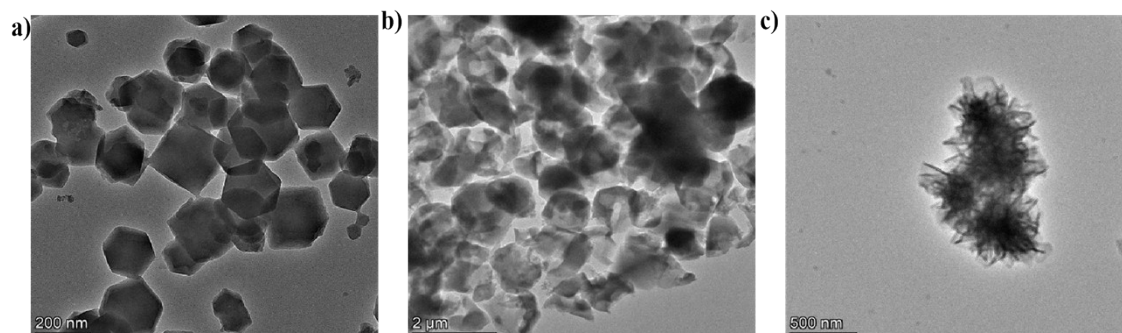
**Fig. S5** Pore size distribution of ZIF-90.



**Fig. S6** UV-vis spectra of (a) HCPT at different concentrations and (b) standard curve of HCPT.



**Fig. S7** XRD patterns of ZIF-90 nanoparticles under different conditions.



**Fig. S8** TEM images of ZIF-90 nanoparticles under (a) PH = 7, (b) PH = 5.4, and (c) 10mM ATP conditions.