

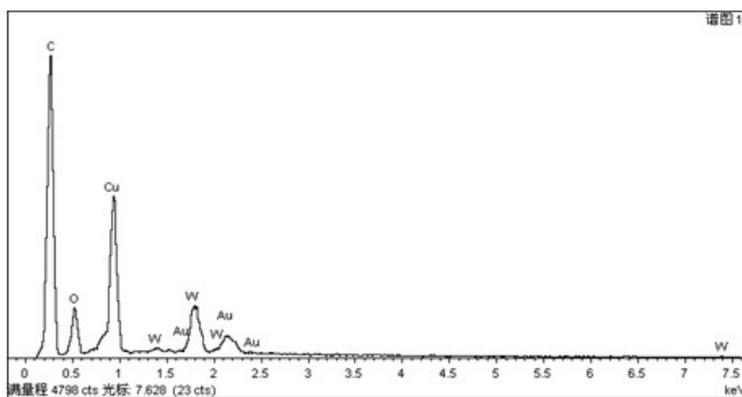
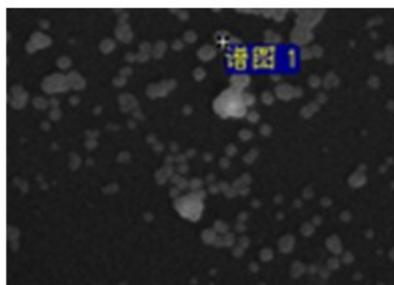
## Controllable self-assemblies of sodium benzoate in different solvents environments

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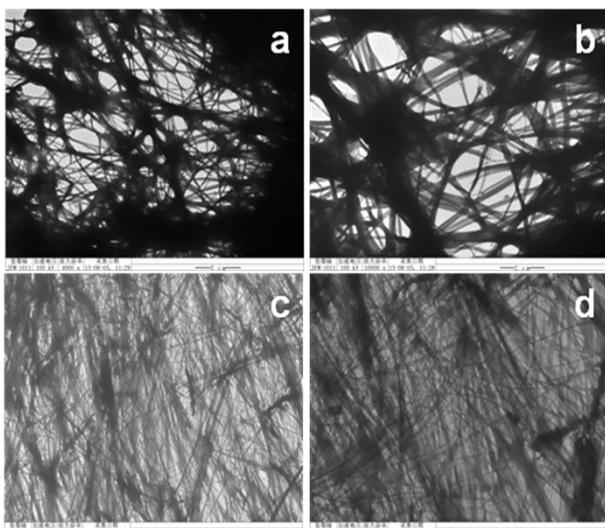
### Supporting Information



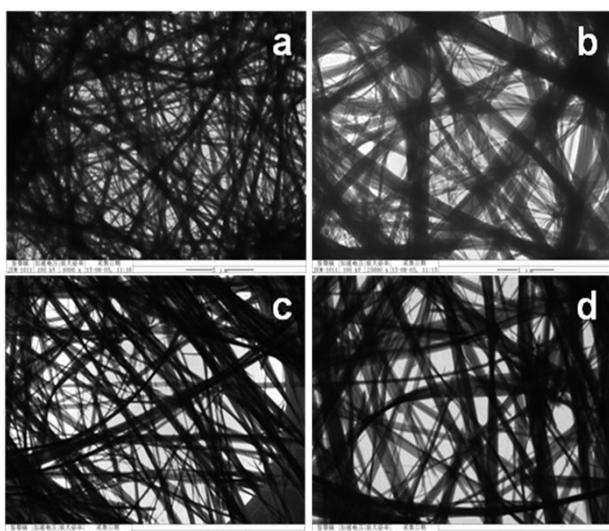
**Fig. S1** EDS spectrum of sodium benzoate vesicles.

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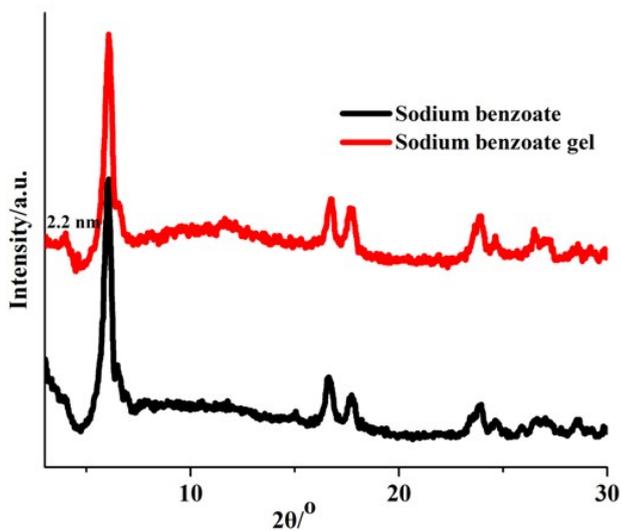
<sup>†</sup>These authors contributed equally



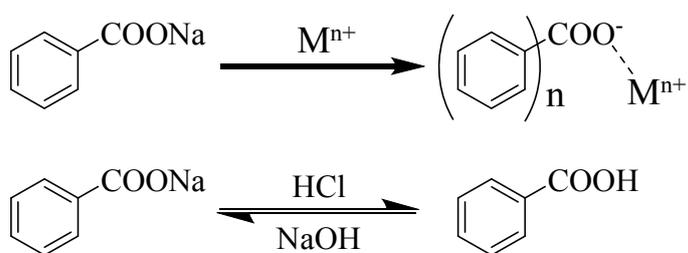
**Fig. S2** TEM images of sodium benzoate gel at room temperature: (a) & (b), water/ acetonitrile; (c) & (d), water/ isopropanol.



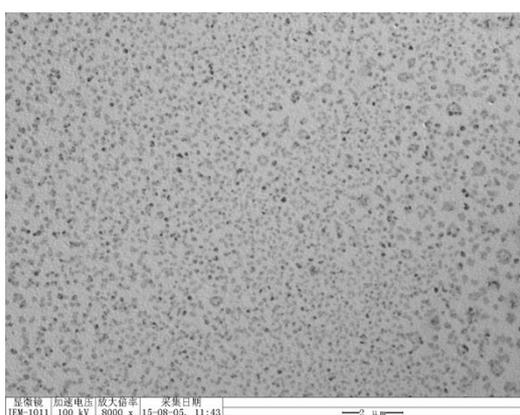
**Fig. S3** TEM images of sodium benzoate gel at room temperature: (a) & (b), water/dimethyl formamide; (c) & (d), water/ dimethylsulfoxide.



**Fig. S4** XRD pattern comparisons of sodium benzoate and sodium benzoate gel.



**Fig. S5** The complex model of metal ions with sodium benzoate and pH-dependent equilibrium between sodium benzoate and benzoic acid.



**Fig. S6** TEM images of calf serum, scale bar = 2 μm.