

Supporting information

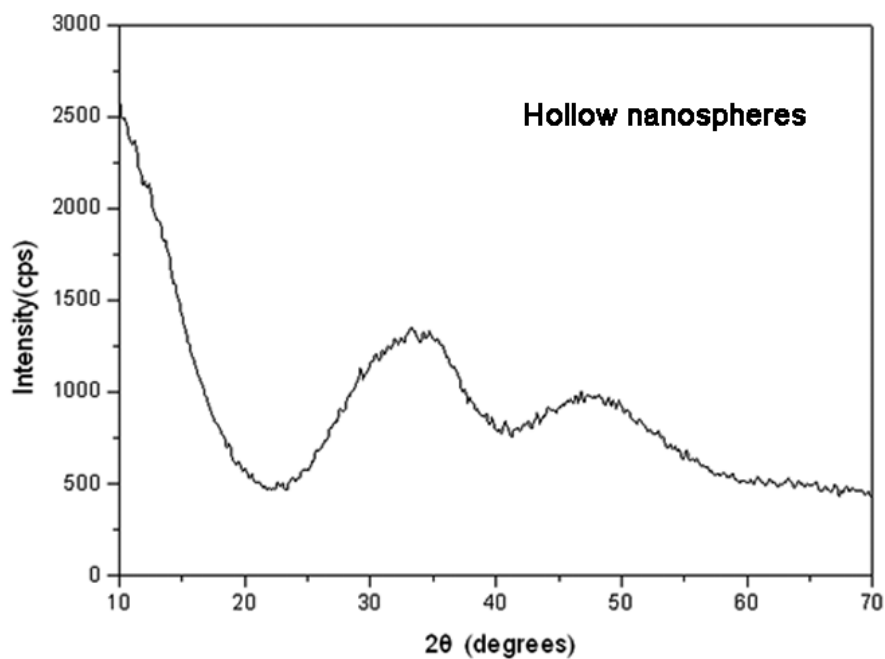


Figure S1. XRD patterns of hollow sodium tungsten bronze nanospheres. There are no typical diffraction peaks appeared, revealing that as-obtained sodium tungsten bronze nanospheres are amorphous.

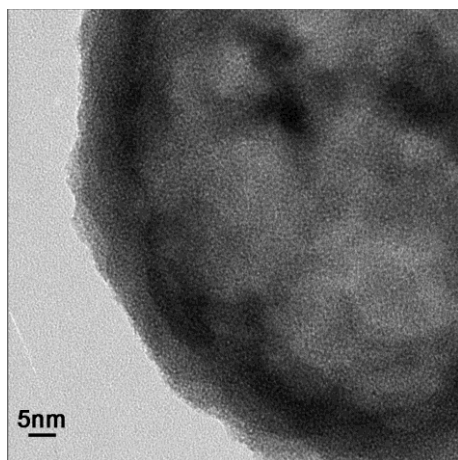
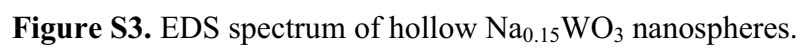


Figure S2. HRTEM image of part of a hollow $\text{Na}_{0.15}\text{WO}_3$ nanosphere. There are no crystal lattice were observed.



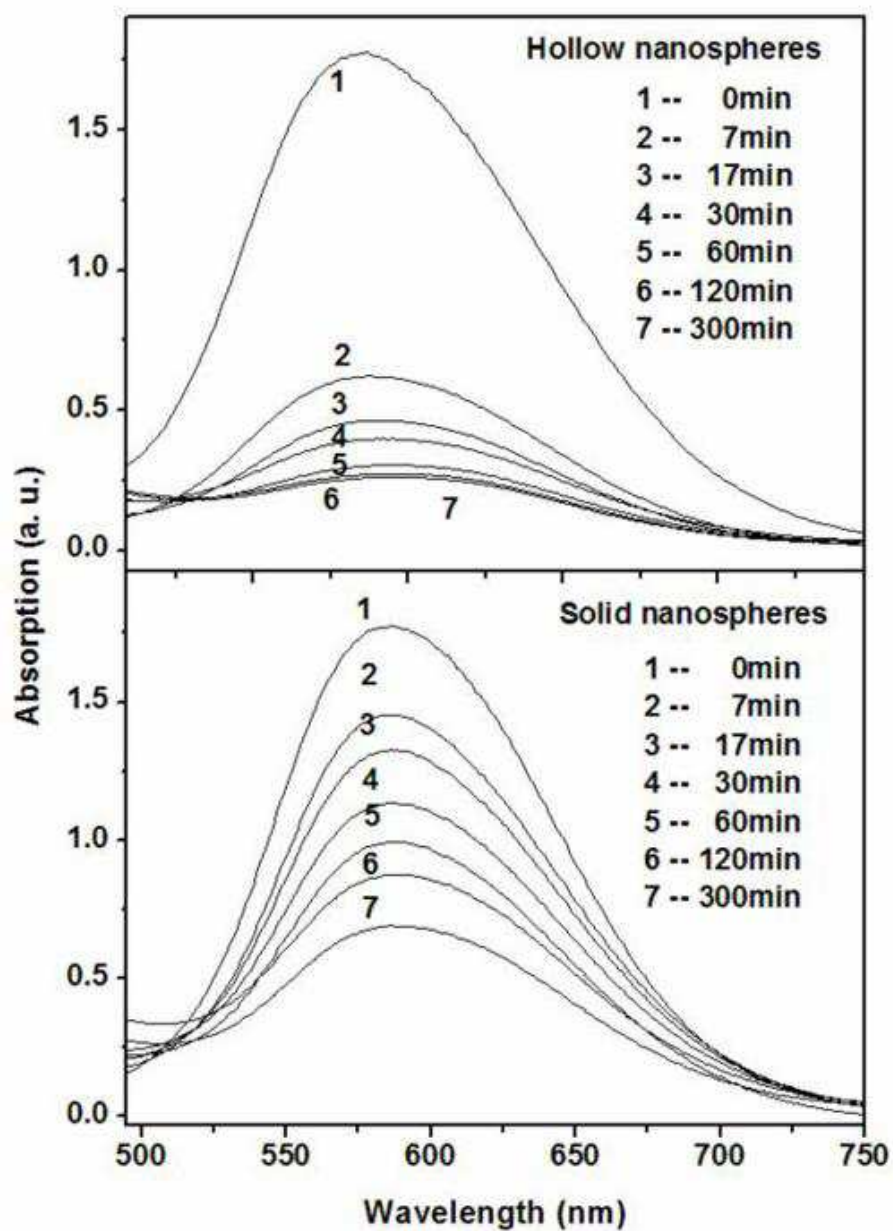


Figure S4. UV-vis absorption spectra of Coomassie Brilliant blue in the presence of hollow and solid sodium tungsten bronze nanospheres recorded at different time intervals to follow the absorption process.

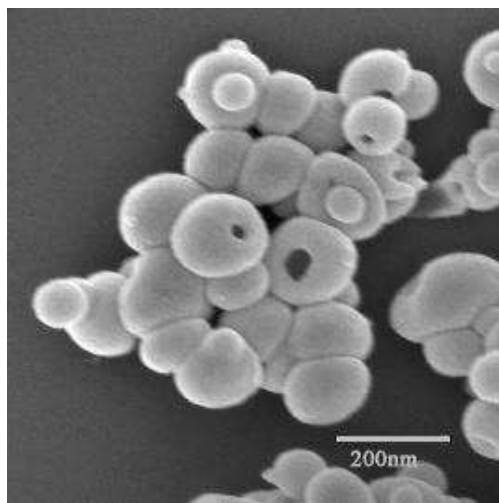


Figure S5. FESEM image of hollow $\text{Na}_{0.15}\text{WO}_3$ nanospheres after being immersed in water with $\text{pH} = 2$ for 2 days.