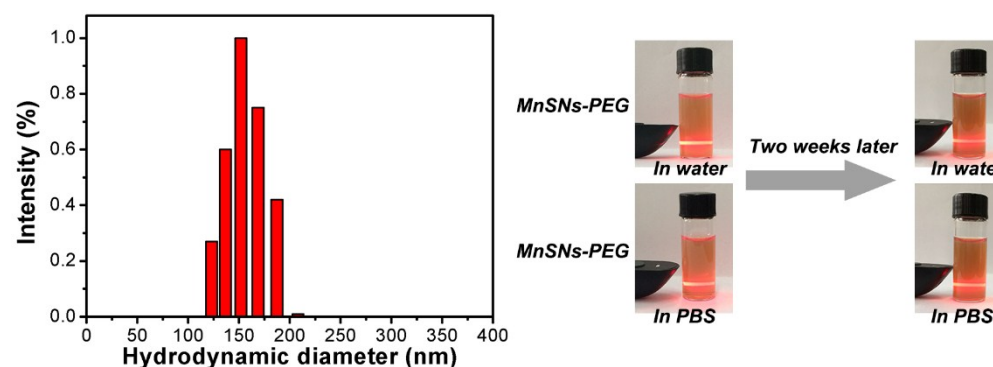


## Supporting Information

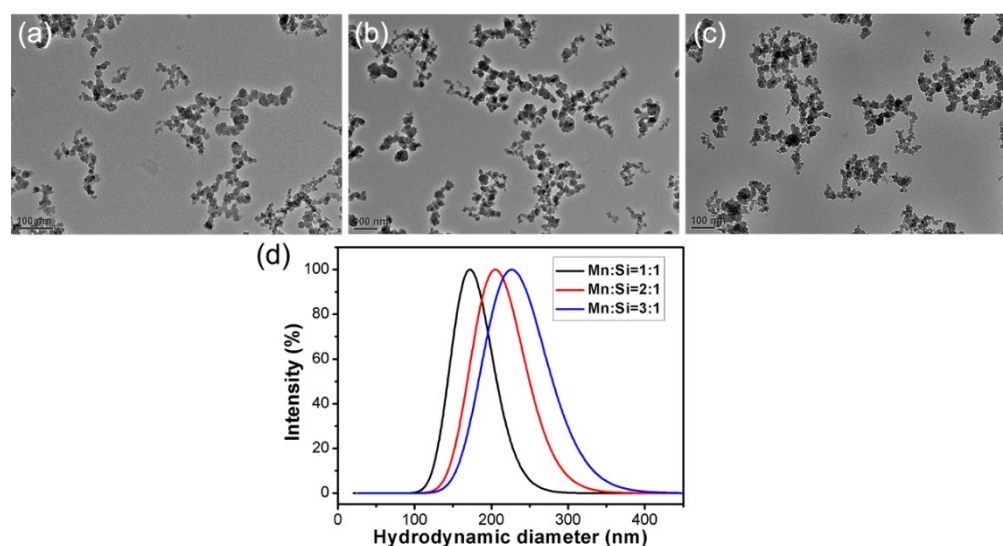
### Facile synthesis of manganese silicate nanoparticles for pH/GSH-responsive T<sub>1</sub>-weighted magnetic resonance imaging

Xiaowei Li, Wenru Zhao\*, Yajing Liu, Xiaohang Liu, Ping Shi, Yongsheng Li, Jianlin Shi\*

#### Supplementary figures



**Fig. S1** DLS profiles of MnSNs in PBS and photographs of MnSNs-PEG in aqueous suspensions showing the Tyndall effect.



**Fig. S2** Size variation of MnSNs by changing the feed Mn/Si molar ratios of a) 1:1, b) 2:1, c) 3:1 and d) the corresponding DLS profiles.

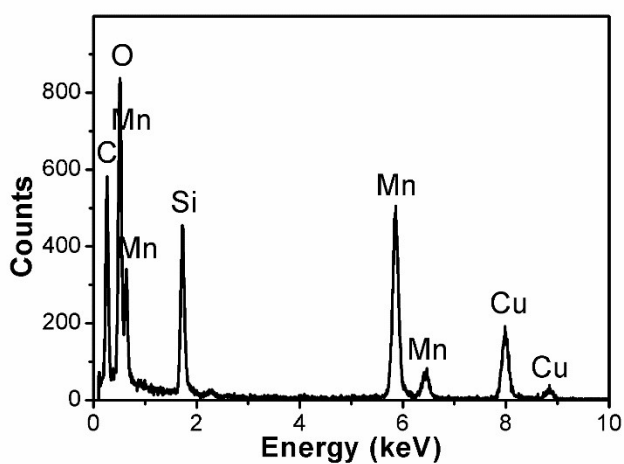


Fig. S3 EDX pattern of MnSNs.

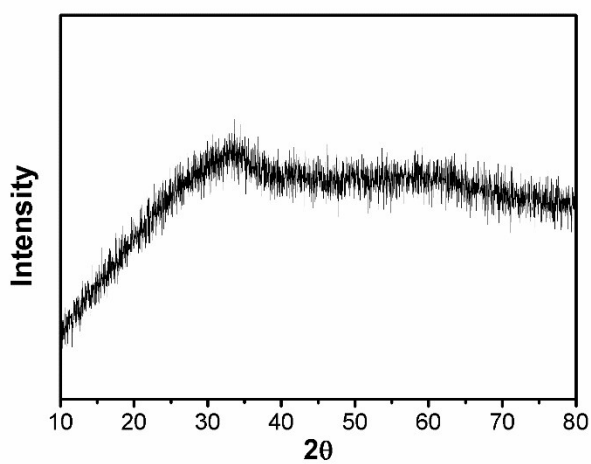


Fig. S4 XRD pattern of MnSNs.

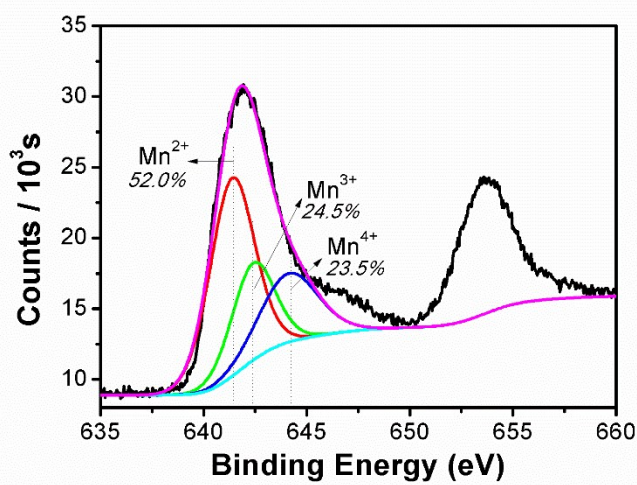
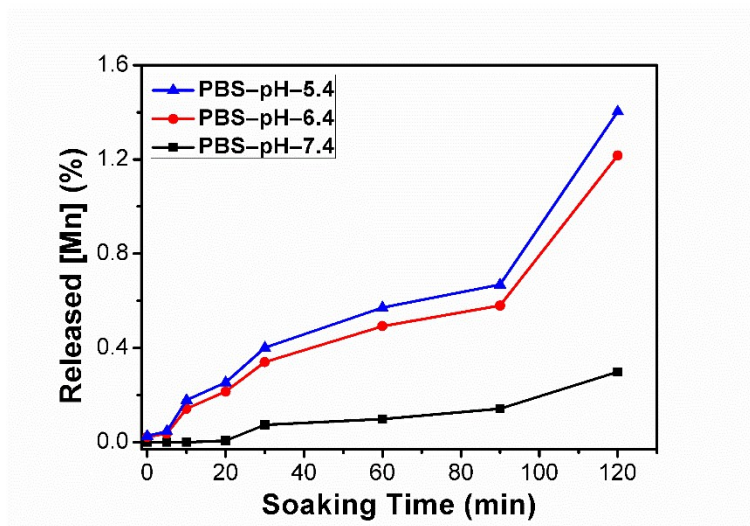
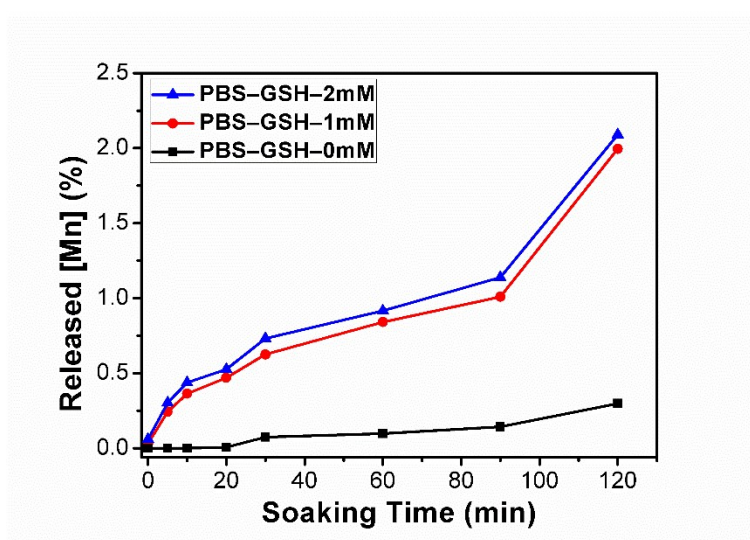


Fig. S5 XPS of MnSNs.



**Fig. S6** The dynamic Mn release of MnSNs in buffer solutions at varied pH values vs soaking time.



**Fig. S7** The dynamic Mn release of MnSNs in buffer solutions containing varied GSH concentrations vs soaking time.