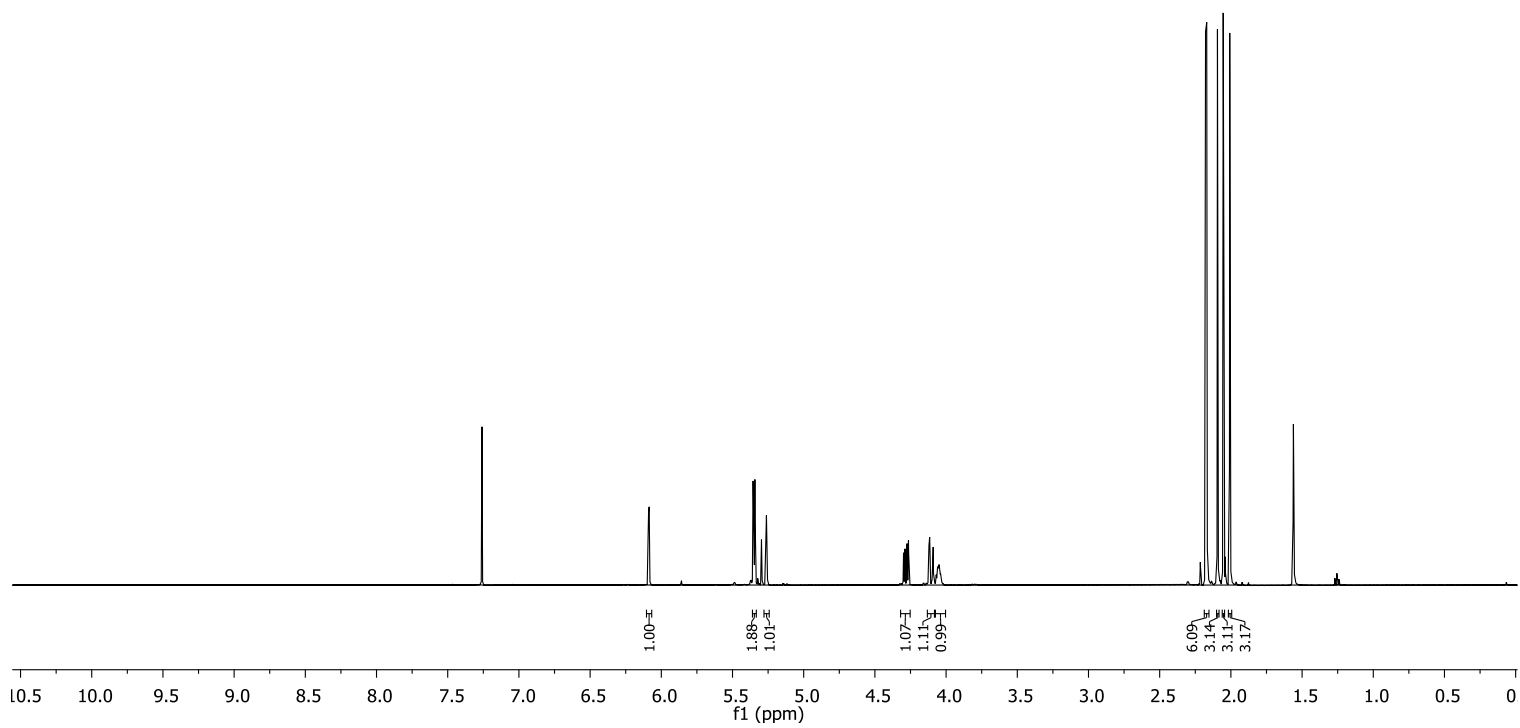


Water-soluble Photoluminescent D-Mannose and L-Alanine Functionalized Silicon Nanocrystals and Their Application to Cancer Cell Imaging

Yi Zhai, Mita Dasog, Ryan B. Snitynsky, Tapas K. Purkait, Maryam Aghajamali, Allison H. Hahn,
Christopher B. Sturdy, Todd L. Lowary and Jonathan G. C. Veinot

Figures

Fig. S1 ^1H and ^{13}C NMR spectra of 1,2,3,4,6-penta-*O*-acetyl- α -D-mannopyranose.



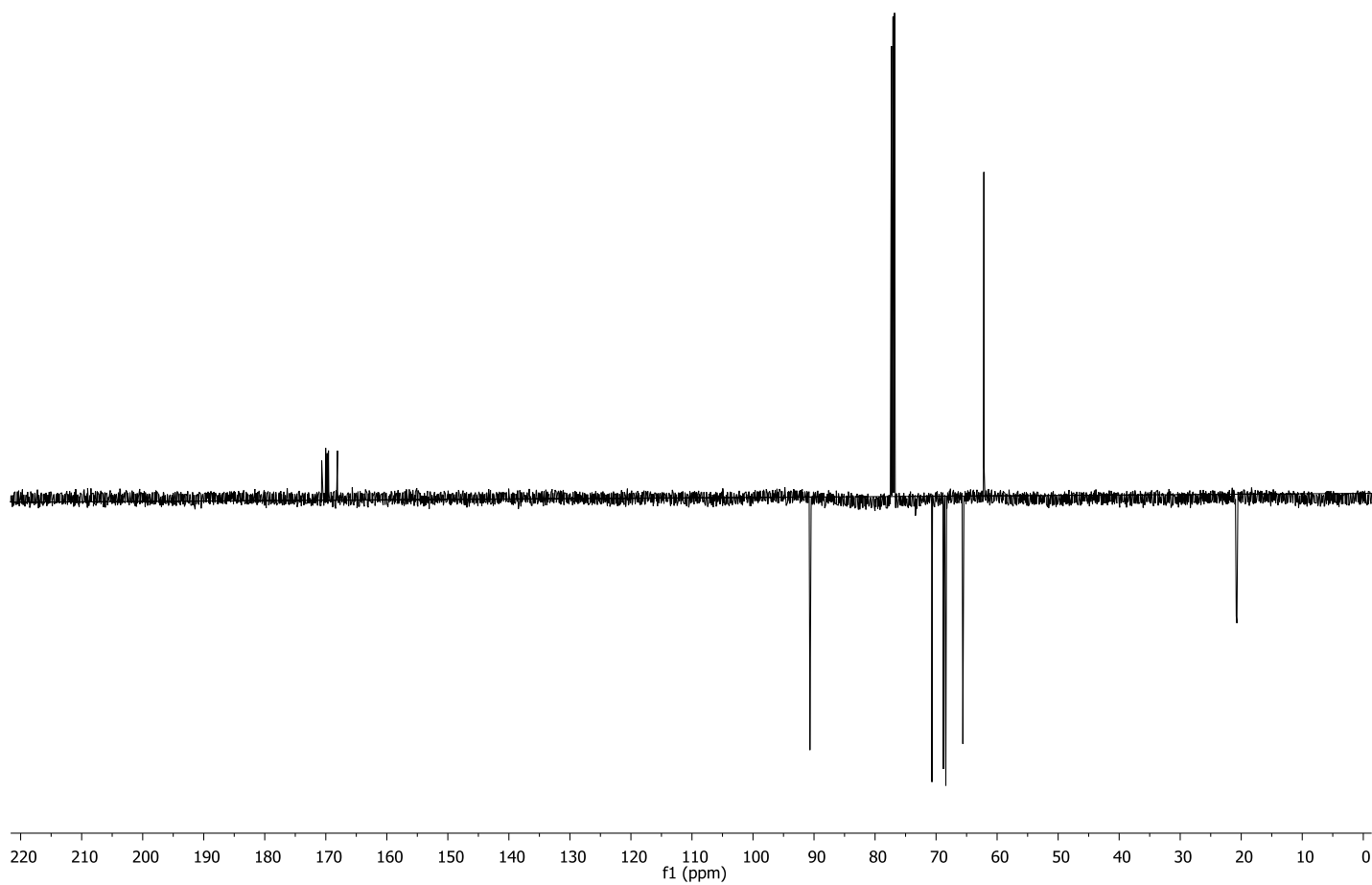
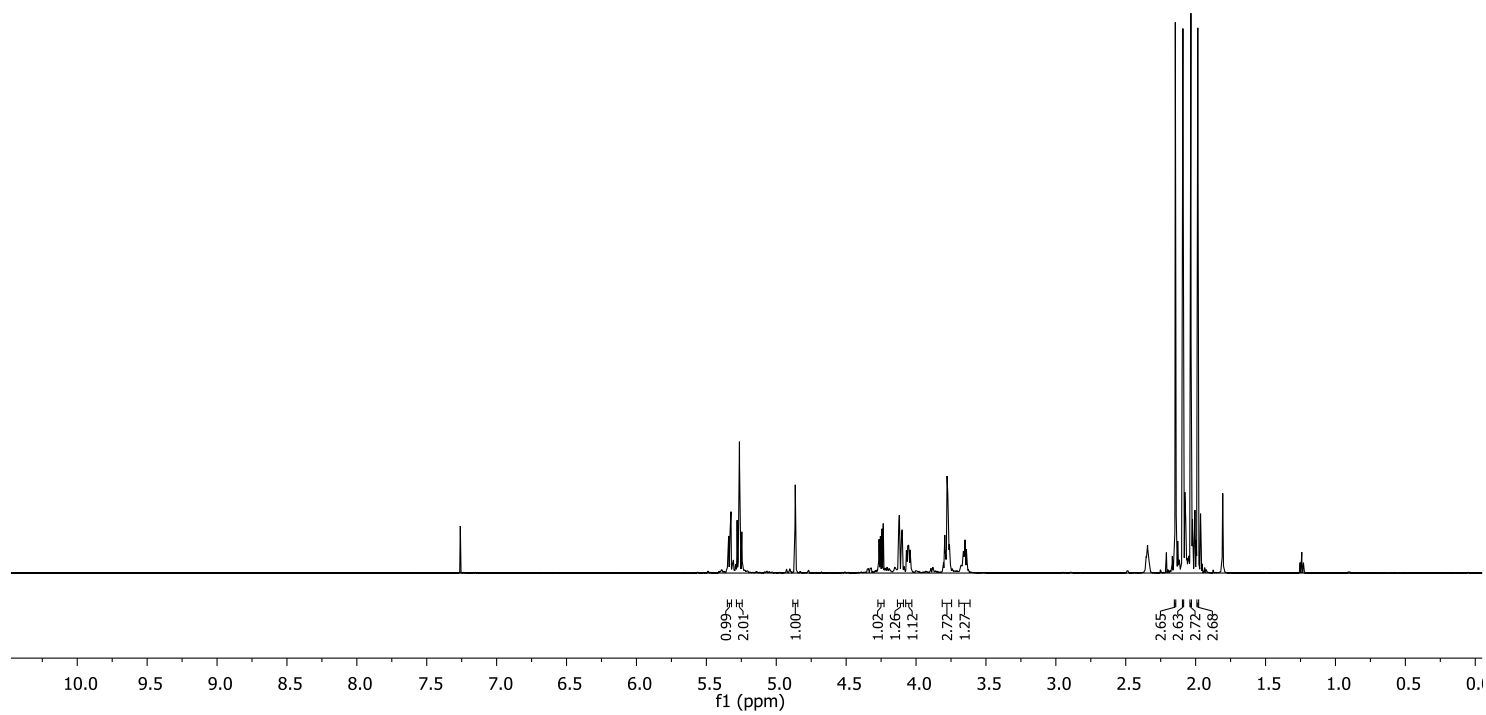


Fig. S2 ^1H and ^{13}C NMR spectra of 2'-hydroxyethyl 2,3,4,6-tetra-*O*-acetyl- α -D-mannopyranoside.



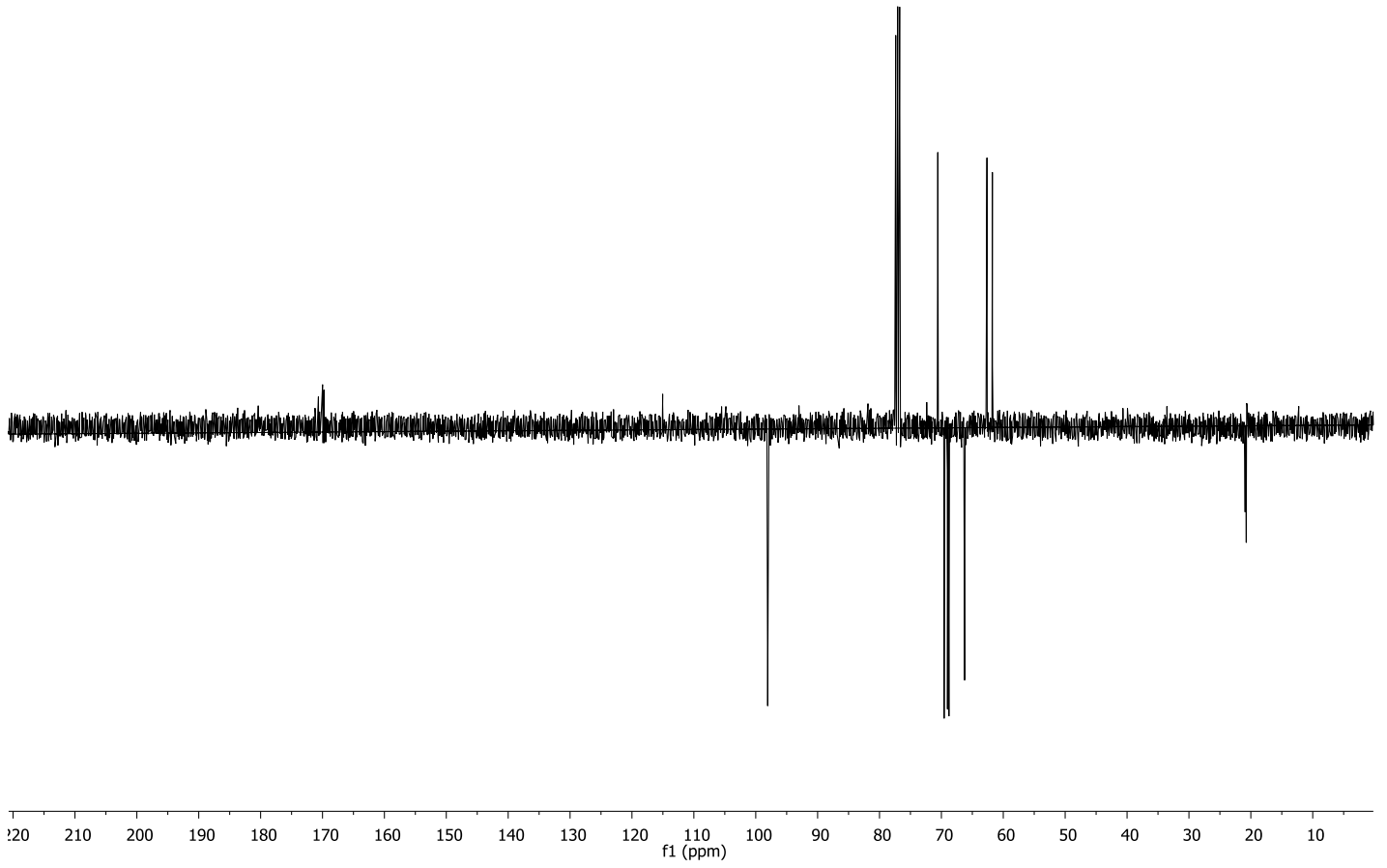


Fig. S3 Size distribution of mannose functionalized Si NCs with diameters of 2.6 ± 0.6 nm and alanine functionalized Si NCs with diameters of 2.7 ± 0.5 nm.

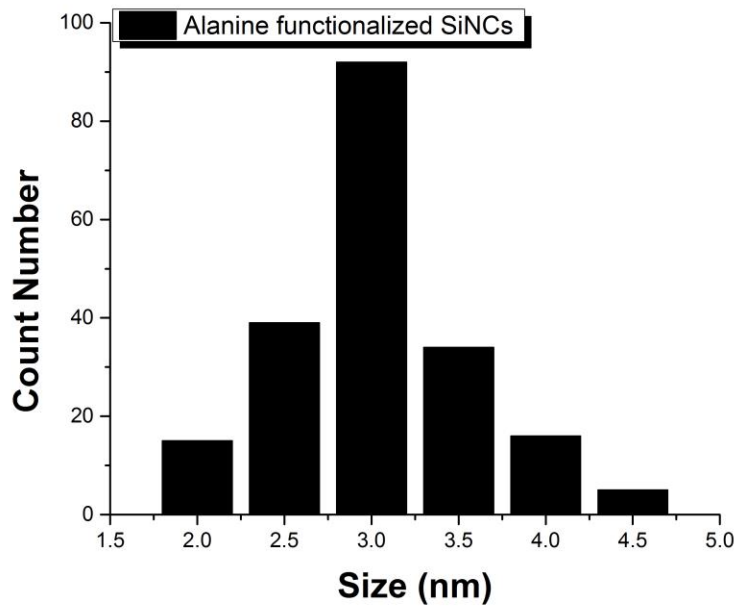
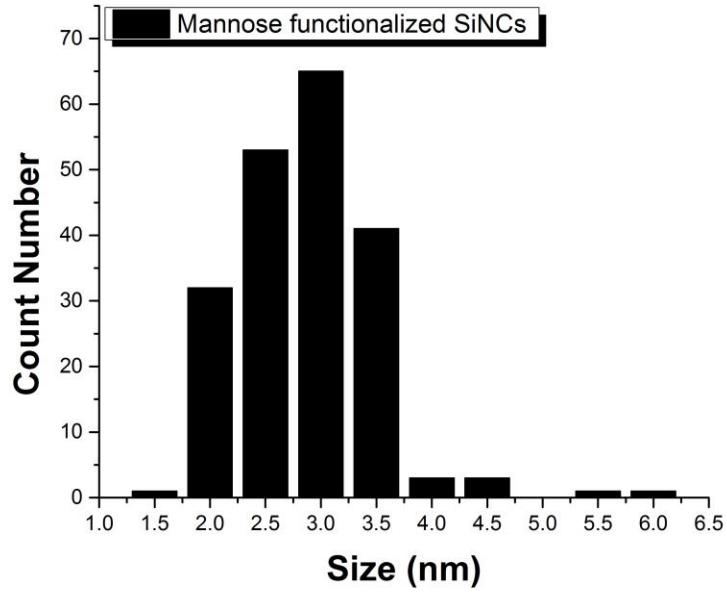


Fig. S4 DLS measurement of (A) mannose functionalized SiNCs, (B) alanine functionalized SiNCs, and (C) pentanoic acid functionalized SiNCs.

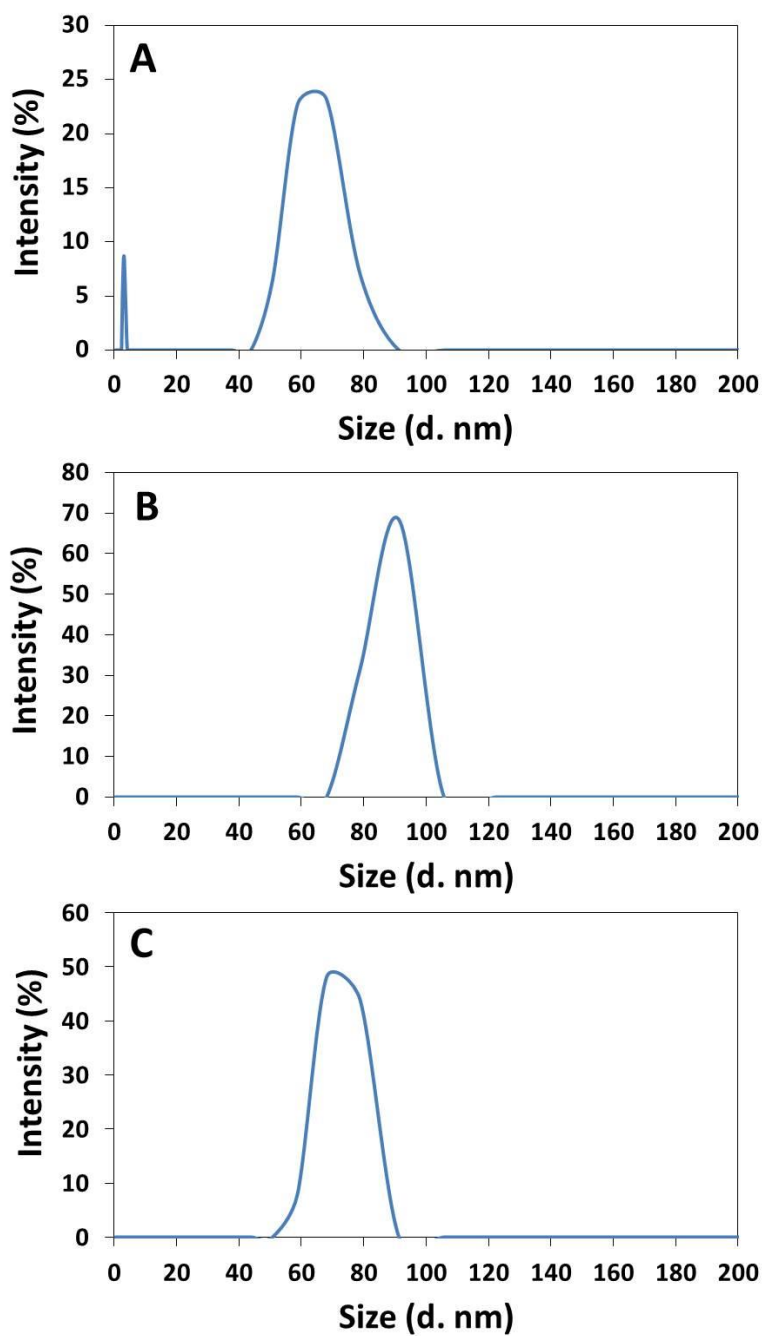


Fig. S5 XPS survey spectrum of mannose surface functionalized SiNCs and alanine surface functionalized SiNCs.

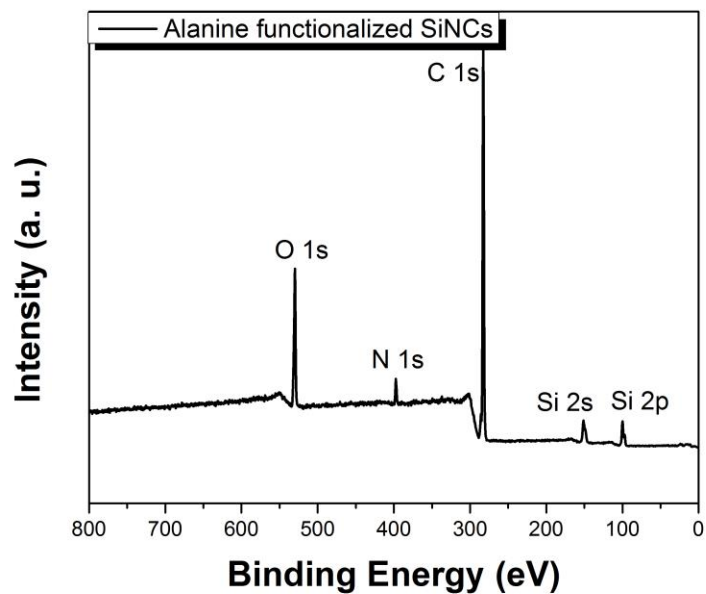
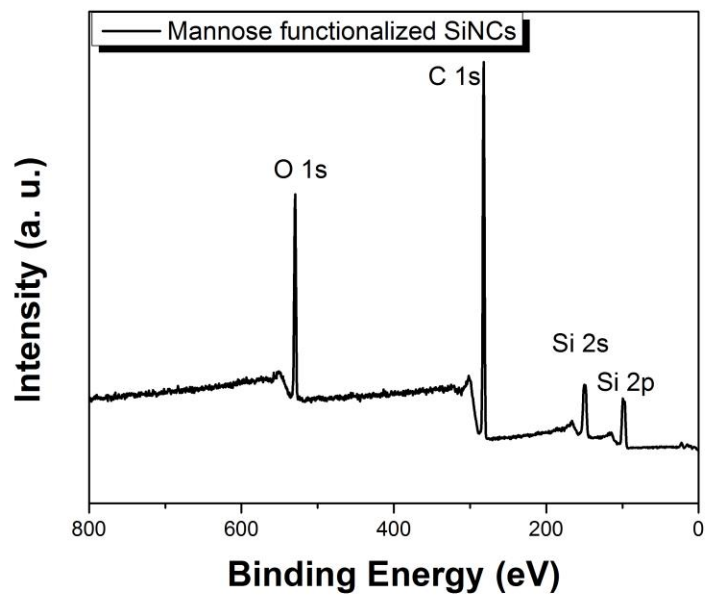


Fig. S6 FTIR spectra of pentanoic acid functionalized Si-NCs.

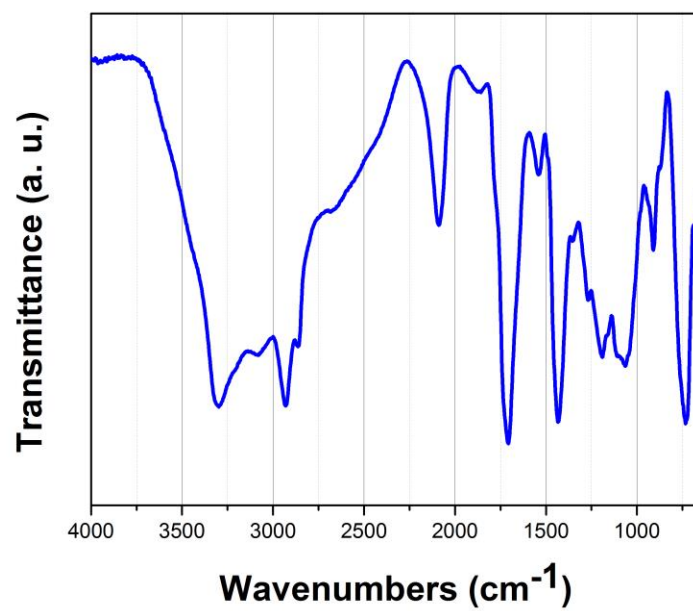


Fig. S7 TEM image of pentanoic acid functionalized SiNCs.

