Electronic Supplementary Material (ESI) for Nanoscale.

Interfacing Enzymes with Silicon Nanocrystals through the Thiol-Ene Reaction

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Supplementary Information

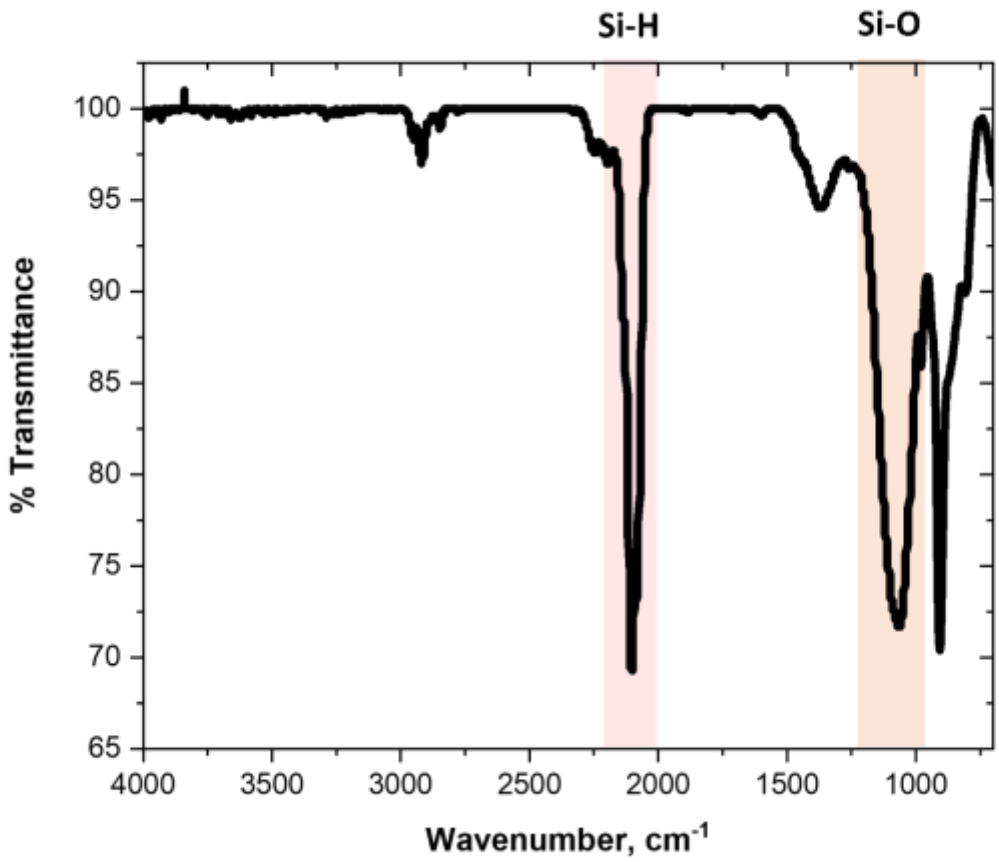

Figure S1. FTIR spectrum of hydride-terminated silicon nanocrystals (H-SiNCs).

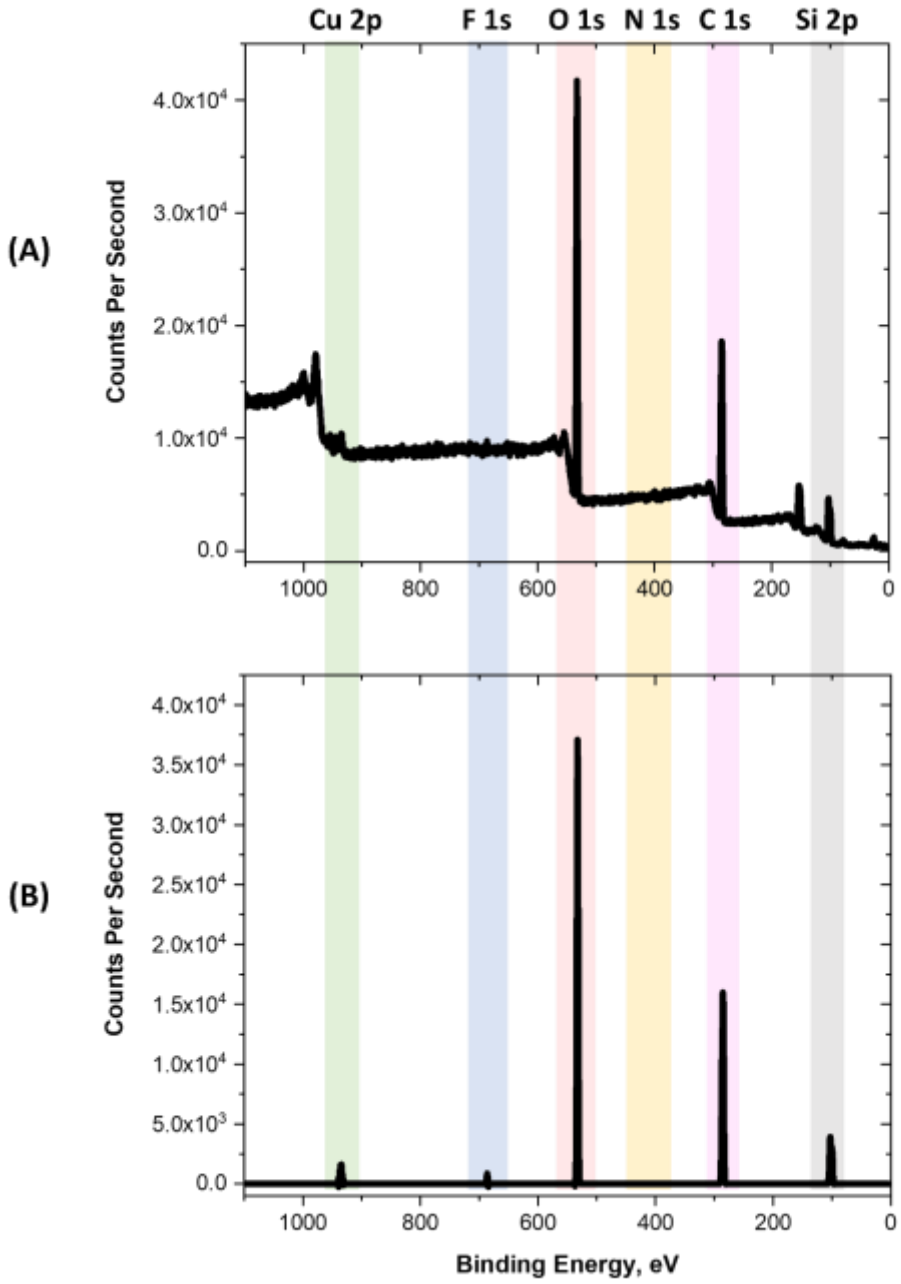

Figure S2. Survey XP spectra of *ene*-SiNCs (A) before and (B) after background correction. Notice that the material does not contain nitrogen (*i.e.,* absence of N 1s peak at *ca.* 400 eV), as expected.

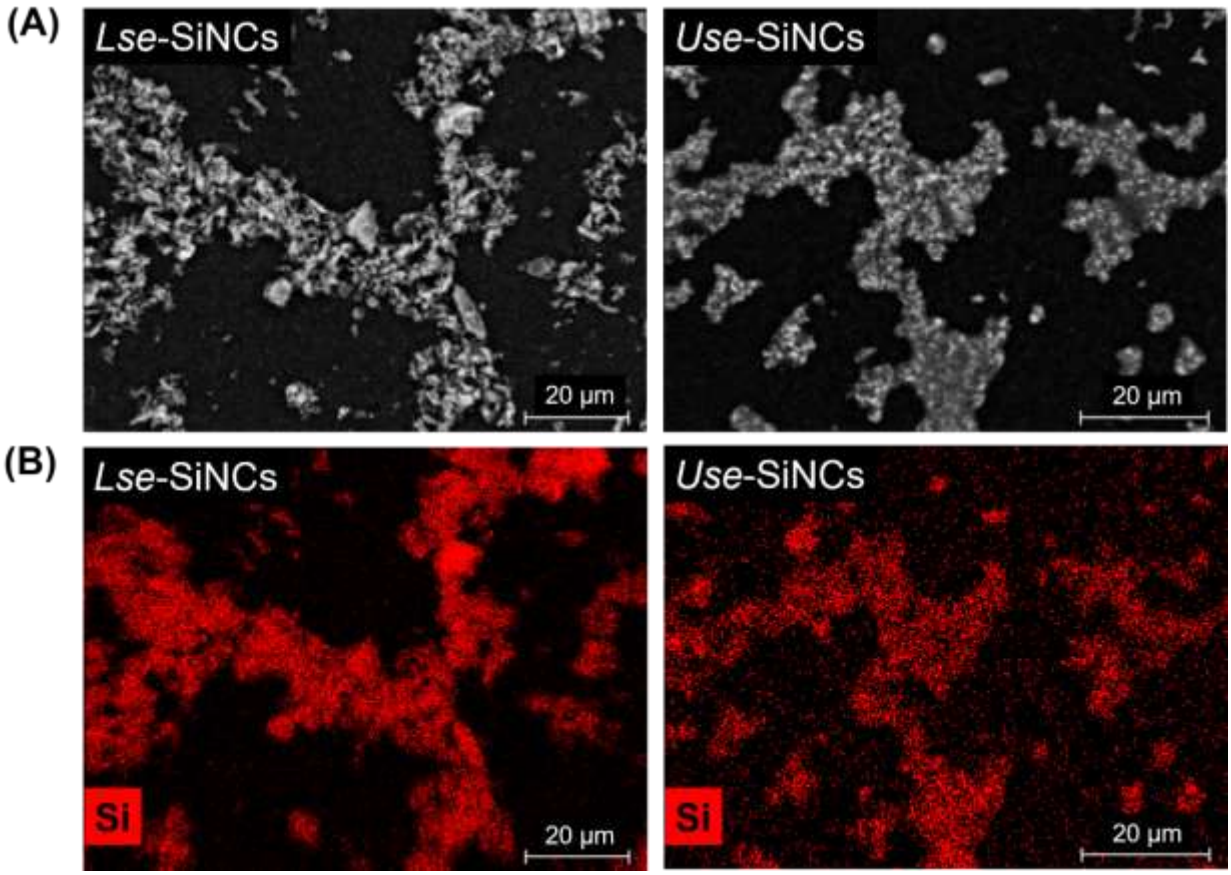

Figure S3. (A) BSE/SEM images and (B) EDX mapping of *Lse*-SiNCs and *Use*-SiNCs on a carbon tape. The brighter regions in the BSE/SEM images correspond to *enz*-SiNCs as confirmed by EDX mapping.

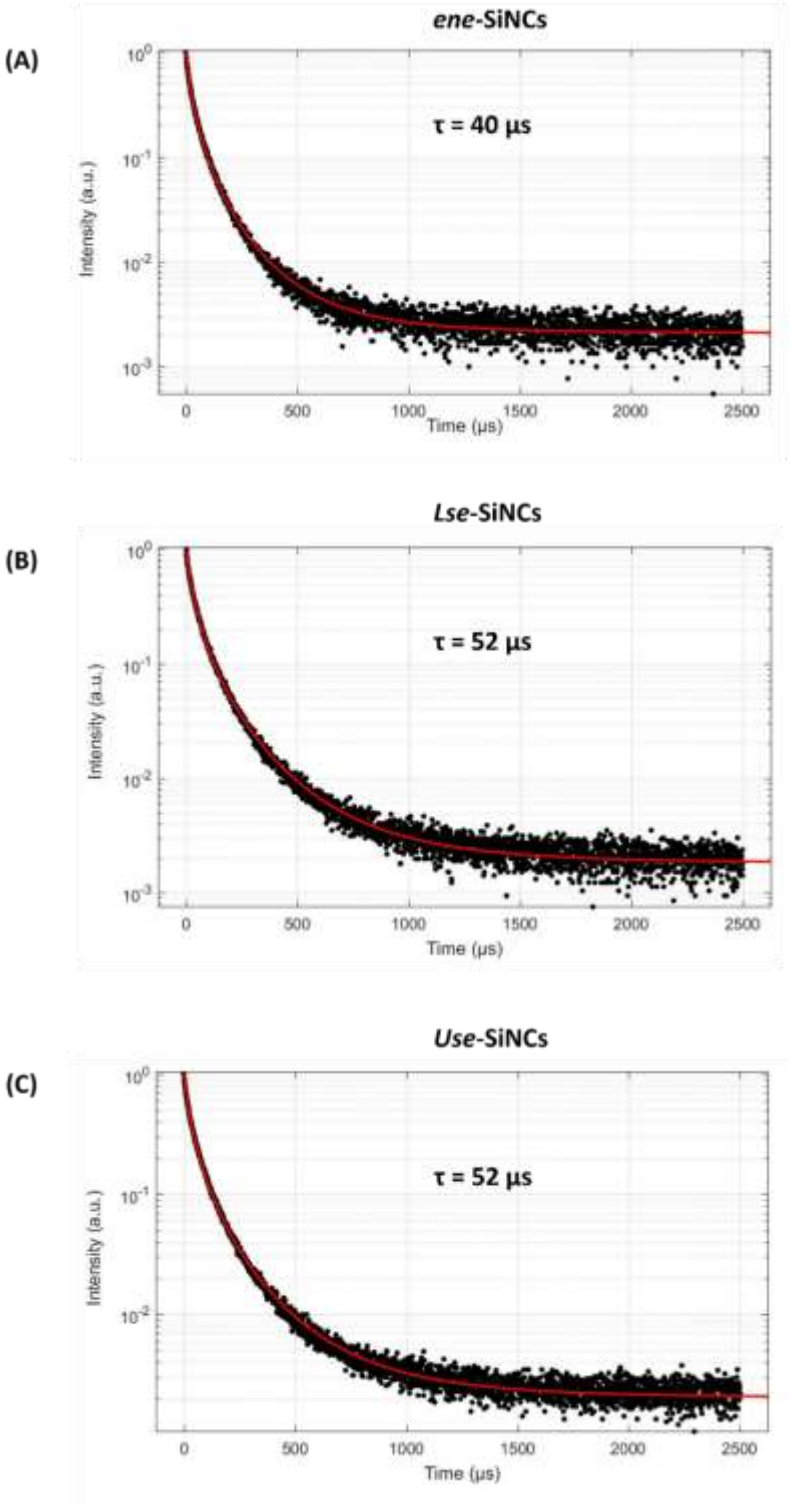

Figure S4. Photoluminescence decay plots of (A) *ene*-SiNCs, (B) *Lse*-SiNCs, and (C) *Use*-SiNCs. The lifetimes were calculated using lognormal fitting.

Table S1. Absolute quantum yields of *ene*-SiNCs, *Lse*-SiNCs, and *Use*-SiNCs (λ_{ex} = 365 nm).

SiNCs	Absolute Quantum Yield (%)
ene-SiNCs	39.1 ± 4.0
Lse-SiNCs	47.1 ± 3.5
Use-SiNCs	43.7 ± 1.0