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Facile synthesis of solid-state fluorescent organosilica nanoparticles with a photoluminescence quantum yield of 73.3% for fingerprint recognition and white-light-emitting diodes

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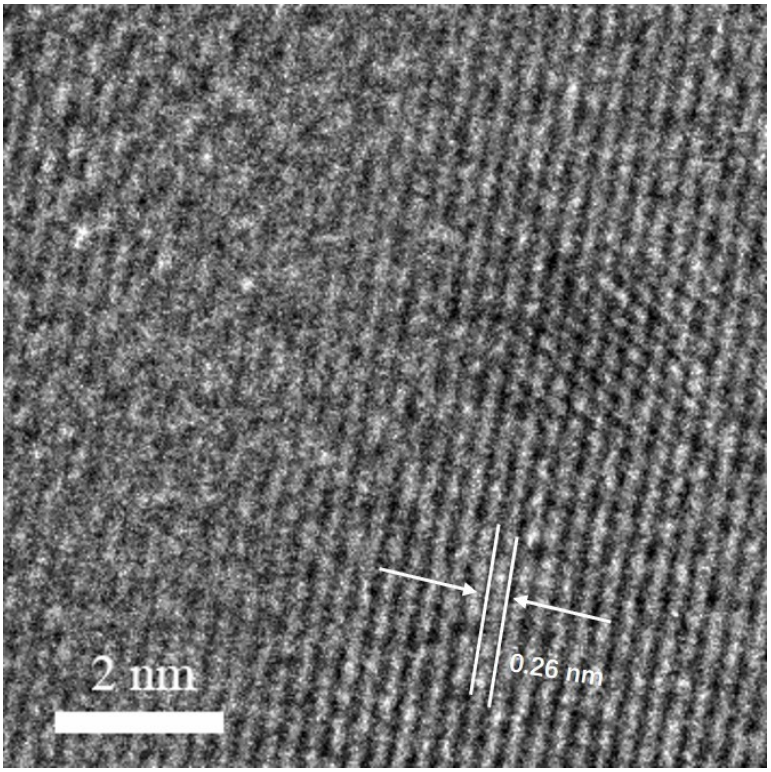

Figure S1. HRTEM image of residual ZnO crystals in polymer-like coated OSiNPs.

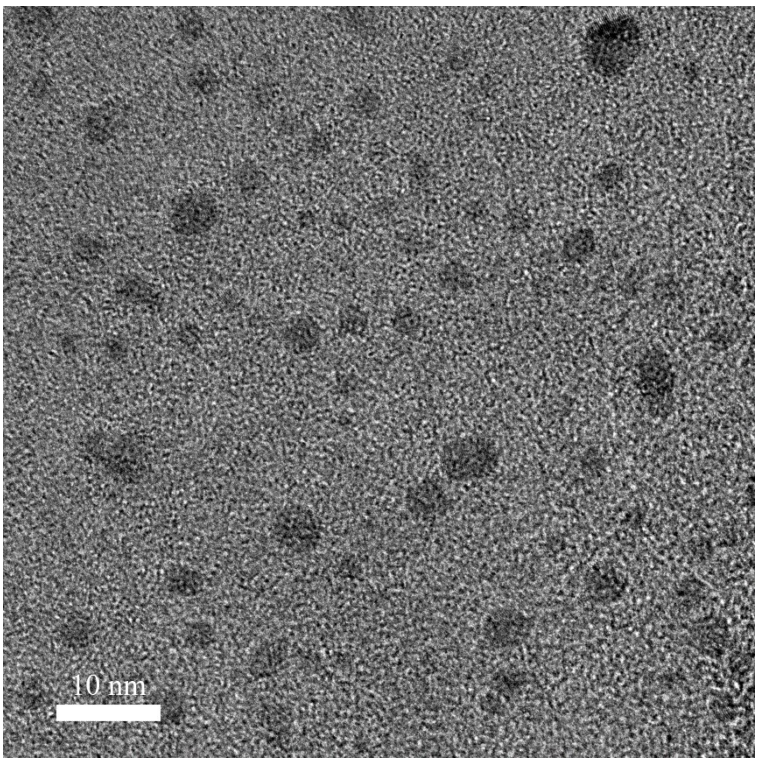

Figure S2. TEM images of OSiNPs synthesized without Zn^{2+}.

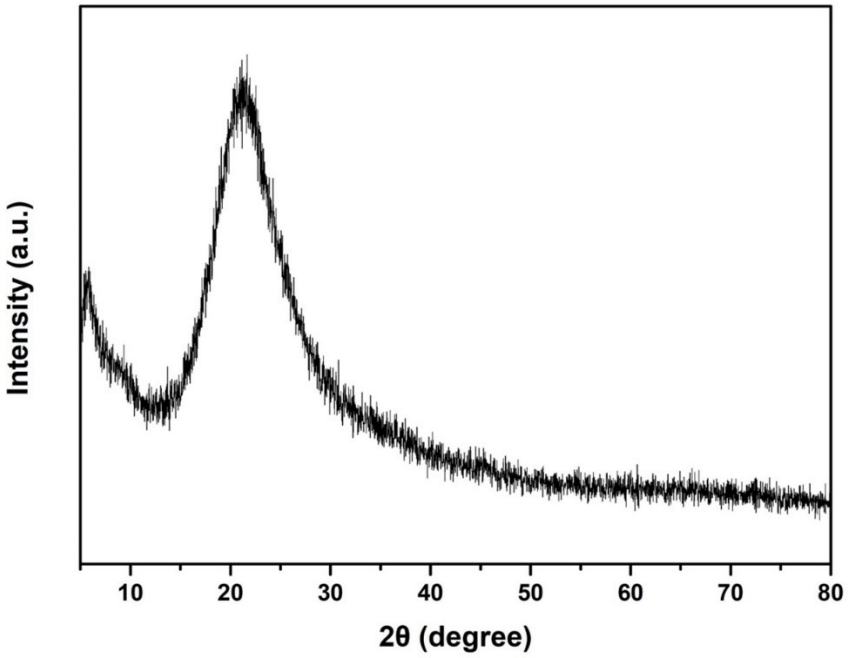

Figure S3. XRD pattern of OSiNPs synthesized without Zn^{2+}.

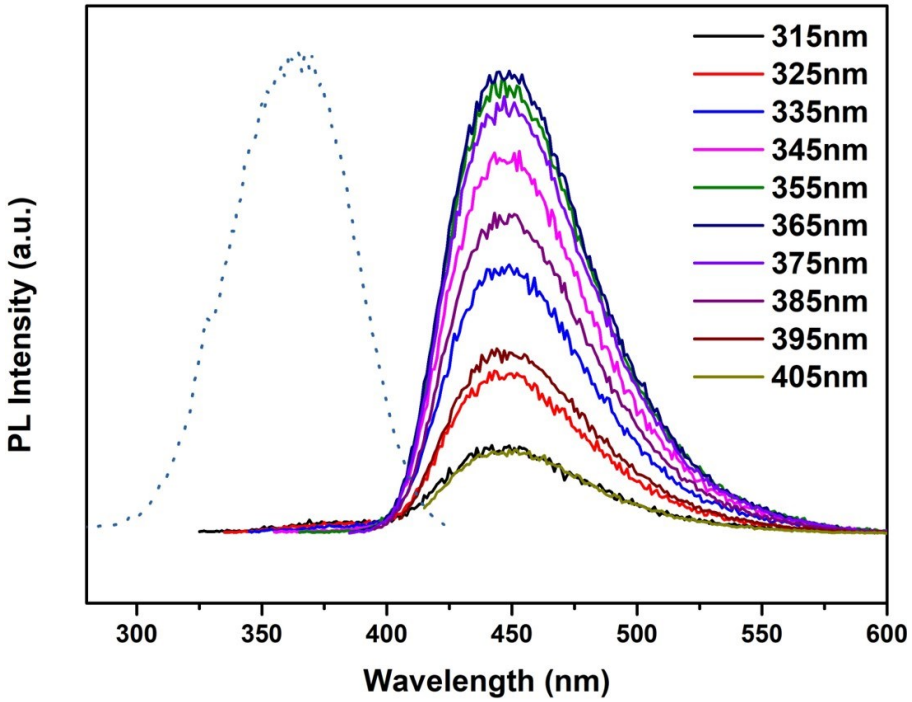

Figure S4. PL excitation (dotted line, λ_{em}=444 nm) and excitation-independent (solid line) spectra of polymer-like coated OSiNPs synthesized without Zn^{2+} dispersed in aqueous solution.

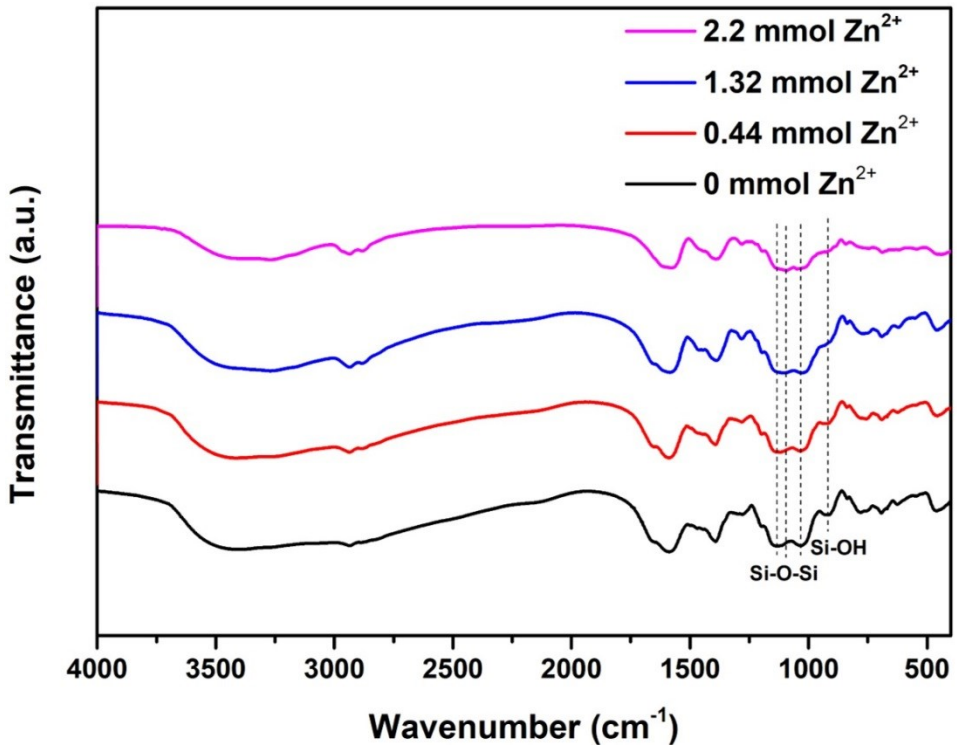

Figure S5. FTIR spectra of OSiNPs synthesized with different amount of Zn^{2+}.