

Supporting Information

NIR-Enhanced Multi-Mode Catalytic Activity over Pd Nanocrystals Sandwiched within Magnetic Polydopamine Hollow-spheres

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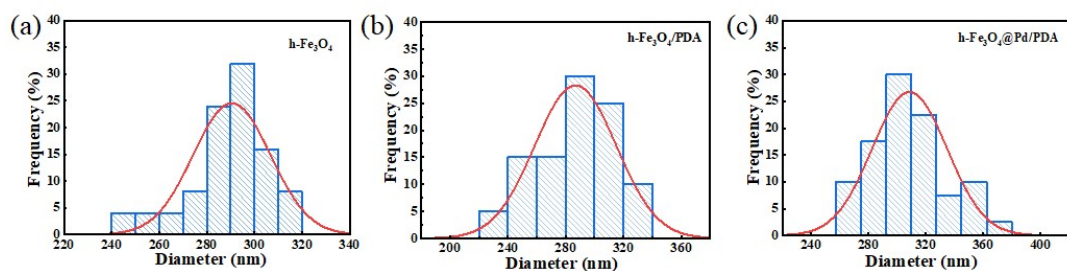


Fig. S1. Size distribution histogram of h-Fe₃O₄ (a), h-Fe₃O₄/PDA (b), h-Fe₃O₄@Pd/PDA hollow-spheres (c).

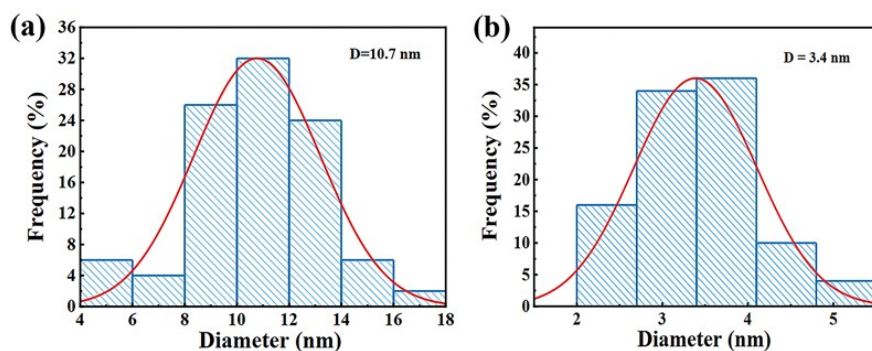


Fig. S2. The size of Pd nanocrystals with sodium citrate as a stabilizer (a), PVP as a stabilizer (b).

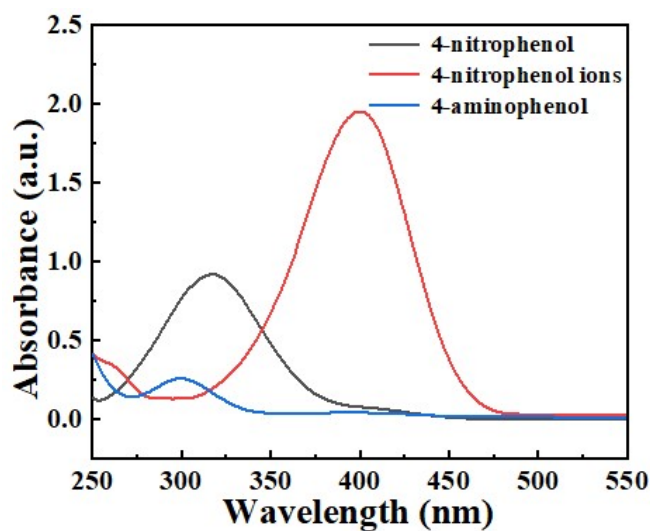


Fig. S3. UV-Vis absorption spectra of 4-nitrophenol, 4-aminophenol and 4-nitrophenol ions.

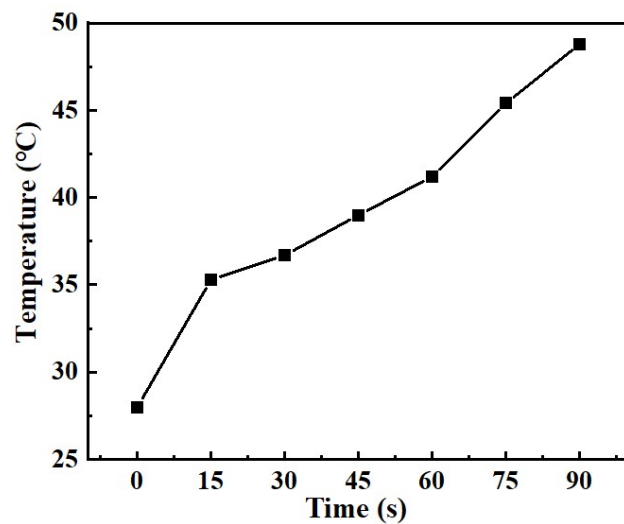


Fig. S4. Time-dependent temperature detected for 4-nitrophenol reaction solution under NIR laser (808 nm, 2.0 W cm^{-2}) irradiation.

Table. S1. The content of Pd metal determined by ICP-AES

Samples Element	h-Fe ₃ O ₄ @Pd/PDA with 4.4×10^{-5} mol H ₂ PdCl ₄	h-Fe ₃ O ₄ @Pd/PDA with 8.8×10^{-5} mol H ₂ PdCl ₄	h-Fe ₃ O ₄ @Pd/PDA with 13.2×10^{-5} mol H ₂ PdCl ₄
Pd	13.2 wt%	19.3 wt%	24.7 wt%