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Fe doped CeO_2 nanorods for enhanced peroxidase-like activity and their application towards glucose detection

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Table S1

The content of Fe values of pure CeO_2 and Fe^{3+}-doped CeO_2 nanorods catalysts.

Catalyst	Content of Fe%
CeO_2	0
3FeCe	2.91
6FeCe	5.92
9FeCe	8.61
12FeCe	11.77

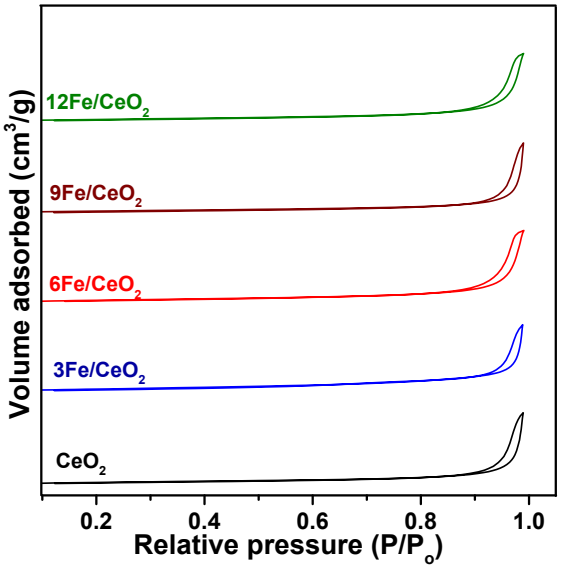

Fig. S1 N_2 adsorption-desorption isotherms of CeO_2, 3Fe/CeO_2, 6Fe/CeO_2, 9Fe/CeO_2, and 12Fe/CeO_2 NRs catalysts

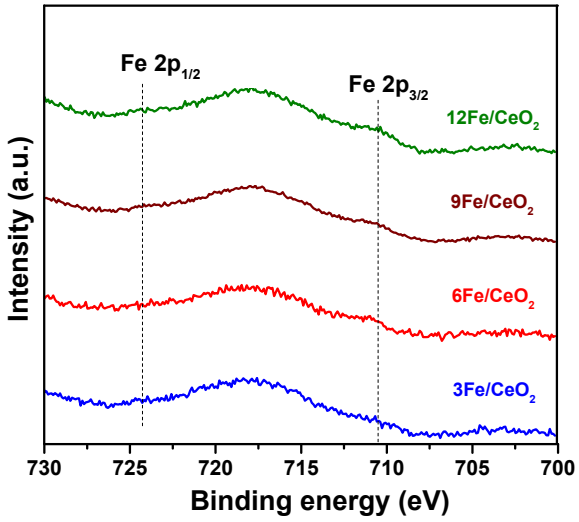

Fig. S2 Fe 2p XPS spectra of CeO_2, 3Fe/CeO_2, 6Fe/CeO_2, 9Fe/CeO_2, and 12Fe/CeO_2 NRs catalysts.

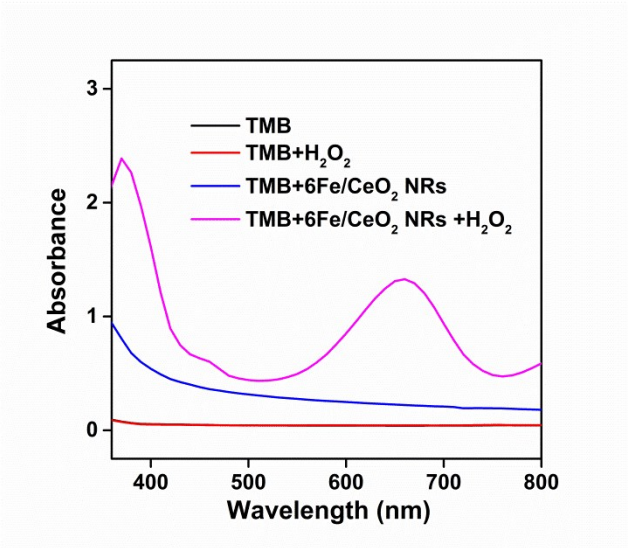

Fig. S3 The absorbance spectra of TMB in a different reaction systems after 10 min. incubation at 25 °C.

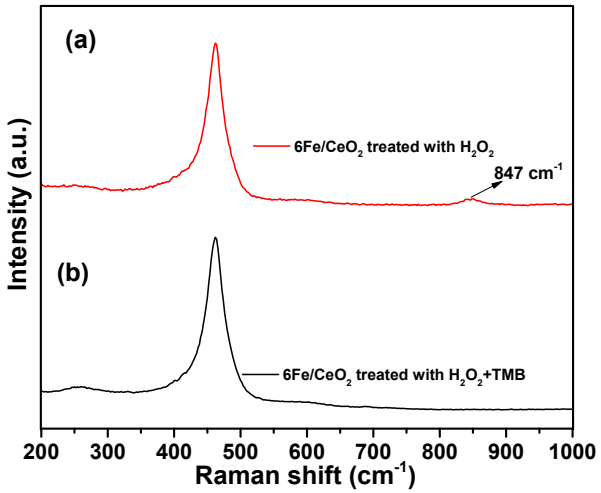

Fig. S4 Raman spectra of $6Fe/CeO_2$ NRs (a) H_2O_2 (b) H_2O_2+TMB treatment. Experimental section: 0.1 mL of H_2O_2 (25−28 wt %) was added into 1 g/L aqueous suspension of $6Fe/CeO_2$ NRs catalyst (50 mL) and then stirred vigorously for 1 h. After that, $6Fe/CeO_2$ NRs catalyst powders were collected by centrifugation and washed thoroughly with H_2O to obtain samples with H_2O_2 treatment.