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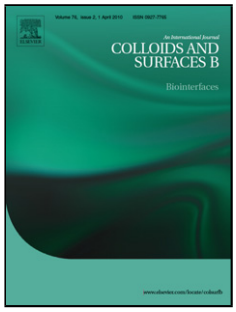

Title: ATP-mediated intrinsic peroxidase-like activity of Fe_3O_4-based nanozyme: One step detection of blood glucose at physiological pH

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Highlights

Peroxidase-like activity of Fe_3O_4 nanoparticles at physiological pH (pH 7.4) has been investigated.

Use of ATP enhances the peroxidase-like activity at physiological pH.

Use of ATP leads to better substrate affinity (lower K_m than HRP) of Fe_3O_4 nanoparticles.

New method to detect glucose from human blood serum at physiological pH is reported.