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An ionic liquid modified nano-vehicle to construct nano models of catalase to target mitochondria

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Table S1 IR data for the nanoparticles and compounds

	ν(C=O)	ν (C=N)	ν (Si-O)	δ (C-H) of pyridyl	Mn-N
SiO_2@IL-PEG		1659	1075	787	
Mndpa@SiO_2@IL-PEG		1633	1075	791	683
AdpaMn@SiO_2@IL-PEG	1570	1633	1075	792	684
AdpaMn	1570			794	685
IL	1705			781	

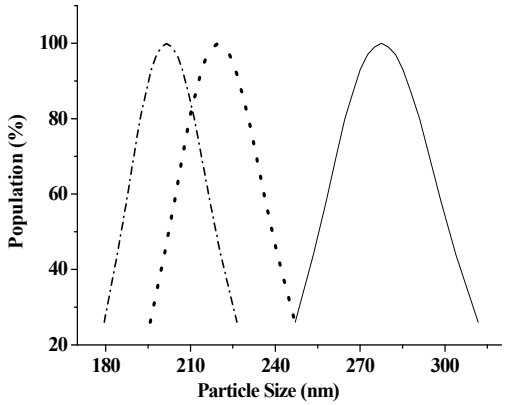

Fig.S1 Size distribution of SiO_2@NH_2 (solid line), SiO_2@IL (dot line) and SiO_2@IL-PEG (dash dot line) nanoparticles in water. The data are mean values for 3 experiments. Standard deviation< 0.07 .

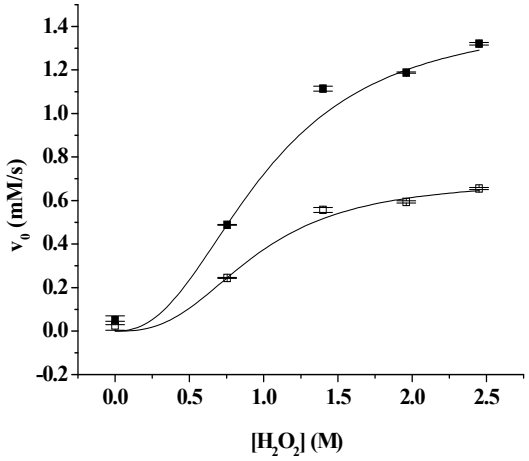

Fig. S2 V_0 vs concentration of H_2O_2 plots of two kinds of nanoparticles (0.5 mM) in Tris-HCl, 37°C. AdpaMn@SiO_2@IL-PEG (■), Mndpa@SiO_2@IL-PEG (□) .

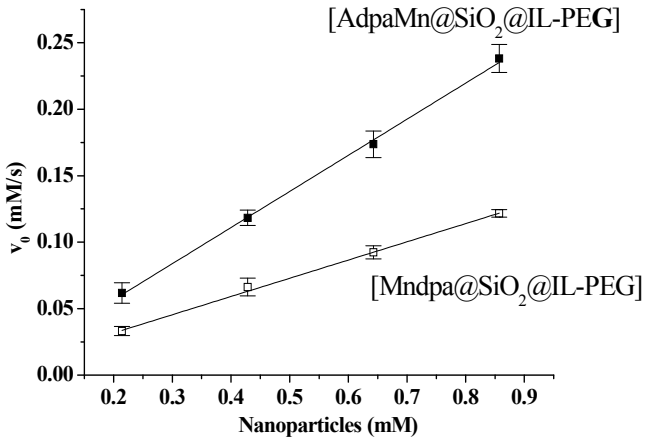

Fig. S3 Initial rate (V_0) of substrate consumption vs concentration of nanoparticles in Tris-HCl, 37 °C. AdpaMn@SiO_2@IL-PEG (■), Mndpa@SiO_2@IL-PEG (□).