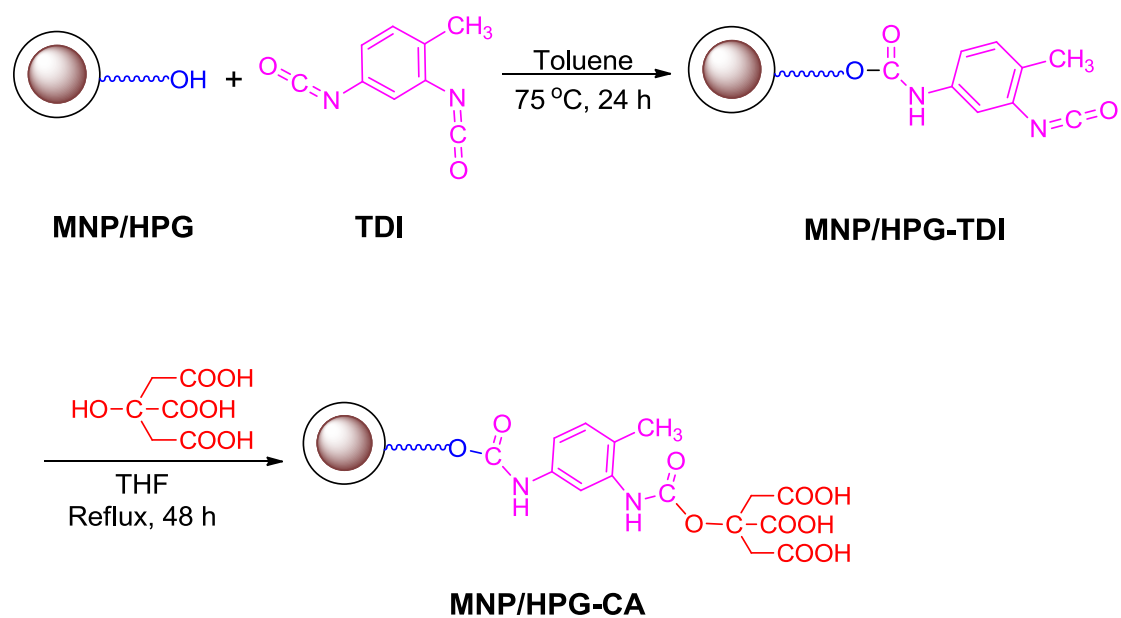


Xylanase Immobilized on Novel Multifunctional Hyperbranched Polyglycerol-Grafted Magnetic Nanoparticles: An Efficient and Robust Biocatalyst

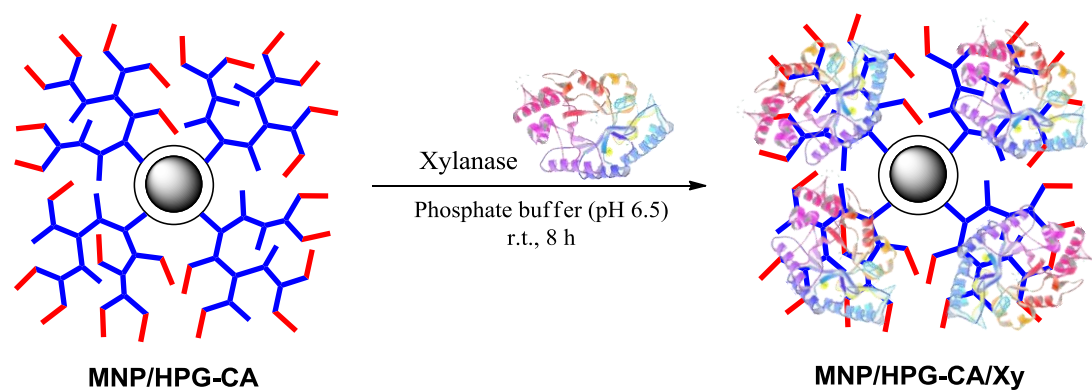
Amir Landarani-Isfahani,^{†} Asghar Taheri-Kafrani,^{‡*} Mina Amini,[†] Valiollah Mirkhani,[†] Majid Moghadam,[†] Asieh Soozanipour,[‡] and Amir Razmjou[‡]*

[†] Catalysis Division, Department of Chemistry, University of Isfahan, Isfahan 81746-73441, Iran

[‡] Department of Biotechnology, Faculty of Advanced Sciences and Technologies, University of Isfahan, Isfahan 81746-73441, Iran



Scheme S1. Synthesis of MNP/HPG-TDI and MNP/HPG-CA.



Scheme S2. Immobilization of xylanase onto MNP/HPG-CA.

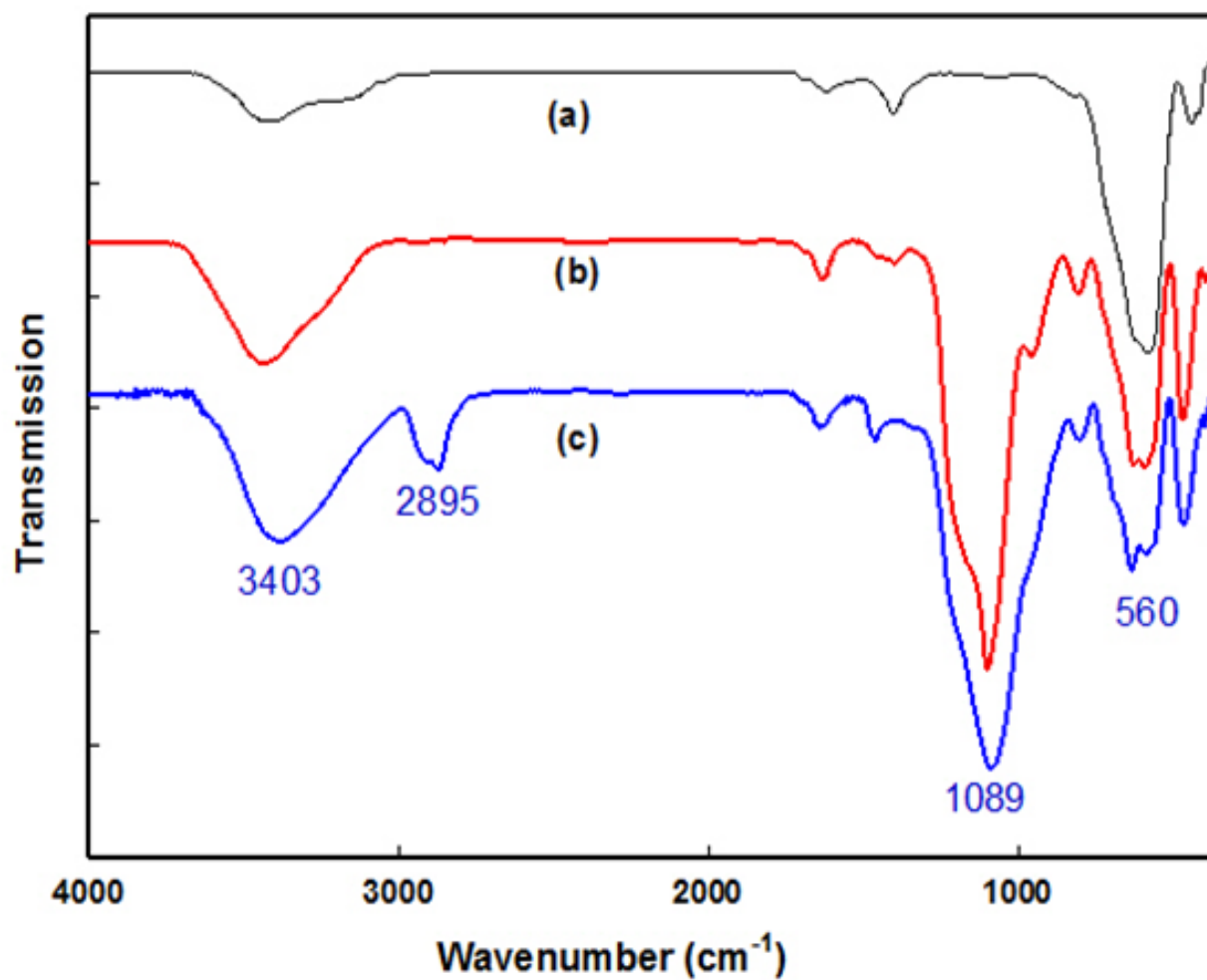


Figure S1. The FT-IR spectra of (a) Fe_3O_4 NPs, (b) MNP, and (c) MNP/HPG.

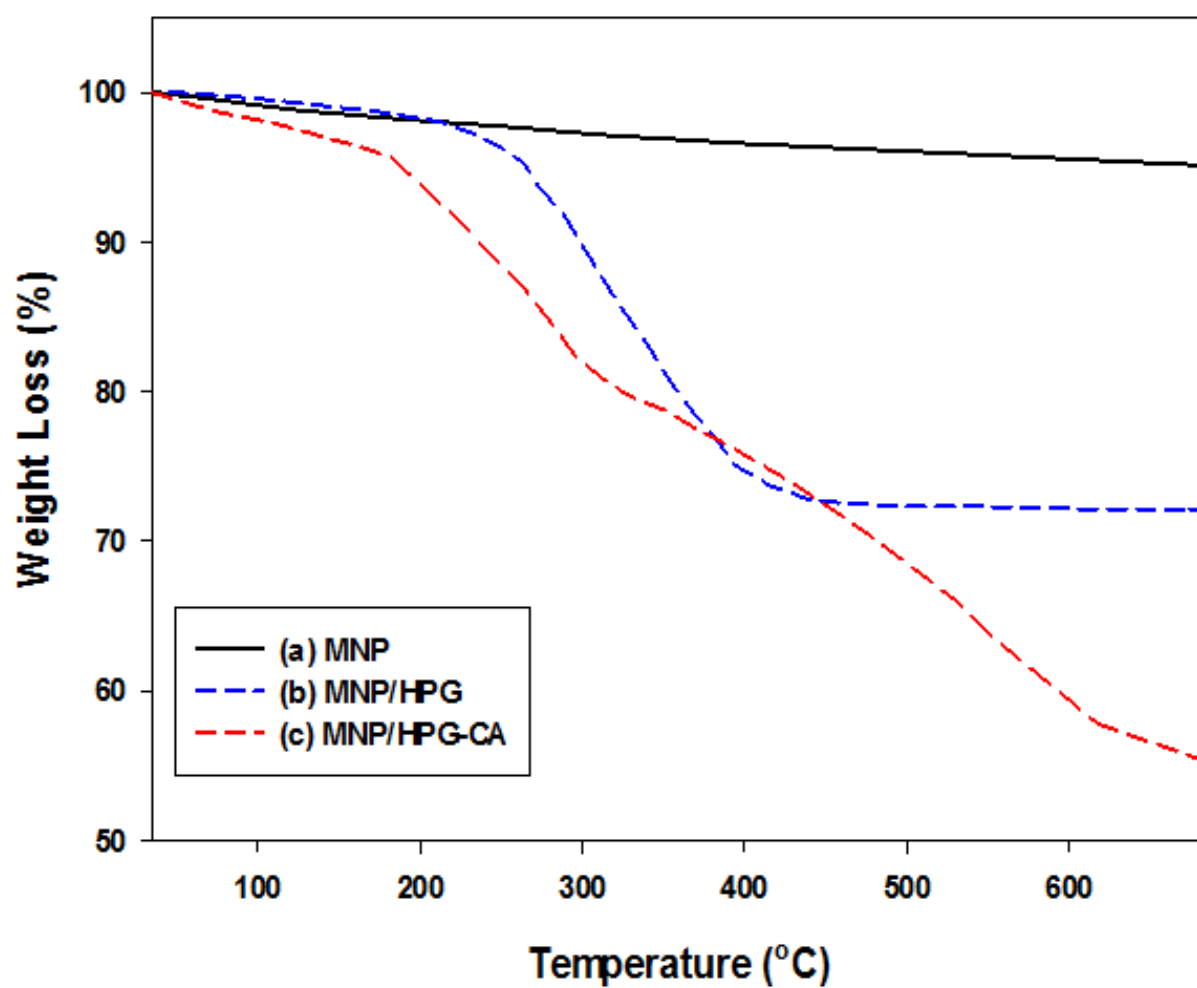


Figure S2. The TGA spectra of (a) MNP, (b) MNP/HPG, and (c) MNP/HPG-CA.

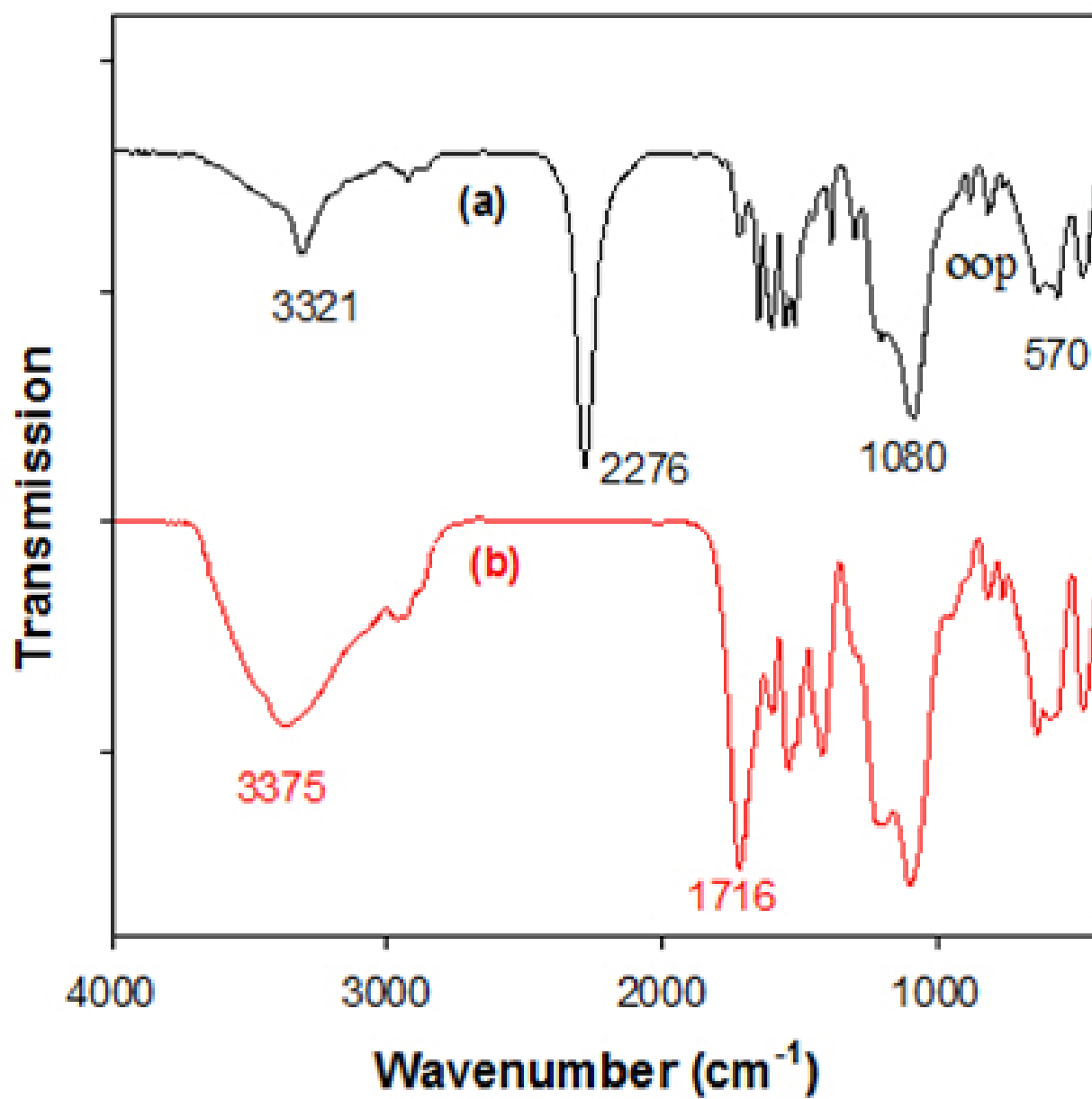


Figure S3. The FT-IR spectra of (a) MNP/HPG-TDI and (b) MNP/HPG-CA.

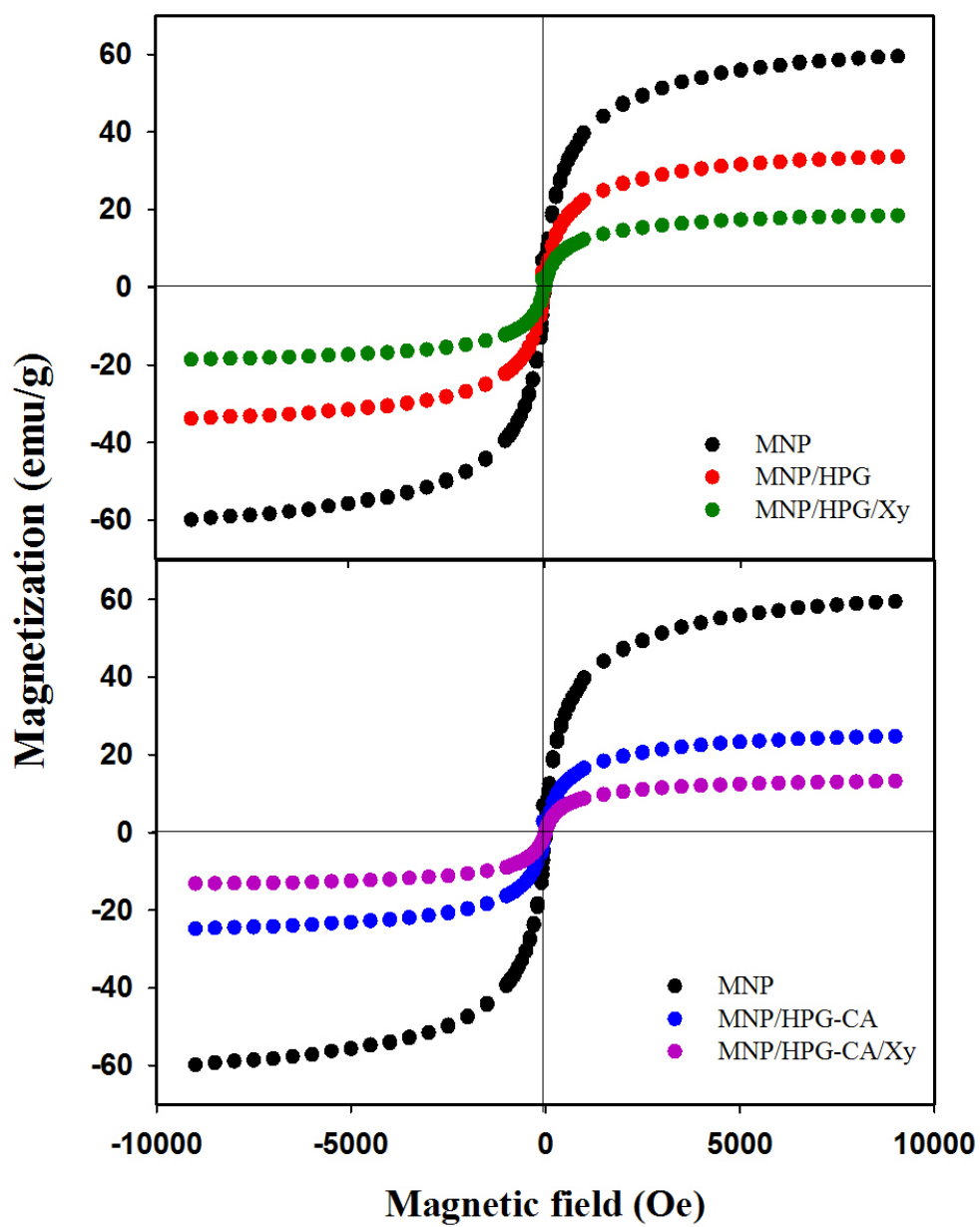


Figure S4. The magnetization curves at room temperature for MNP, MNP/HPG, MNP/HPG-CA, MNP/HPG/Xy and MNP/HPG-CA/Xy.