Electronic Supplementary Information (ESI)

A Facile and General Approach for the Preparation of Boronic Acid-

functionalized Magnetic Nanoparticles for the Selective Enrichment of

Glycoproteins

Xiaoting Xue, Rui Lu,* Min Liu, Yi Li, Jiansheng Li and Lianjun Wang*

Jiangsu Key Laboratory of Chemical Pollution Control and Resources Reuse, School

of Environmental and Biological Engineering, Nanjing University of Science &

Technology, Nanjing 210094, China

*Corresponding Authors:

Dr. Rui Lu, Email: rlu@njust.edu.cn;

Prof. Lian-Jun Wang, Email: wanglj@mail.njust.edu.cn.



Fig. S1 SEM images of Fe_3O_4 (a, d and c), $Fe3O_4@SiO_2$ (d, e and f) and $Fe_3O_4@SiO_2-BA$ (g, h and i) from three independent experiments.



Fig. S2 Mechanism of reaction between boric acid and the *cis*-diol moieties of glycans¹.



Figure S3 Adsorption of ovalbumin (0.1 mg/mL) on Fe₃O₄@SiO₂-BA at pH 8.5 with different time.

Reference:

1. J. P. Lorand, Edwards J. O. Polyol, J. Org. Chem., 1959, 6, 769-774.