ACS APPLIED MATERIALS & INTERFACES
Addition/Correction
www.acsami.org

Correction to Magnetic Mesoporous Organic–Inorganic $NiCo_2O_4$ Hybrid Nanomaterials for Electrochemical Immunosensors

Qunfang Li, Lingxing Zeng, Jinchao Wang, Dianping Tang,* Bingqian Liu, Guonan Chen, and Mingdeng Wei*

2011, *3*, 1366–1373, DOI: 10.1021/am200228k

Figure 3b and its description in page 1369 to 1370 are incorrect. The original Figure 3b displays the nitrogen adsorption–desorption isotherm of mesoporous silica nanomaterials. The correct nitrogen adsorption–desorption isotherm and pore size distribution of the synthesized $NiCo_2O_4$–Nf–Th–Au hybrid nanomaterials are given below, together with the revised description and explanation of Figure 3b. To further clarify the issue, we have added the characteristics of magnetic mesoporous $NiCo_2O_4$ nanostructures. The revised section on page 1369 should read: "Next, type IV adsorption–desorption isotherms and H1 hysteresis loops of the synthesized nanomaterials were investigated in the range of 0–1.0 Pa. The nitrogen adsorption–desorption isotherm of mesoporous $NiCo_2O_4$ exhibits a type IV isotherm (Figure 3b′), characteristic of mesoporous materials. The pore size distribution of desorption branch is depicted in the inset of Figure 3b′. It clearly shows a bimodal pore size distribution for mesoporous $NiCo_2O_4$, which is common in KIT-6 type mesoporous materials. The first peak at 3.3 nm can be attributed to the void space generated after the removal of silica wall, and is in good agreement with the pore size of mesoporous silica template KIT-6, whereas the larger pores at 11.2 nm can be attributed to incomplete replicate in the two sets of KIT-6 templates. The specific surface area and larger pore volume of mesoporous $NiCo_2O_4$ are 122 $m^2\ g^{-1}$ and 0.42 $cm^3\ g^{-1}$, respectively. The high surface area and relatively large pores favor the immobilization of biomolecules. After the formation of $NiCo_2O_4$–Nf–Th–Au nanomaterials; however, the first peak of mesoporous $NiCo_2O_4$ at 3.3 nm has almost disappeared, and the size of most pores at 11.2 nm has decreased in $NiCo_2O_4$–Nf–Th–Au (inset of Figure 3b). The changes might be attributed to the occupation of pores by the gold nanoparticles. The successful synthesis of mesoporous $NiCo_2O_4$–Nf–Th–Au favors the immobilization of biomolecules."

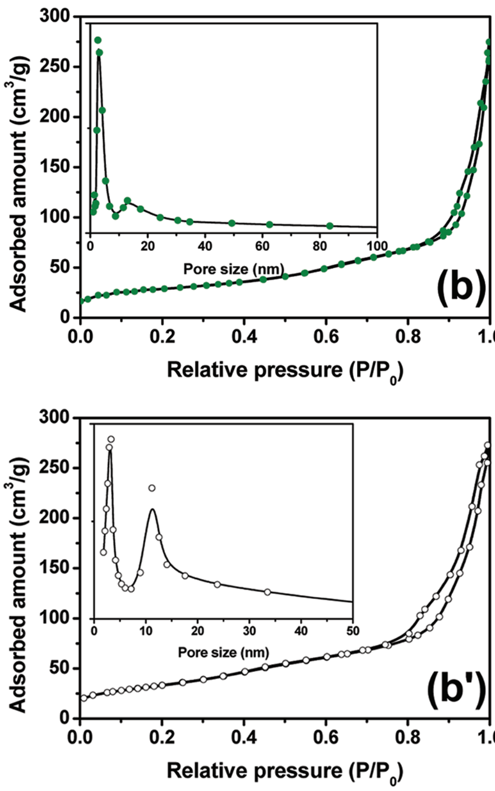

Figure 3. (b) Nitrogen adsorption–desorption isotherm of mesoporous $NiCo_2O_4$–Nf–Th–Au measured at 78 K (Inset: Pore size distribution). (b′) Nitrogen adsorption–desorption isotherm of mesoporous $NiCo_2O_4$ measured at 78 K (Inset: Pore size distribution)

Published: December 16, 2011