JACS
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY

ADDITION/CORRECTION

pubs.acs.org/JACS

Na-Doped p-Type ZnO Microwires [*Journal of the American Chemical Society* **2010**, *132*, 2498–2499 DOI: 10.1021/ja908521s]. Wei Liu,* Faxian Xiu, Ke Sun, Ya-Hong Xie, Kang L Wang,* Yong Wang, Jin Zou, Zheng Yang, and Jianlin Liu

Upon our recent experiments, we realized that using EDAX to evaluate the low concentration of Na in ZnO is not reliable due to the overlap between Na K (1.04 keV) and Zn L (1.01 keV) in the EDAX spectra. Therefore, the EDAX mapping of Na shown in Figure 1 and Supporting Information Figure S3b–d should consist of the signals of Na and Zn due to the overlap. Therefore, the Na concentration (∼1%) specified in paragraph 5 and the caption of Figure S3 is not accurate. Herein, we withdraw the value (∼1%) of Na concentration reported in this paper. The actual value of the Na in ZnO should be less than 1%.

Although the EDAX spectra cannot directly characterize the distribution and concentration of Na in ZnO, the doping of the Na is proved by other data, which are shown in the paper and Supporting Information. The transfer characteristic curve (shown in Figure 3) of this doped ZnO FET device shows *p*-type behavior. The elements involved in the material synthesis are Zn, O, Na, Cl, C, and H. To date, the known *p*-type dopants, which can dope ZnO in *p*-type, include Li, Na, K, N, P, As, Cu, and Ag.[1] Therefore, we believe that Na is the sole element that makes the ZnO with *p*-type. The PL spectra (Figure 2 and Figure S6) also show obvious difference between the doped and undoped ZnO samples. These suggest that Na doping has been scussfully achieved.

Page 2498. Figure 1, caption (d,e) should be changed to "Distribution maps of (d) Zn and (e) Na/Zn obtained using EDX."

Supporting Information. Figure S3 should be change to the following:

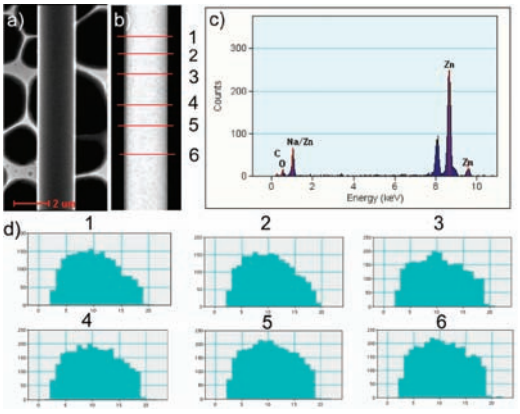

Figure S3. (a) A typical TEM image of an individual Na doped ZnO microwire. (b) EDX line scans. (c) EDX spectra to show the composition. (d) The distribution of the Na/Zn in the wire corresponding to Figure S3b.

REFERENCES

(1) Ozgur, U.; Alivov, Y. I.; Liu, C.; Teke, A.; Reshchikov, M. A.; Dogan, S.; Avrutin, V.; Cho, S. J.; Morkoc, H. *J. Appl. Phys.* **2005**, *98*, 103.

DOI: 10.1021/ja204565w
Published on Web 06/16/2011