Molecular Rectification and Conductance Switching in Carbon-Based Molecular Junctions by Structural Rearrangement Accompanying Electron Injection [J. Am. Chem. Soc. 2003, 125, 107...

ARTICLE *in* JOURNAL OF THE AMERICAN CHEMICAL SOCIETY · APRIL 2004

Impact Factor: 12.11 · DOI: 10.1021/ja048667z

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ADDITIONS AND CORRECTIONS

Molecular Rectification and Conductance Switching in Carbon-Based Molecular Junctions by Structural Rearrangement Accompanying Electron Injection [*J. Am. Chem. Soc.* **2003**, *125*, 10748−10758]. Richard McCreery,* Jon Dieringer, Ali Osman Solak, Brian Snyder, Aletha M. Nowak, William R. McGovern, and Stacy DuVall

Page 10751. After the paper was published, we discovered that residual gases in the electron beam evaporator were causing titanium oxide to form during titanium deposition. A lower back pressure and faster Ti deposition rate (4×10^{-7} Torr and 0.1 nm/s) resulted in a significant change in the appearance of Figure 3, as shown below. XPS depth profiling showed the formation of Ti(II) and Ti(III) oxides using the previous conditions. These results imply that both a Ti/TiO_x layer and the NAB/NAB^- layer determine the electronic behavior of the junction.

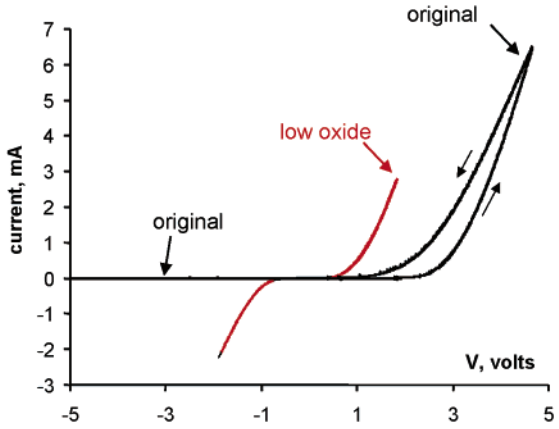

Figure 3.

Current/voltage curves for PPF/NAB/Ti/Au junctions with Ti deposited under the original conditions (8×10^{-6} Torr and 0.03 nm/s) and under "low oxide" conditions (4×10^{-7} Torr and 0.1 nm/s). The scan rate was 1 V/s in both cases.

JA048667Z

10.1021/ja048667z
Published on Web 04/27/2004