## **Electronic Supplementary Information**

## Optical modulation of ZnO microwire optical resonators with parallelogram cross section

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**Figure S1.** (a) SEM image of ZnO nanowire with hexagonal cross section obtained using source material without  $Sb_2O_3$ . (b) XPS spectrum of several ZnO microwires with parallelogram cross section dispersed on Si wafer. A small Sb  $3d^{3/2}$  peak can be found. The calculated mole ratio Sb:ZnO was about 0.27%, which was difficult for EDS to determine. (c) Raman backscattering spectra of single ZnO:Sb and pure ZnO dispersed on Si wafer, Silicon background Raman spectrum was also detected. An additional Sb related peak at about 717 cm<sup>-1</sup> was found. The similar results also obtained in other Sb doped ZnO products.<sup>1</sup> The results indicate that small amount Sb elements have been introduced into the ZnO products.

## Reference

1. Y. Yang, J. J. Qi, Q. L. Liao, Y. Zhang, L. D. Tang, Z. Qin, J. Phys. Chem. C 2008, 112, 17916.