

Supplementary Information (SI) for Nanoscale Advances

Supporting Information

Improved electrical and thermoelectric properties of electrodeposited $\text{Bi}_{1-x}\text{Sb}_x$ nanowire networks by thermal annealing

Luc Piraux,^{*a} Nicolas Marchal,^a Pascal Van Velthem,^a Tristan da Câmara Santa Clara Gomes,^a Flavio Abreu Araujo,^a Etienne Ferain,^{ab} Jean-Paul Issi,^a and Vlad-Andrei Antohe^{*ac}

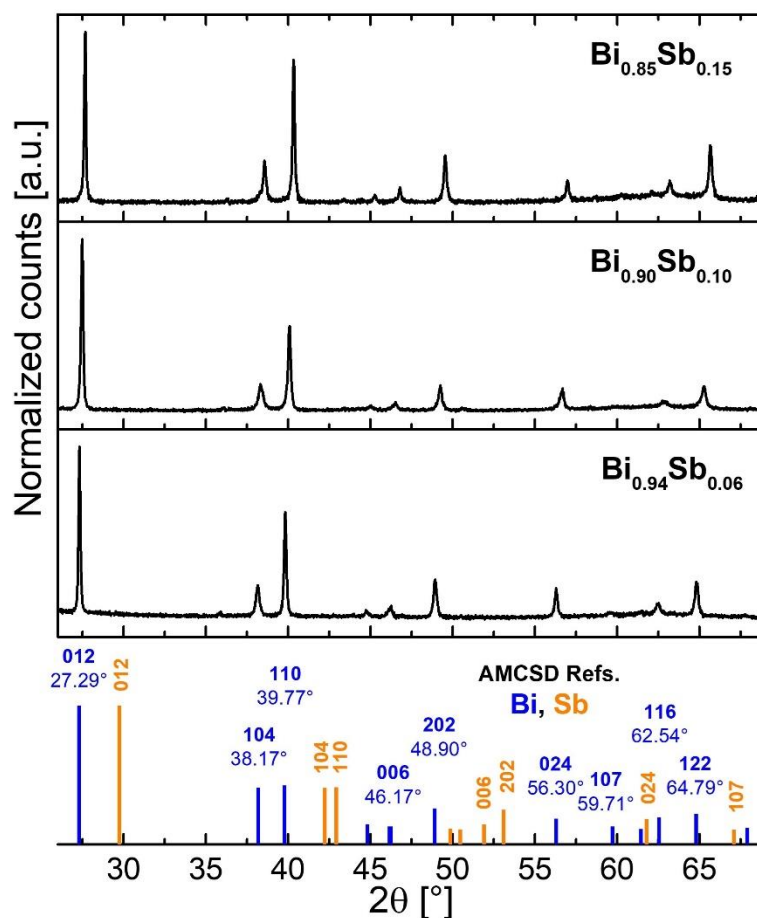


Fig. S1 X-ray diffraction (XRD) patterns acquired onto the as-deposited (not annealed) $\text{Bi}_{1-x}\text{Sb}_x$ (with 6%, 10% and 15% atomic percentage of Sb, respectively) crossed nanowires (CNWs) embedded in polycarbonate (PC) templates. The data are normalized and the amorphous background given by the PC template was removed from the XRD patterns. Reference powder diffraction data of Bi (AMCSD 0012839) and Sb (AMCSD 0009736) are shown at the bottom in blue and orange, respectively. AMCSD stands for ‘American Mineralogist Crystal Structure Database’.

^aInstitute of Condensed Matter and Nanosciences (ICMN), Université catholique de Louvain (UCLouvain), B-1348 Louvain-la-Neuve, Belgium. E-mail: luc.piraux@uclouvain.be

^bit4ip s.a., Avenue Jean-Etienne Lenoir 1, B-1348 Louvain-la-Neuve, Belgium.

^cR&D Center for Materials and Electronic & Optoelectronic Devices (MDEO), Faculty of Physics, University of Bucharest, 077125 Măgurele, Ilfov, Romania. E-mail: vlad.antohe@fizica.unibuc.ro