Accepted Manuscript

Bismuth–Indium–Sodium Two-Dimensional Compounds on Si(111) Surface

 $\mbox{N.V. Denisov}$, $\mbox{ A.A. Alekseev}$, $\mbox{ O.A. Utas}$, $\mbox{ S.G. Azatyan}$, $\mbox{ A.V. Zotov}$, $\mbox{ A.A. Saranin}$

PII: S0039-6028(17)30638-6 DOI: 10.1016/j.susc.2017.08.020

Reference: SUSC 21084

To appear in: Surface Science

Received date: 27 June 2017 Revised date: 13 August 2017 Accepted date: 13 August 2017



Please cite this article as: N.V. Denisov, A.A. Alekseev, O.A. Utas, S.G. Azatyan, A.V. Zotov, A.A. Saranin, Bismuth–Indium–Sodium Two-Dimensional Compounds on Si(111) Surface, *Surface Science* (2017), doi: 10.1016/j.susc.2017.08.020

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- RT deposition of Na onto the Si(111)2×2-(Bi,In) surface "conceals" defects and domain boundaries.
- RT temperature deposition of Na onto the Si(111) $\sqrt{7} \times \sqrt{7}$ -(Bi,In) surface results in formation of a new $\sqrt{7} \times \sqrt{7}$ -(Bi,In,Na) structure.
- The $\sqrt{7} \times \sqrt{7}$ -(Bi,In,Na) is thermostable up to ~ 360 °C and can be formed by codeposition of the metals onto the Si(111)7×7 followed by annealing.
- Atomic model of the $\sqrt{7} \times \sqrt{7}$ -(Bi,In,Na) structure was proposed.

Download English Version:

https://daneshyari.com/en/article/7844953

Download Persian Version:

https://daneshyari.com/article/7844953

Daneshyari.com