

# Accepted Manuscript

Coexistence of superconductivity and weak ferromagnetism at the interface of twisting bicrystals of 3D topological insulator  $\text{Bi}_{1-x}\text{Sb}_x$  ( $0.07 < x < 0.2$ )

F.M. Muntyanu, A. Gilewski, A.J. Zaleski, V. Chistol, K. Rogacki

PII: S0375-9601(17)30397-3  
DOI: <http://dx.doi.org/10.1016/j.physleta.2017.04.021>  
Reference: PLA 24461

To appear in: *Physics Letters A*

Received date: 12 March 2017  
Revised date: 13 April 2017  
Accepted date: 14 April 2017

Please cite this article in press as: F.M. Muntyanu et al., Coexistence of superconductivity and weak ferromagnetism at the interface of twisting bicrystals of 3D topological insulator  $\text{Bi}_{1-x}\text{Sb}_x$  ( $0.07 < x < 0.2$ ), *Phys. Lett. A* (2017), <http://dx.doi.org/10.1016/j.physleta.2017.04.021>

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.



## Highlights

- We found that the manifestation of superconductivity and weak ferromagnetism depends on bicrystal disorientation angle.
- The small angle interfaces exhibit two superconducting transitions at  $T_c$  (3.7–4.6) K and  $T_c$  (8.3–21) K.
- The large angle interfaces show that weak ferromagnetism and superconductivity coexist in a single phase.

Download English Version:

<https://daneshyari.com/en/article/5496834>

Download Persian Version:

<https://daneshyari.com/article/5496834>

[Daneshyari.com](https://daneshyari.com)