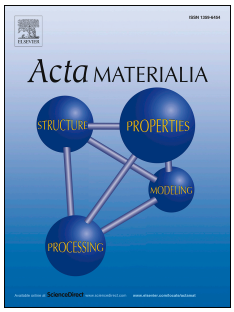
Accepted Manuscript



Patterned nano-domains in PMN-PT single crystals

Wei-Yi Chang, Ching-Chang Chung, Zhongyuan Yuan, Chih-Hao Chang, Jian Tian, Dwight Viehland, Jie-Fang Li, Jacob L. Jones, Xiaoning Jiang

PII: S1359-6454(17)30866-2

DOI: 10.1016/j.actamat.2017.10.016

Reference: AM 14115

To appear in: *Acta Materialia*

Received Date: 26 June 2017

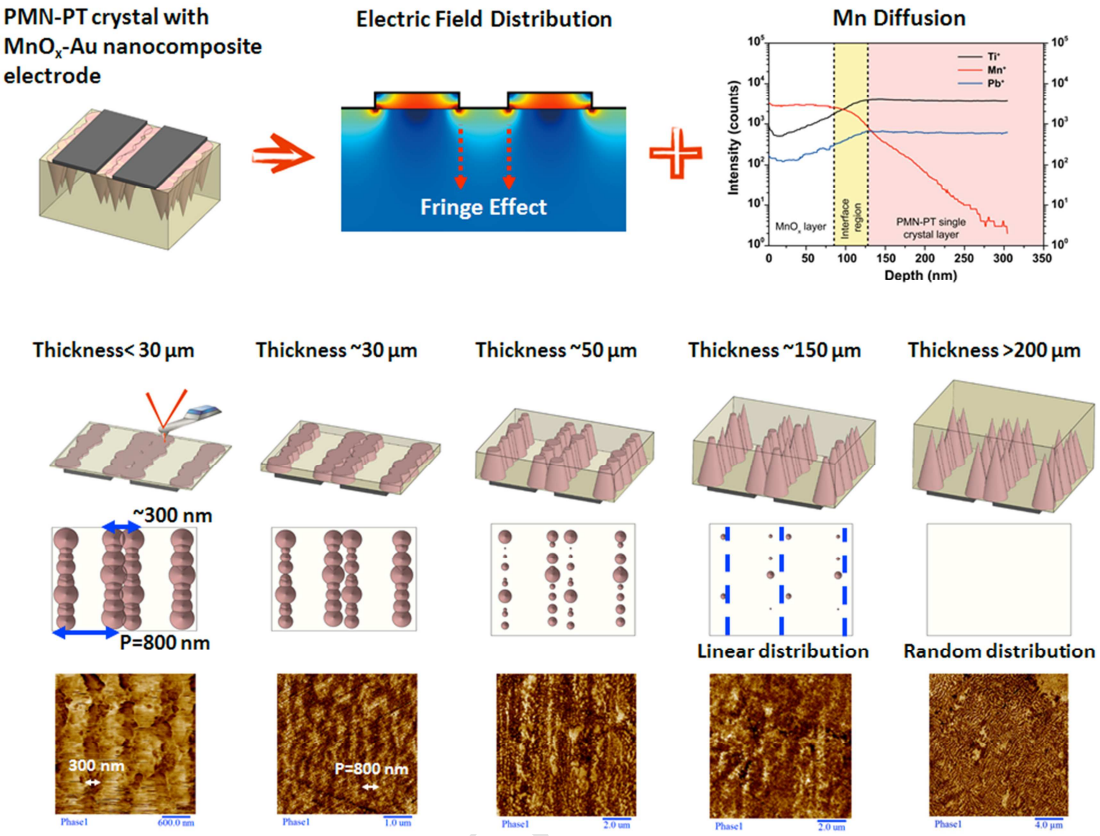
Revised Date: 5 October 2017

Accepted Date: 6 October 2017

Please cite this article as: W.-Y. Chang, C.-C. Chung, Z. Yuan, C.-H. Chang, J. Tian, D. Viehland, J.-F. Li, J.L. Jones, X. Jiang, Patterned nano-domains in PMN-PT single crystals, *Acta Materialia* (2017), doi: 10.1016/j.actamat.2017.10.016.

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.

Graphical abstract



The localized high electric field induced by fringe effect and the nanocomposite electrode can lead to enhanced nucleation of new domains, and the patterned Mn diffusion may also contribute to an enhancement in domain wall mobility. The domain distribution was observed using a piezoresponse force microscopy (PFM) for PMN-PT single crystal samples with different thicknesses.

ACCEPTED

Download English Version:

https://daneshyari.com/en/article/7877031

Download Persian Version:

https://daneshyari.com/article/7877031

Daneshyari.com