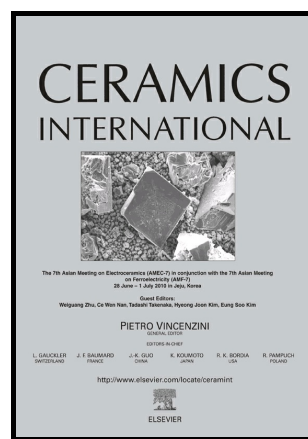


Anisotropic field induced phase transitions and negative electrocaloric effect in rhombohedral Mn doped $\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3\text{-Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-PbTiO}_3$ single crystals

Yaming Zhou, Qiang Li, Fangping Zhuo, Qingfeng Yan, Yiling Zhang, Xiangcheng Chu



www.elsevier.com/locate/ceri

PII: S0272-8842(18)30406-1
DOI: <https://doi.org/10.1016/j.ceramint.2018.02.108>
Reference: CERI17510

To appear in: *Ceramics International*

Received date: 3 January 2018
Revised date: 2 February 2018
Accepted date: 12 February 2018

Cite this article as: Yaming Zhou, Qiang Li, Fangping Zhuo, Qingfeng Yan, Yiling Zhang and Xiangcheng Chu, Anisotropic field induced phase transitions and negative electrocaloric effect in rhombohedral Mn doped $\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3\text{-Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-PbTiO}_3$ single crystals, *Ceramics International*, <https://doi.org/10.1016/j.ceramint.2018.02.108>

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 galley proof before it is published in its final citable 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.

Anisotropic field induced phase transitions and negative electrocaloric effect in rhombohedral Mn doped $\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3\text{-Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-PbTiO}_3$ single crystals

Yaming Zhou^a, Qiang Li^{a,*}, Fangping Zhuo^a, Qingfeng Yan^a, Yiling Zhang^b,
Xiangcheng Chu^b

^aDepartment of Chemistry, Tsinghua University, Beijing 100084, China

^bState Key Laboratory of New Ceramics and Fine Processing, Tsinghua University, Beijing 100084, China

*Correspondence: Tel.: +86 10 62797871; fax: +86 10 62771149.
qiangli@mail.tsinghua.edu.cn

Abstract

The electrocaloric effect (ECE) of Mn doped $\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3\text{-Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-PbTiO}_3$ (PIN-PMN-PT:Mn) single crystals with **particular** emphasis on the **impact** of crystallographic orientations and phase transitions were investigated systematically. Orientation-dependent phase transitions have been demonstrated by the dielectric and strain **behaviors**.

Download English Version:

<https://daneshyari.com/en/article/7887532>

Download Persian Version:

<https://daneshyari.com/article/7887532>

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