

Dear Editor,

Thank you for the review of the paper:

Ref: Article ID: 207

Title: Role of swift heavy ion irradiation on the structural and magnetic properties of $\text{Ti}_{0.95}\text{Co}_{0.05}\text{O}_{2-\delta}$ epitaxial thin films

Authors: P. Mohanty, C. Rath, C. J. Sheppard and A. R. E. Prinsloo

The reviewer's suggestions were valuable and we have made all changes in the manuscript in response to the comments raised.

In brief, all grammatical corrections were incorporated in the revised manuscript as per the attached scanned copy. Technical queries were answered below with necessary changes made in the revised manuscript. The response to every query is mentioned in detail below.

It is strongly believed that the reviewer's comments or suggestions improved the paper and it will be appreciated if you can kindly consider the revised version of the manuscript for the publication.

Please contact us if you need additional information.

Yours sincerely,



(Pankaj Mohanty)

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Response to Comments

Editor or Reviewer 1

Comments: Thank you for your submission. This paper will be accepted for the 2016 SAIP Proceedings after the corrections recommended by reviewers are made.

Please submit a corrected pdf of the paper as well as a description of all changes made in response to the reviewer comments, also in pdf format. Corrections must be submitted as soon as possible.

Comments from the reviewers can be found by logging into the SAIP 2016 website (<http://events.saip.org.za/event/saip2016>), clicking on My Contributions, then View for the specific paper, and finally look under History.

You can upload a second document to the Indico system by clicking on the More link in the Upload Paper window.

Response: Necessary amendments were done according to the Reviewer's comments. The corrected pdf of the paper as well as the description of all changes made in response to the reviewer comments (as described below) were made in pdf format.

Reviewer 2

Comments: Paper is well-written and easy to follow.

One minor comment:

- On the bottom of page 3, I am not familiar with use of the terminology "5 at. %" and "7 at. %". Please use a more conventional description of the concentration.

Response: The terms "5 at. %" and "7 at. %" were now elaborated as "5 atomic %" and "7 atomic %" in the text for clarity. The text has been modified appropriately in the revised manuscript.

Reviewer 3

Comments: In present paper entitled "Role of swift heavy ion irradiation on the structural and magnetic properties of $Ti_{0.95}Co_{0.05}O_{2-\delta}$ epitaxial thin films", authors has studied about defect induced by swift ion irradiation on structural and magnetic properties. They found that defect (irradiation with different dose) play an important role in modification of structural and magnetic properties of these films. They also emphasis that Bound poltroon model explain unusual magnetization in amorphous film. This paper is recommended for publication in the conference proceeding.

Response: Not required.

Reviewer 4

Comments: The article makes a notable contribution to the field of solid state physics and magnetism in particular. Information is presented regarding the structural and magnetic properties of cobalt doped titanium oxide thin films, which will be of value to other researchers in the field.

It is thus a pity that the article contains some grammatical errors. These need to be corrected before the article can be accepted for publication. The marked-up article was scanned and is

attached to this report (DPCMM207-Reviewer_Comments.pdf). It would serve the authors to take more care in future by doing a thorough proof-reading of their articles.

1. Film thicknesses have not been mentioned under Section 2.

2. How were film thicknesses obtained? Include under Section 2.

Response: The grammatical errors have been rectified in the revised manuscript as per the marked-up scanned copy attached to the report (DPCMM207-Reviewer_Comments.pdf). Film thickness which is ~ 100 nm has now been included under Section 2. The film thickness was measured using Rutherford's backscattering spectrometry and included under Section 2 of the revised manuscript.