



**SDI Review Form 1.6**

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| Journal Name:            | <a href="#">Journal of Materials Science Research and Reviews</a>                                                                                      |
| Manuscript Number:       | <b>Ms_JMSRR_45574</b>                                                                                                                                  |
| Title of the Manuscript: | <b>Influence of Ag-doping on The Optical and Structural properties of TiO<sub>2</sub> Thin Films Deposited by Electrohydrodynamic Spray Pyrolysis.</b> |
| Type of the Article      | <b>Original Research Article</b>                                                                                                                       |

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

**PART 1: Review Comments**

|                                     | Reviewer's comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Compulsory</b> REVISION comments | <p>In the original document were realized corrections, red color means delete and blue means suggestions</p> <p>Line 123 to include the values of thickness each sample.</p> <p>Line 187 which reflections were used to determine the crystal sizes?<br/>Which phase corresponds the amorphous zone between 20 and 35 degrees?<br/>the crystal size seems larger</p> <p>Line 200 "...improves the efficiency under the visible –light radiation" what kind of efficiency?</p> <p>The manuscript does not have a clear objective in relation to the obtained results.<br/>What is the phase for TiO<sub>2</sub>? Rutile or anatase<br/>Is it important?<br/>It is logical that you doped with silver you have conduction and decreases the band gap.<br/>The recently references are 2016 year.</p> | <p>Thank you Sir for the corrections. Most of your observations, I thought it wasn't necessary initially but since you mentioned it, I have taken cognisance of it for future articles.</p> <ul style="list-style-type: none"> <li>❖ Undoped TiO<sub>2</sub> = 300 nm</li> <li>❖ 1.0 M = 500 nm</li> <li>❖ 1.5 M = 700 nm</li> </ul> <p>The x – ray diffraction patterns of deposited samples are attributed to reflections of anatase phase with tetragonal crystal structure corresponding to the JCPDS card number (021 – 1272). There is no peak corresponding to the rutile phase of the TiO<sub>2</sub>. The dome shape observed in the XRD spectra between 20° and 35° is attributed to amorphous nature of deposited sample at 250°C temperature. This shows that there is a phase transition during the formation of the samples from amorphous to anatase phase.</p> |
| <b>Minor</b> REVISION comments      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | From the results of both the direct and indirect Energy band gap, the results showed that doping with Ag brought about decrease in the Band gap of the doped films.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Optional/General</b> comments    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**PART 2:**

|                                                     | Reviewer's comment                                                           | Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here) |
|-----------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Are there ethical issues in this manuscript?</b> | <i>(If yes, Kindly please write down the ethical issues here in details)</i> |                                                                                                                                                                               |