



**SDI Review Form 1.6**

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|--------------------------|---------------------------------------------------------------------------------|
| Journal Name:            | <a href="#">Physical Science International Journal</a>                          |
| Manuscript Number:       | Ms_ PSIJ_20601                                                                  |
| Title of the Manuscript: | Luminescence Characteristics of Polymer Passivized Strontium Aluminate Phosphor |
| Type of the Article      | Original research papers                                                        |

**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>)



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**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>(1) The authors should state clearly their objective.</p> <p>(2) Why were PVP, CMC and PVA chosen for this study?</p> <p>(3) Fig. 1b had three photographs. Did all three show the same situation?</p> <p>(4) Which condition was how effective for obtaining small (40 nm diameter) particles?</p> | <p>1 &amp; 2</p> <p>Since nanoparticles have extremely high tendency of adhesion and high level of aggregation, it is of great importance to develop relevant techniques to control the dispersive/aggregation phenomena of nanoparticle to apply them into materials that are functional; Hence the choice of suitable passivizing agents (PVP, PVA and CMC) which has been capped with ZnS and ZnO majorly but less attention of it function was given to capping it with <math>\text{SrAl}_2\text{O}_4:\text{Eu}^{3+}</math> phosphor. The importance of these research findings involving different polymers as passivizing agents on <math>\text{SrAl}_2\text{O}_4:\text{Eu}^{3+}</math> phosphor is to verify their influence on the crystals sizes and luminescence emission characteristics at the excitation of 285nm.</p> <p>3.</p> <p>Fig. 1b photographer was obtained under the same condition (same order of preparation, calcination temperature &amp; time, and characterization )</p> <p>4.</p> |



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|                                         |  | PVP sample which has the highest crystal size of 40nm also gave the highest luminescence intensity, indicating its more viable for LED and other display usage under the said conditions. |
| <b><u>Minor</u></b> REVISION comments   |  |                                                                                                                                                                                           |
| <b><u>Optional/General</u></b> comments |  |                                                                                                                                                                                           |