



SDI Review Form 1.6

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| Journal Name: | Physical Science International Journal |
| Manuscript Number: | Ms_PSIJ_27184 |
| Title of the Manuscript: | Magnetic properties of a quasi-two-dimensional Heisenberg antiferromagnet -RbCrF4 |
| Type of the Article | Original Research Article |

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) |
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| <u>Compulsory</u> REVISION comments | | |
| <u>Minor</u> REVISION comments | | |
| <u>Optional/General</u> comments | <p>In this paper authors reported to synthesize a quasi-two-dimensional Heisenberg antiferromagnet α-RbCrF₄. This synthesis is one step to realize the material where ferromagnetism, ferroelectricity, and ferroelasticity coexist and completely couple with each other. They used the RS method to synthesize the pure antiferromagnet.</p> <p>As results they can suppress the extrinsic anomaly due to impurities in measurements of the magnetic susceptibility.</p> <p>Also performing X-ray diffraction (XRD), they revealed that α-RbCrF₄ consists of a superstructure in the ab-plane.</p> <p>But they could not determine the structure, and they could not clarify whether ferromagnetism, ferroelectricity, and ferroelasticity coexist in this material.</p> <p>Based on these observation, I conclude that this paper is worth publishing, although it does not include the high novelty.</p> | |

Reviewer Details:

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