



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_33660
Title of the Manuscript:	Maxwell Relations for Substances with Negative Thermal Expansion and Negative Compressibility
Type of the Article	Short 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)
Compulsory REVISION comments		
Minor REVISION comments	<p>This paper presents the General Maxwell relations have been derived which take into account the sign of compressibility and thermal expansion. The authors also provided the first and third general Maxwell relations have been supported experimentally. The paper provides a lot of information about Maxwell relations. Paper is well organized and describes original work. The earlier results of the author indicating that negative thermal expansion also effects these relations have been strongly confirmed.</p> <p>1-In my opinion the authors should provide the novel ideas of their work.</p> <p>2- Specifically they should emphasize on the traditional derivation procedure they introduced.</p>	<p>Dear Referee, thank you for your comments. I introduced a new reference [19] into my paper.</p> <p>1) I have included the novelty of my paper in the Conclusions (see highlighted text). Also, some novelty was already given in the Conclusions, for example: The first and third general Maxwell relations have been supported experimentally. It is shown that their previous versions fail to describe the experiments of a number of authors.</p> <p>2) Your question is not quite clear to me. I introduced the signs of α and β into the laws of thermodynamics, noticed small inaccuracies in the traditional derivation of the Maxwell relations, and derived these relations having corrected these inaccuracies. I have added a sentence in the Conclusion: Inaccuracies in the previous derivation of the Maxwell relations are shown and corrected.</p>
Optional/General comments		