

Manuscript: **“The Effect of B, Al, N, and P Impurities on the Electronic Structure of Si_{0.3}Sn_{0.7}Ge alloy: A First-Principles Approach”**

Submitted: 04 October 2021

Accepted: 26 December 2021

Published: 31 January 2022

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Doi:10.19044/esj.2022.v18n3p186

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Date Manuscript Received: 30/11/2021	Date Review Report Submitted: 8/12/2021
Manuscript Title: The effect of B, Al, N, and P impurities on the electronic structure of Si_{0.3}Sn_{0.7}Ge alloy: a first-principles approach	
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1. The title is clear and it is adequate to the content of the article.	5
here, there are no particular comments	
2. The abstract clearly presents objects, methods and results.	5
The summary is well structured and all parts of the article stand out (objects, methods and results,	

3. There are few grammatical errors and spelling mistakes in this article.	4
The article was written with fewer grammatical and spelling errors	
4. The study methods are explained clearly.	3
It would be desirable for the authors to provide a few lines of description of the Korringa-Kohn-Rostoker Green (KKR-GF) method of function to enable readers to understand exactly what it	
5. The results are clear and do not contain errors.	2
<ol style="list-style-type: none"> 1. The discussion part of the results, the authors quite simply chose to make observations in particular on obtaining the alloys $\text{Si}_{0.3}\text{Sn}_{0.7-y}\text{ByGe}$, $\text{Si}_{0.3}\text{Sn}_{0.7-y}\text{AlGe}$, $\text{Si}_{0.3}\text{Sn}_{0.7-y}\text{NyGe}$ and $\text{Si}_{0.3}\text{Sn}_{0.7-y}\text{PyGe}$ from the parent alloy $\text{Si}_{0.3}\text{Sn}_{0.7-y}\text{XyGe}$ without actually saying what these observations indicate. 2. The n-type conductivity of the parent $\text{Si}_{0.3}\text{Sn}_{0.7}\text{Ge}$ alloy was maintained by the newly formed alloys and an increase in the total number of electronic states was observed. What does that indicate? 3. Analysis of the discussions part of the results shows that the necessary discussions that lead to solid conclusions seem to be completely ignored.your comments) 	
6. The conclusions or summary are accurate and supported by the content.	2
Authors should convince the reader of the meaning of the data, its importance, its contribution to existing data and research, its theoretical, empirical and conceptual contribution.	
7. The references are comprehensive and appropriate.	4
Avoid references before 2015	

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Accepted, no revision needed	
Accepted, minor revision needed	X
Return for major revision and resubmission	
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