|  |
| --- |
|  |
| Book Name: | [**Chemical and Materials Sciences: Research Findings**](https://www.bookpi.org/bookstore/product/chemical-and-materials-sciences-research-findings-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4567** |
| Title of the Manuscript:  | **Novel All-Nitrogen Molecular Crystals Composed of Tetragonal N4 Molecules** |
| Type of the Article | **Book Chapter** |

|  |
| --- |
| PART 1: Comments |
|  | Reviewer’s comment**Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | **This computational study focuses on predicting the existence of molecular crystals of tetrahedral N4 molecules (Td-N4). Based on Born-Oppenheimer molecular dynamics and geometry optimizations, the study confirms that Td-N4 molecules are dynamically and thermally metastable. The analysis suggests that these crystals, with high detonation performance and stability, could be potential candidates for high-energy density explosives due to their high stability and detonation performance.** |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | **Yes.** |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | **Yes. But can be extended as a book chapter** |  |
| **Is the manuscript scientifically, correct? Please write here.**  | **Yes. The headings are correctly written but a more descriptive conclusion is recommended** |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | **Yes. However, as a book chapter additional references are strongly recommended**  |  |
| Is the language/English quality of the article suitable for scholarly communications? | Yes. Therefore, a second round checking is necessary |  |
| Optional/General comments | I recommend authors to add more reference as book chapter and provide better descriptive conclusion. |  |

|  |
| --- |
| **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)* |
| **Are there ethical issues in this manuscript?**  | *(If yes, Kindly please write down the ethical issues here in details)* |  |

|  |
| --- |
| **Reviewer Details:** |
| Name: | **Theodore Azemtsop Manfo** |
| Department, University & Country | **University of Vaasa, Finland** |