

Review Form2

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|--------------------------|---------------------------------------------------------------------------------------------|
| Book Name:               | <a href="#">Science and Technology - Recent Updates and Future Prospects</a>                |
| Manuscript Number:       | Ms_BPR_2110                                                                                 |
| Title of the Manuscript: | Electronic Structure of Chemical Elements Described by the Characteristic Graph of the Atom |
| Type of the Article      | Book chapter                                                                                |

PART 1: Review Comments

| Compulsory REVISION comments                                                                                                                                                                                                         | Reviewer's comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 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. Why do you like (or dislike) this manuscript? A minimumof 3-4 sentences may be required for this part.                        | I see that this paper investigates the characteristic graph of the atom, facilitating a comprehensive explanation of various atomic concepts through derived graphical representations. It examines the electronic structure, elucidating the order and period of subshells that conform to stability, classified in stacks based on Cartesian coordinates. Also, the results introduce novel methods for depicting atomic classification, known as "condensed tables," applicable with or without period and order subshells. These findings offer a robust framework for comprehending atomic structures and their classifications.                                                                                                                                                                      |                                                                                                                                                             |
| Is the title of the article suitable?<br>(If not please suggest an alternative title)                                                                                                                                                | It is suitable with contents and scope, but if it is possible to rewrite it as:<br>"Characterizing the Electronic Structure of Chemical Elements Through Atomic Graph Representations". This title aptly reflects the paper's contents, as it highlights the focus on using atomic graph representations to describe the electronic structure of chemical elements.                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                             |
| 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.                                                                          | I suggest that the abstract needs to include:<br>1. Provide research problems and objectives.<br>2. Provide applied research methods.<br>3. Provide research results.<br>4. Provide relevant keywords.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                             |
| Are subsections and structure of the manuscript appropriate?                                                                                                                                                                         | Yes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                             |
| Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimumof 3-4 sentences may be required for this part. | <p>Please put more emphasis on conducted Methodology: whether you do this method manually or with the help of software, please explain.<br/>Please tell me how the process of forming graphes1, 2? Can you also add what application did you use to create them? Do you draw manually?</p> <p>Result and Discussion:</p> <p>1. Data presentation and explanation valid and reasonable</p> <p>2. Tables and figures must be cited on the text</p> <p>3. Discussion / analysis is relevant to research results.</p> <p>Add more justification about the sub-layers compose the figure 1.</p> <p>Add more justification about the sub-layers compose the tables 1 and its coorelation with Table 2.</p> <p>In discussion, what do you mean by saying ("OE " instead of " n" the period) , please explain.</p> |                                                                                                                                                             |

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| Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. | Regarding the references, Composition of citations or references here, as much as 80% comes from journals; the remaining 20% can be from books, magazines, or something similar. Reference No. 13 needs to be modified.                                                                    |  |
| Minor REVISION comments                                                                                                             |                                                                                                                                                                                                                                                                                            |  |
| Is the language/English quality of the article suitable for scholarly communications?                                               | Good.                                                                                                                                                                                                                                                                                      |  |
| Optional/General comments                                                                                                           | <p>This is an interesting paper that I have read in this week. However, a set of notes need to be taken into a count.</p> <p>RevieEnsure all figures and tablesare properly referenced in the text, indicating whether they were created by the authors or adapted from other sources.</p> |  |

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:

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|----------------------------------|--------------------------|
| Name:                            | Laith H. M. Al-ossmi     |
| Department, University & Country | Thi-Qar University, Iraq |