

Review of: "Synthesis of Nickel Nanoparticles Using Ionic Liquid-Based Extract from *Amaranthus viridis* and Their Antibacterial Activity"

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Potential competing interests: No potential competing interests to declare.

Manuscript comments

The study of "**Synthesis of Nickel Nanoparticles Using Ionic Liquid-Based Extract from *Amaranthus viridis* and Their Antibacterial Activity**" was carried out to synthesize the Ni nanoparticles using *Amaranthus viridis* plant extract. They utilized various techniques to study the characteristics of these Ni NPs. The study is exciting and well-designed. The methodology is discussed in brief, and the resulting data were analyzed properly. Also, the authors have cited recent papers in this study. I find minor technical errors or mistakes in spelling and grammar. I give my recommendation for its acceptance after a few minor corrections.

1. Ensure that all plant names are written in *italics*.
2. Additionally, label the units of absorbance on the Y-axis of Figure 1.
3. You have presented the UV-visible, FTIR, and XRD spectra for Ni NPs synthesized using plant extract. It would be beneficial to include data for the plant extract alone, as this comparison can validate the findings between the plant extract and the Ni NPs. This would help determine whether the plant extract is involved in antibacterial activity on its own or in combination with the Ni NPs. Please include these results in the manuscript.
4. Also, ensure that all bacterial names are in *italics*.
5. Could you clarify how the antibacterial activity was measured? In the manuscript, you mentioned that precise measurements were taken, but it would be helpful if you could explain the methodology used to measure the antibacterial activity.
6. Lastly, please provide a higher-resolution image of the SEM data, as the current one appears hazy.