

Review Form 1.7

Journal Name:	Asian Journal of Research in Biochemistry
Manuscript Number:	Ms_AJRB_98929
Title of the Manuscript:	A Brief Review on Investigation of Synthesis and Antimicrobial Activity of Silver Nanoparticles
Type of the Article	Review 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:

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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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p>	<p>Although, the manuscript is important for scientific community but discussion section instead of discussing results in detail is more like introduction to different characterisation techniques. Obtained results are not interpreted correctly.</p> <p>No, the title given by authors suggests that it is a review article. Although it is not a review article but a research article. So, in my opinion more appropriate title for this would be "An investigation on synthesis of Silver Nanoparticles". Secondly, the given title suggests that it involves studies on the antimicrobial activity of silver nanoparticles, although there are no antimicrobial studies done in the manuscript. Current title is misleading to the researchers and readers.</p> <p>Although the abstract of the article is comprehensive but lacks continuity. Results section in abstract highlights introduction of the techniques used in characterisation of nanomaterials more rather than highlighting the results.</p> <p>No. 'Section 3.3 CHARACTERIZATION AND DISCUSSION' is not appropriate, as no characterization details have been given in this section. Merely by writing word 'CHARACTERIZATION' in the heading is not enough, characterization details should be given properly. Secondly authors have given the heading "2. INVESTIGATION OF ANTIBACTERIAL ACTIVITY MECHANISM". Although no such study is done in the manuscript. It is more of a literature search.</p> <p>In my opinion manuscript is scientifically weak, as results obtained have not been explained in detail like: what the obtained results signify? Secondly, discussion section instead of focusing on results obtained, focuses much on the introduction to characterization techniques. Particularly, section 3.3.2. DYNAMIC LIGHT SCATTERING is written very pathetically.</p> <p>Kindly explain how "Characterization of any nanomaterial in solution is essential to evaluate the toxic potential"?</p> <p>"On figure.4, DLS is a nondestructive method used to obtain the average diameter of nanoparticles dispersed in liquids as well as the zeta potential that was conformed the stability of nanoparticles in a solution or medium." How figure.4. explains that DLS is a non a nondestructive method used to obtain the average diameter of nanoparticles? This should be corrected.</p> <p>"The AgNPs average size is below 100.00nm conformed the formation of nano." This sentence should also be corrected.</p> <p>Section 3.3.3. SCANNING ELECTRON MICROSCOPE</p> <p>"The modern high-resolution SEM is able to identify the morphology of nanoparticles below the evel of 10 nm, The limitation of SEM". Use of punctuation is wrong in this sentence.</p> <p>How the authors can say "The grain sizes of the samples obtained from the SEM images are larger than that obtained from XRDT data (crystallite size)" as no data regarding crystallite size from XRD is given in the manuscript. Secondly, no data regarding grain size obtained from SEM is given. Manuscript is more based on assumptions rather than actual facts.</p>	

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<p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>Section: 3.3.4. TRANSMISSION ELECTRON MICROSCOPE</p> <p>“morphology of AgNPs which particle size between 50 and 200 nm (histogram)”. Sentence written wrongly. Secondly, authors have mentioned the histogram size as 50 to 200 nm, although the maximum size range in the histogram mentioned is 50 nm. This is wrong interpretation.</p> <p>Although references are sufficient but reference number 16 is lacking in the manuscript and pattern used for references is of one kind upto 29 while after 29 another pattern is used.</p> <p>The manuscript is not a review article but is a research article. Secondly, manuscript is grammatically poor and discussion is not well supported by obtained results.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>No, quality of English is poor.</p>	
<p>Optional/General comments</p>	<p>Word 'nanoparticles' should be written uniformly throughout. Most of the times it is written as 'nanoparticles' while at others it is written as 'nano particles'.</p> <p>Introduction section is poorly written.</p> <p>Section -INVESTIGATION OF ANTIBACTERIAL ACTIVITY MECHANISM Para 2, Line-3 “determine a higher antibacterial activity with penetration the cell wall disruption”. This sentence is not clear and grammatically wrong.</p> <p>Line-3-4: “The following figure shows generally how AgNPs can damage and CD of bacterial cell disruption.” This sentence is also not written clearly and needs to be re-written to explain what the authors are trying to explain. The figure numbers given are not mentioned in the text. E.g. Figures 1 & 2, nowhere mentioned in the text.</p> <p>Section 3.1 Materials section “The experiment proceeds to the following reagent and condition [37].” This looks like more of a copied sentence as it is written that experiment proceeds to the following reagent and condition, although no conditions are mentioned. Sentence “use a s a medium” should be written as “used as a medium”. Further sentences like: “use as a precursor” “use as a chelating agent” “use as a solvent” should be written in past tense rather than in present tense.</p> <p>Section 3.2 '120 °C' should be written as '120°C'.</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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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