



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_23370
Title of the Manuscript:	THE STUDY OF SILVER NANOPARTICLES IN BASIS OF SLATER FUNCTIONS
Type of the Article	Review papers

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)
Compulsory REVISION comments	<p>There is no Introduction with description of the problem.</p> <p>There are no explanations why authors use the semi-empirical WH method. Ab initio methods work very well for 16-atomic particles.</p> <p>Authors do not discuss the parameters of used Slater functions and the procedure of optimization of the Ag₁₆ cluster geometry.</p> <p>Authors do not compare their results with results of other works.</p>	<p>The descriptions of the problem is given in line 20-23.</p> <p>Differently from other semi-empirical methods in WH the overlap integrals with STO's are calculated analytically and the author's have their own computer programs in order to calculate them</p> <p>In order to calculate the parameters of Slater functions author's used formulas given in Ref.[21]</p> <p>In literature (R. C. Baetzold, <i>J. Phys. Chem.</i> 101, 8180 (1997)) for band gap of silver nanoparticles obtained values 6.5 eV (Ag₂), 3.8 eV (Ag₃), 5.0 eV (Ag₄), 4.2 eV (Ag₅), 5.1 eV (Ag₆).</p> <p>In our work for band gap of Ag₁₆ obtained 1.154508 eV</p>
Minor REVISION comments		
Optional/General comments	English is bad.	We particularly agree