



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_37726
Title of the Manuscript:	LASER COOLING OF RADIUM ATOMS, COMPUTATIONAL INVESTIGATION
Type of the Article	Review Paper

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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

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		
Minor REVISION comments	I believe that the authors should review again carefully their manuscript since I have found at least a pair of typing misprints. For instance: i) In section 2. The <i>Mathmathical</i> model ii) After Eq.(7) the next phrase ends with The finite linewidth of the lasers can also <i>beincluded</i> I checked carefully the manuscript, and I believe the paper is suitable for publication in PSIJ.	
Optional/General comments	The paper contains an original research, which provides a numerical approach by using a Matlab code, to the Liouville equation in quantum mechanics. The latter one describing spontaneous emissions in laser cooling of Radium atoms for a 4-level system of an atom trap, Therefore the non-lineal equations are numerically solved in order to interpreter shifts on the velocity of cooled atoms. Overall, the current research results to be interesting from a physical point of view. It may motivate to develop new experimental or theoretical trends to understand better some issues regarding cooling atoms with lasers. I have reviewed the manuscript carefully and I recommend the paper to be published in PSIJ after checking the minor revision comments.	

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