



## SDI Review Form 1.6

### **PART 1:**

Journal Name:	<a href="#">Physical Review &amp; Research International</a>
Manuscript Number:	2013_PRRI_3906
Title of the Manuscript:	Determination of the optimum design and extraction optics for a glow discharge Ion source

**General guideline for Peer Review process is available in this link:**

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

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



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### **PART 2:** Review Comments

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b><u>Compulsory</u></b> REVISION comments	<p>The work deal with the study of optimal ion optic system for extraction low current ion beam from plasma ion source based on glow discharge . The study based on experimental investigations and computer simulations results. The good agreement was found for the same experimental parameters.</p> <p>This can sound interesting for some technological applications. Therefore, this manuscript can be submitted for publication at journal <a href="#">Physical Review &amp; Research International</a></p>	
<b><u>Minor</u></b> REVISION comments	<p>At the same time the presented figures (Fig2-5) are not too clear. It need to point along the axis's values currents, voltages and so on. Also, it need to correct at Fig.6 the inscription along the Y axis And what does it mean <b>B</b> at this figure?</p>	<p>We have been made corrections for the required figs We also made a corrections for the axis and delete B.</p>



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<p><b><u>Optional/General</u></b> comments</p>	<p>Certainly, the introduction is not too optimal. This problem is well known indeed and well investigated starting from <b>Pierce J.R. Theory and Design of Electron Beams ,New York (1954)</b>. This concern describes very well in <b>Large Ion Beams - Fundamentals of Generation and Propagation by A.Theodore Forrester , A Wiley-Interscience Publication, 1990</b>.</p> <p>At the former Soviet Union <b>M. D.Gabovich</b> described all these issues at book “ <b>Physics and technology of plasma ion sources, Moscow, Atomisdat, 1972 (in Russian) taking in consideration the Bohm relationship</b> for the ion current density coming from plasma volume at the extraction gap. Also, this described N.Gavrilov in Ref.(1,chapter 7) of this paper.</p> <p>I believe the paper would look much more better if authors will add more references and concerning comments in the introduction.</p>	<p>We did some corrections to the introduction We added some new reference.</p>
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