



SDI Review Form 1.6

PART 1:

Journal Name:	Physical Review & Research International
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

	Reviewer's comment	Author's comment <i>(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)</i>
<u>Compulsory</u> 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 Physical Review & Research International</p>	
<u>Minor</u> 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 at this figure?</p>	



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<u>Optional/General</u> comments	<p>Certainly, the introduction is not too optimal. This problem is well known indeed and well investigated starting from Pierce J.R. Theory and Design of Electron Beams ,New York (1954). This concern describes very well in Large Ion Beams - Fundamentals of Generation and Propagation by A.Theodore Forrester , A Wiley-Interscience Publication, 1990.</p> <p>At the former Soviet Union M. D.Gabovich described all these issues at book “ Physics and technology of plasma ion sources, Moscow, Atomisdat, 1972 (in Russian) taking in consideration the Bohm relationship 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>	
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