



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	2015_PSIJ_17567
Title of the Manuscript:	Modeling and Simulation of High Blocking Voltage in 4H Silicon Carbide Bipolar Junction Transistors
Type of the 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:

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



SDI Review Form 1.6

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>The work of paper concerns a very interesting domain: power bipolar transistors of new generation. The idea, presented in this paper, is acceptable but the paper must be improved according to my proposals:</p> <ul style="list-style-type: none"> - Introduction: very long, the authors owe limited the description and the electric functioning of the transistor. On the other hand, they have to keep and specify the problems of the current transistors (breakdown of junctions, voltages and currents,...) and their contributions. - Paragraph 2: too long and badly structured. The authors feigned the known general equations. I suggest revising this party by specifying: structure of the transistors of power, basic equations by mentioning their contribution, the typical simulations in relation with the problems of the breakdown of the transistors junctions.. - Paragraph 3: normally in this party, the authors have to validate their models and simulations. They modelled the experimental results of the reference 34, but the discussions are insufficient and no work of validation is made. Besides, they do not discuss the breakdown mentioned previously. I suggest revising this party in terms of validation. - Conclusion: to revise by specifying the contribution of the authors : equations and simulations of the performances of the studied bipolar transistors. 	
Minor REVISION comments	/	



SDI Review Form 1.6

<u>Optional/General</u> comments	/	

Reviewer Details:

Name:	Anonymous
Department, University & Country	Mohamed Premier University, Morocco