



SDI Review Form 1.6

Journal Name:	Journal of Materials Science Research and Reviews
Manuscript Number:	Ms_JMSRR_43485
Title of the Manuscript:	Si Microwire Anode with Enhanced Conductivity through Decoration with Cu Nanoparticles
Type of the Article	Original Research 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>)

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	1.You have written "The curve of the 30 s sample decreases with the cycle number. This is an indication that the resistance of the anode increases with the cycle number. This is not because the coating loses conductivity; it is because the wires start cracking due to the lack of space for volume expansion of the wires." Please support your hypothesis of cracking of wire. 2. Why an electrode where Cu deposited for 20 seconds exhibit better capacity(fig-3) than that of 30 seconds one ?- an explanation is required 3. Does the deposited Cu block Li intercalation ability of Si ? Discussion is required	1. Thanks for making us clarify the point. There is no direct evidence of "cracking". However, it is a common effect happening when the volume expansion of materials is constrained, e.g. during thermal expansion. 2. The explanation was already given, but now it was enhanced to make the point clearer: After 30s of Cu deposition a Cu film is formed (instead of separated Cu particles), constraining the volume expansion of the Si wires during lithiation. Just a limited amount of Li is allowed into the Si structure. 3. Cu does not block the Li insertion, but constraints the volume expansion, as mentioned above.
Minor REVISION comments		
Optional/General comments		