



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	2014_PSIJ_12924
Title of the Manuscript:	EFFECT OF TEMPERATURE ON THE IRON SULPHUR RATIO OF PYRITE DEPOSITED BY AEROSOL ASSISTED CHEMICAL VAPOUR DEPOSITION METHOD
Type of the Article	Original Research Article

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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.

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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	<ol style="list-style-type: none"> 1. The parameters studied is only the deposition temperature and with variation of 4 different temperature. Other operating parameter such as argon gas flow, precursor concentration deposition time and wider range of temperature should be study as well to give more convincing results 2. Only EDX and XRD been used for characterization. Both only provide the data on single point of sample which is not representing the whole sample property. Mapping is recommended 3. Many peaks on EDX and XRD spectrum other than the peaks targeted by the authors. The author should elaborate the source other peaks and explained the present of such element or crystal lattice. 4. The uniformity of the film is the most crucial goal to achieve for deposition. SEM or AFM suggested for giving a better view on the surface of the pyrite film. 	<ol style="list-style-type: none"> 1. Other operating parameters were studied but they don't have effect on the iron:sulphur ratio only temperature affects the iron:sulphur ratio. Again because our work was on semiconducting pyrite, we only reported temperature at which pyrite is formed. We varied the temperature up to 600°C, but above 450°C, there is phase transformation from pyrite to marcasite and to triolite. The triolite formed was metallic with iron:sulphur of 96% Fe and 4%S. 2. Yes we did not do the Mapping but our SEM and thus the EDX was on a defined larger area and as such not on single spot/point. 3. As we have said early, the SEM/EDX (because EDX was coupled on the SEM, Philips XL30 field emission gun scanning electron microscope (FEGSEM)) was done on a larger area than on a spot, the glass substrate used contain other elements, like silicon, Oxygen, Calcium, Sodium e.t.c which gave rise to other peaks but we restricted the targeted peaks by coding them pink for Fe and light green for S (line 116) 4. We have subsequently corrected the paper to include SEM image for better view.
Minor REVISION comments		
Optional/General comments		