Review Form2

Book Name:	Chemical and Materials Sciences: Developments and Innovations
Manuscript Number:	Ms_BPR_3850
Title of the Manuscript:	SnO2 Dense Ceramic Microwave Sintered with Low Resistivity
Type of the Article	Book chapter

PART 1: Review Comments

<u>Compulsory</u> REVISION comments	Reviewer's comment	Author's Feedback(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimumof 3-4 sentences may be required for this part.	This manuscript offers valuable insights into the development of SnO2-based ceramics for industrial applications. The innovative use of microwave sintering to achieve high-density, low-resistivity ceramics is a novel and practical solution for reducing production costs and improving efficiency, also enhance material properties while addressing environmental concerns is timely and relevant. The findings could significantly impact the materials science community, particularly in sustainable production technologies. Additionally, the study provides a strong foundation for further exploration into ceramic anodes for electrolytic processes.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title is suitable and reflects the manuscript's content. However, a minor suggestion would be to emphasize the environmental and technological implications of the work. Suggested alternative: "Low Resistivity SnO2 Dense Ceramics via Microwave Sintering for Sustainable Applications."	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract is comprehensive and well-structured, but it could briefly mention the environmental advantages of the proposed method to broaden its appeal. Suggested addition: "In addition to its material properties, this approach reduces carbon emissions, aligning with sustainable development goals."	
Are subsections and structure of the manuscript appropriate?	The manuscript is well-structured with logical progression through the sections. Subsections are appropriately labeled and facilitate easy understanding of the experimental procedures and findings.	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimumof 3-4 sentences may be required for this part.	The manuscript is scientifically robust and technically sound. The methods are clearly described, and the results are supported by detailed characterization data, including X-ray diffraction, FE-SEM, and resistivity measurements. The discussion effectively correlates the findings with existing literature, reinforcing the scientific merit.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are sufficient and appropriately cited. However, adding a few more recent citations (post-2018) related to microwave sintering or SnO2-based ceramics would enhance the manuscript's relevance.such as https://doi.org/10.1007/s10717-024-00655-4 ; https://doi.org/10.1016/j.ceramint.2024.05.195	

Created by: EA Checked by: ME Approved by: CEO Version: 2 (08-07-2024)

Review Form2

Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The language is suitable for scholarly communication, though some technical terms could be simplified for better comprehension by a broader audience.
Optional/General comments	- While results are presented effectively, a deeper comparative discussion of conventional versus microwave sintering processes, particularly with respect to economic feasibility, would add value Include Economic Impact: A cost analysis comparing the traditional and microwave sintering processes would make the research more impactful for industrial applications Expanding on potential applications beyond aluminum production could broaden the manuscript's impact.
	No plagiarism was detected. None identified.
	No ethical issues were identified in this manuscript

PART 2:

		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)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

Reviewer Details:

Name:	Sadiq Hassan Khoreem
Department, University & Country	Al-Razi University, Amran University, Yemen

Created by: EA Checked by: ME Approved by: CEO Version: 2 (08-07-2024)