



SDI Review Form 1.6

Journal Name:	Journal of Materials Science Research and Reviews
Manuscript Number:	Ms_JMSRR_43347
Title of the Manuscript:	Synthesis of Mn₃O₄ Microflowers Anode Material for Lithium -ion Batteries with Enhanced Performance
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:

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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	<p>Mn₃O₄ is a novel anode material for LIBs. Synthesis of nanostructure is effective way to improve the electrochemical performance of Mn₃O₄. This work describes a solvothermal method to prepare nanostructure Mn₃O₄, which show that morphological characteristics of the prepared Mn₃O₄ can be tuned by the solvent. The Mn₃O₄ micro-flowers prepared with CTABr-DMF-H₂O mixed solvent exhibits good performance. The results in this work is interesting for the study of lithium ion batteries and other electrochemical energy storage modes. Thus, the reviewer believes this work would be publishable after a minor revision if the authors could further address the following points.</p> <ol style="list-style-type: none"> 1. In lines 95-96: Some microflowers composed of superimposed thin and wide nanosheets were prepared with CTABr in the DMF-H₂O mixed solvent in Fig. 1c, d. "Fig. 1c, d" should be "Fig. 1e, f". 2. In lines 99-101: The diffraction peaks of the sample prepared with DMF, water and CTABr has the highest intensity than samples prepared with water and THF in Fig. 2. "water and THF" should be "water, CTABr and DMF". 3. In lines 101-102: The diffraction peaks can be ascribed to Mn₃O₄ in Fig. 2a. The other samples can also be ascribed to Mn₃O₄ in Fig. 2b,c. The authors should provide JCPDS number corresponding to Mn₃O₄. 4. It is well known that nanostructures help to increase the reversible capacity and rate performance of Mn₃O₄. The reversible capacity and cycle performance were given in Fig.6. It is necessary to provide the rate performance of the prepared Mn₃O₄ to further explain the effects of the nanostructure. 5. It is necessary to supplement the cyclic voltammetry and electrochemical impedance analysis to illustrate the effect of nanostructures on the reaction kinetics of the electrode. 	
Minor REVISION comments		
Optional/General comments		

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