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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.
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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	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. 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.	Thank you very much for your good advice. 1. "Fig. 1c, d" has been revised to "Fig. 1e, f". 2. "water and THF" has been revised to "water, CTABr and DMF". 3. JCPDS 89-4837 corresponding to Mn_3O_4 was added. 4. It can be predicted that bad rate cycling performance would be obtained because Mn_3O_4 microflowers are apt to decay quickly at a small current density of 240 mA h g^{-1}. So we did not test rate cycling performance. We are sorry not to provide the data. We have focused on the research of flower-like rutile TiO_2 and ammonium vanadium bronze. We found that the effect of flower-like nanostructures on the reaction kinetics of the electrode are ascribe to the changes the total impedance and electron transfer resistance [50, 51].The improved performance of Mn_3O_4 micro-flowers is also ascribed to improve the transferring of electron. 5. Unfortunately, we currently have some difficulty in performing CV and impedance tests without glovebox and advanced electrochemical working condition. So we performed dQ/dV curves based on charge-discharge tests. dQ/dV curves also can show the reaction in the process of charge-discharge like cyclic voltammetry.
Minor REVISION comments		
Optional/General comments		