

RETRACTION

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Retraction: Formation of $\text{Fe}_3\text{O}_4@\text{MnO}_2$ ball-in-ball hollow spheres as a high performance catalyst with enhanced catalytic performances

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Retraction of 'Formation of $\text{Fe}_3\text{O}_4@\text{MnO}_2$ ball-in-ball hollow spheres as a high performance catalyst with enhanced catalytic performances' by Shouwei Zhang *et al.*, *J. Mater. Chem. A*, 2016, **4**, 1414–1422, <https://doi.org/10.1039/C5TA08400H>.

The Royal Society of Chemistry, with the agreement of the authors, hereby wholly retracts this *Journal of Materials Chemistry A* article due to concerns with the reliability of the data in the published article.

There are repeating fragments in the 282–291 eV region of the XPS spectrum in Fig. 3F. Part of the SEM image in Fig. 4E, representing $\text{SiO}_2@\text{Fe}_3\text{O}_4@\text{MnO}_2$, is duplicated in the SEM image in Fig. 5A which represents a different material, $\text{Fe}_3\text{O}_4@\text{MnO}_2$ BBHs. An independent expert was consulted who was not satisfied with the replacement data and explanation provided by the authors.

Given the significance of the concerns about the validity of the original and replacement data, the findings presented in this paper are no longer reliable.

Signed: Shouwei Zhang, Qiaohui Fan, Huihui Gao, Yongshun Huang, Xia Liu, Jiaxing Li, Xijin Xu, Xiangke Wang

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Retraction endorsed by Michaela Mühlberg, Executive Editor, *Journal of Materials Chemistry A*.

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