


 Cite this: *RSC Adv.*, 2024, 14, 28299

## Expression of concern: Enhanced electrical and magnetic properties of (Co, Yb) co-doped ZnO memristor for neuromorphic computing

 Nouredine Elboughdiri,<sup>ab</sup> Shahid Iqbal,<sup>c</sup> Sherzod Abdullaev,<sup>de</sup> Mohammed Aljohani,<sup>g</sup> Akif Safeen,<sup>f</sup> Khaled Althubeiti<sup>g</sup> and Rajwali Khan<sup>\*hi</sup>

DOI: 10.1039/d4ra90092h

[rsc.li/rsc-advances](https://rsc.li/rsc-advances)

 Expression of concern for 'Enhanced electrical and magnetic properties of (Co, Yb) co-doped ZnO memristor for neuromorphic computing' by Nouredine Elboughdiri *et al.*, *RSC Adv.*, 2023, 13, 35993–36008, <https://doi.org/10.1039/D3RA06853F>.

*RSC Advances* is publishing this expression of concern in order to alert readers that concerns have been raised regarding the integrity of the data published in Fig. 4.

An independent expert has assessed Fig. 4 and is concerned the authors have not provided an accurate representation of the experiments that were conducted.

The Royal Society of Chemistry has asked the affiliated institution (University of Lakki Marwat, Pakistan) to investigate this matter and confirm the integrity and reliability of the data in Fig. 4 of the paper. An expression of concern will continue to be associated with this manuscript until we receive information from the institution on this matter.

Laura Fisher

21st August 2024

 Executive Editor, *RSC Advances*
<sup>a</sup>Chemical Engineering Department, College of Engineering, University of Ha'il, P.O. Box 2440, Ha'il 81441, Saudi Arabia

<sup>b</sup>Chemical Engineering Process Department, National School of Engineers Gabes, University of Gabes, Gabes 6029, Tunisia

<sup>c</sup>Department of Physics, University of Wisconsin, La Crosse, WI, USA

<sup>d</sup>Engineering School, Central Asian University, Tashkent, Uzbekistan

<sup>e</sup>Scientific and Innovation Department, Tashkent State Pedagogical University Named After Nizami, Tashkent, Uzbekistan

<sup>f</sup>Department of Physics, University of Poonch Rawalakot, Rawalakot 12350, Pakistan

<sup>g</sup>Department of Chemistry, College of Science, Taif University, P.O. BOX. 110, 21944 Taif, Saudi Arabia

<sup>h</sup>Department of Physics, University of Lakki Marwat, Lakki Marwat, KP, Pakistan. E-mail: [rajwali@ulm.edu.pk](mailto:rajwali@ulm.edu.pk); [khan\\_phy@foxmail.com](mailto:khan_phy@foxmail.com)
<sup>i</sup>Department of Physics, United Arab Emirates University, United Arab Emirates
