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Retraction: Yttrium- and zirconium-decorated $\text{Mg}_{12}\text{O}_{12}-\text{X}$ ($\text{X} = \text{Y}, \text{Zr}$) nanoclusters as sensors for diazomethane (CH_2N_2) gas

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 Retraction of 'Yttrium- and zirconium-decorated $\text{Mg}_{12}\text{O}_{12}-\text{X}$ ($\text{X} = \text{Y}, \text{Zr}$) nanoclusters as sensors for diazomethane (CH_2N_2) gas' by Terkumbur E. Gber *et al.*, *RSC Adv.*, 2023, 13, 25391–25407, <https://doi.org/10.1039/D3RA02939E>.

The Royal Society of Chemistry hereby wholly retracts this *RSC Advances* article due to concerns with the reliability of the data.

The noncovalent interactions (NCI) plots in Fig. 8 are identical to each other and to figures in another paper by the same author group but representing different systems.^{1,2} The authors have not been able to satisfactorily explain this.

In addition, a number of references were inappropriately replaced with self-citations by the authors during the revision process.

Given the significance of these concerns, the Editor has lost confidence that the findings presented in this paper are reliable.

The authors were informed but have not responded to any correspondence regarding the retraction.

Signed: Laura Fisher, Executive Editor, *RSC Advances*

Date: 28th March 2025

References

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2. T. E. Gber, H. Louis, O. C. Ngana, I. O. Amodu, E. E. Ekereke, I. Benjamin, S. A. Adalikwu and A. Adeyinka, *RSC Adv.*, 2023, 13, 25391–25407.

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