

RETRACTION

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Retraction: Sequestration and speciation of Eu(III) on gamma alumina: role of temperature and contact order

Yawen Cai,^{ab} Xuemei Ren,^c Yue Lang,^{ab} Zhiyong Liu,^{ab} Pengfei Zong,^d Xiangke Wang^{ab} and Shitong Yang^{*ab}

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Retraction of 'Sequestration and speciation of Eu(III) on gamma alumina: role of temperature and contact order' by Yawen Cai et al., *Environ. Sci.: Processes Impacts*, 2015, 17, 1904–1914, <https://doi.org/10.1039/C5EM00412H>.

The Royal Society of Chemistry hereby wholly retracts this *Environmental Science: Processes & Impacts* article due to concerns with the reliability of the data in the published article.

The ' $T = 353\text{ K}$ ' and ' $T = 313\text{ K}$ ' XRD patterns in Fig. 2 appear to be identical. An independent expert was consulted who was not satisfied with the explanation provided by the authors, nor with the replacement XRD data provided for ' $T = 313\text{ K}$ '.

The EXAFS spectra presented in Fig. 8A for ' $\gamma\text{-Al}_2\text{O}_3/\text{Eu(III)}$; $T = 293\text{ K}$ ', ' $\gamma\text{-Al}_2\text{O}_3/\text{Eu(III)}$; $T = 313\text{ K}$ ' and ' $\gamma\text{-Al}_2\text{O}_3/\text{Eu(III)}$; $T = 333\text{ K}$ ' appear to be unexpectedly similar in the range $6\text{--}7.4\text{ \AA}^{-1}$. The expert was not satisfied with the explanation provided by the authors who stated that the two spectra were different. Furthermore, upon analysis of the supplied raw EXAFS data, the expert found that it did not match the published EXAFS data in Fig. 8.

The ' $\gamma\text{-Al}_2\text{O}_3/\text{HA}/\text{Eu(III)}$; $T = 293\text{ K}$ ' EXAFS spectrum in Fig. 10A and 'batch 3' EXAFS spectrum in Fig. 11A appear to be identical but represent different samples. The expert was not satisfied with the explanation provided by the authors, and also observed that the supplied raw data did not match the published EXAFS data in Fig. 10 and 11.

Given the significance of the concerns about the validity of the data, the findings presented in this paper are no longer reliable. The authors have been informed about the retraction of the article but did not respond.

Signed: Neil Scriven, Executive Editor, *Environmental Science: Processes & Impacts*

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^aSchool for Radiological and Interdisciplinary Sciences, Soochow University, 215123 Suzhou, P. R. China. E-mail: shitongyang@suda.edu.cn; Fax: +86-512-65883945; Tel: +86-512-65883945

^bCollaborative Innovation Center of Radiation Medicine of Jiangsu Higher Education Institutions, 215123 Suzhou, P. R. China

^cInstitute of Plasma Physics, Chinese Academy of Sciences, P. O. Box 1126, 230031 Hefei, P. R. China

^dReactor Operation and Application Division, Nuclear Power Institute of China, 610005 Chengdu, P. R. China

