

CORRECTION

[View Article Online](#)
[View Journal](#) | [View Issue](#)

Cite this: *RSC Adv.*, 2021, 11, 3685

Correction: Synthesis and characterisation of brannerite compositions (U_{0.9}Ce_{0.1})_{1-x}M_xTi₂O₆ (M = Gd³⁺, Ca²⁺) for the immobilisation of MOX residues

D. J. Bailey, ^a M. C. Stennett, ^a B. Ravel, ^b D. Grolimund ^c and N. C. Hyatt ^a

DOI: 10.1039/d0ra90131h

rsc.li/rsc-advances

Correction for 'Synthesis and characterisation of brannerite compositions (U_{0.9}Ce_{0.1})_{1-x}M_xTi₂O₆ (M = Gd³⁺, Ca²⁺) for the immobilisation of MOX residues' by D. J. Bailey *et al.*, *RSC Adv.*, 2018, 8, 2092–2099. DOI: 10.1039/C7RA11742F.

The authors wish to correct an error in the unit cell volumes quoted in Table 1 of the original article. The corrected table is given below:

Unit cell parameters were determined by a Le Bail refinement of XRD data using the Bruker Topas software package.

The subsequent discussion of the unit cell volume and the conclusions drawn in the manuscript are unaffected by this correction.

Table 1 Refined lattice parameters of synthesised brannerites

Composition	Atmosphere	<i>a</i> (Å)	<i>b</i> (Å)	<i>c</i> (Å)	<i>β</i> (°)	<i>V</i> (Å ³)
Gd _{0.1} U _{0.81} Ce _{0.09} Ti ₂ O ₆	Air	9.8172(2)	3.7390(1)	6.9196(2)	118.554(1)	223.10(1)
Gd _{0.2} U _{0.72} Ce _{0.08} Ti ₂ O ₆	Air	9.8210(2)	3.7370(1)	6.9101(1)	118.607(1)	222.65(1)
Gd _{0.25} U _{0.675} Ce _{0.075} Ti ₂ O ₆	Air	9.8207(1)	3.7371(1)	6.9099(1)	118.607(1)	222.64(1)
Ca _{0.1} Gd _{0.1} U _{0.72} Ce _{0.08} Ti ₂ O ₆	Air	9.8145(2)	3.7346(1)	6.9027(1)	118.482(1)	222.39(1)
Gd _{0.1} U _{0.81} Ce _{0.09} Ti ₂ O ₆	Ar	9.8192(1)	3.7617(1)	6.9253(1)	118.807(1)	224.14(1)
Gd _{0.2} U _{0.72} Ce _{0.08} Ti ₂ O ₆	Ar	9.8215(2)	3.7612(1)	6.9240(1)	118.799(1)	224.14(1)
Gd _{0.25} U _{0.675} Ce _{0.075} Ti ₂ O ₆	Ar	9.8208(2)	3.7600(1)	6.9219(1)	118.797(1)	223.99(1)
Ca _{0.1} Gd _{0.1} U _{0.72} Ce _{0.08} Ti ₂ O ₆	Ar	9.8210(6)	3.7660(2)	6.9293(4)	118.825(1)	224.53(4)
Gd _{0.1} U _{0.81} Ce _{0.09} Ti ₂ O ₆	5% H ₂ /N ₂	9.8197(2)	3.7695(1)	6.9297(2)	118.864(1)	224.64(1)
Gd _{0.2} U _{0.72} Ce _{0.08} Ti ₂ O ₆	5% H ₂ /N ₂	9.8286(5)	3.7702(2)	6.9324(4)	118.867(3)	224.97(3)
Gd _{0.25} U _{0.675} Ce _{0.075} Ti ₂ O ₆	5% H ₂ /N ₂	9.8251(3)	3.7686(1)	6.9292(2)	118.867(1)	224.69(2)
Ca _{0.1} Gd _{0.1} U _{0.72} Ce _{0.08} Ti ₂ O ₆	5% H ₂ /N ₂	9.8192(2)	3.7693(1)	6.9294(1)	118.867(1)	224.60(1)

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

^aImmobilisation Science Laboratory, Department of Materials Science and Engineering, University of Sheffield, UK. E-mail: d.j.bailey@sheffield.ac.uk

^bNational Institute of Standards and Technology, 100 Bureau Drive, Gaithersburg, MD 20899, USA

^cSwiss Light Source, Paul Scherrer Institute, Villigen 5232, Switzerland

