Correction: High-temperature X-ray diffraction and thermal expansion of nanocrystalline and coarse-crystalline acanthite $\alpha$-Ag$_2$S and argentite $\beta$-Ag$_2$S

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Correction for 'High-temperature X-ray diffraction and thermal expansion of nanocrystalline and coarse-crystalline acanthite $\alpha$-Ag$_2$S and argentite $\beta$-Ag$_2$S' by S. I. Sadovnikov et al., Phys. Chem. Chem. Phys., 2016, 18, 4617–4626.

The authors wish to draw the readers’ attention to their previous related study, published in Physics of the Solid State, 1 which should have been cited in this Physical Chemistry Chemical Physics paper.

The study published in this Physical Chemistry Chemical Physics paper contains new experimental X-ray diffraction data, differential thermal and thermogravimetric analysis (DTA-DTG) results and data on the acanthite–argentite phase transformation enthalpy. This Physical Chemistry Chemical Physics paper was accepted before the publication of ref. 1 but published after ref. 1. Therefore ref. 1 should have been cited in this Physical Chemistry Chemical Physics paper.

The authors regret not giving the correct attribution for Fig. 4, 6, 7, 8 and 9 in the paper, which were reproduced for the readers’ information. The figures are reproduced below with the correct copyright permission text.

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Fig. 4  The effect of temperature $T$ on the unit cell parameters $a$, $b$, $c$, $\beta$, and volume $V$, and on the volumetric thermal expansion coefficient $\beta_V$ of coarse- and nanocrystalline acanthite. The approximation of the experimental data by the solid line and the closed symbols (●), (▲), (▼), (●), (■), and (▲) corresponds to coarse-crystalline acanthite and the approximation by the dotted line and the open symbols (○), (▲), (▼), (●), (■), and (▲) corresponds to nanocrystalline acanthite. Reproduced from ref. 1 with permission from Springer.
Fig. 6  Evolution of XRD patterns of coarse-crystalline argentite $\beta$-$\text{Ag}_2\text{S}$ in the temperature range of 446–623 K. The inset shows a systematic displacement of the (200) diffraction reflection of bcc argentite with increase of measuring temperature. Reproduced from ref. 1 with permission from Springer.

Fig. 7  Dependence of the lattice constant $a_{\text{arg}}$ of argentite $\beta$-$\text{Ag}_2\text{S}$ on the temperature $T$: (1) data of present work; (2), (3), and (4) data $^{22,24,27}$ respectively. The approximations of measured lattice constant $a_{\text{arg}}$ by the function (10) in the temperature range of 440–660 K is shown by solid lines. Reproduced with some changes from ref. 1 with permission from Springer.
The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

References