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Erratum

Erratum to "Variable dimensionality and new uranium oxide topologies in the alkaline-earth metal uranyl selenites $AE[(UO_2)(SeO_3)_2]$ (AE = Ca,Ba) and $Sr[(UO_2)(SeO_3)_2]\cdot 2H_2O$" [J. Solid State Chem. 168 (2002) 358–366] ☆

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This paper was inadvertently published in the special issue on molecular metals [Vol. 168, Number 2 (2002)]. It should have appeared in the special issue Proceedings of the 23rd Rare Earth Research Conference [Vol. 171, Numbers 1 and 2 (2003)]. The publishers regrets the error. For the reader's convenience the abstract of the paper appears below:

Three new alkaline-earth metal uranyl selenites, $Ca[(UO_2)(SeO_3)_2]$ (**1**), $Sr[(UO_2)(SeO_3)_2]\cdot 2H_2O$ (**2**), and $Ba[(UO_2)(SeO_3)_2]$ (**3**), have been prepared from the reactions of $CaCO_3$ and $Ca(OH)_2$, $SrCl_2$ and $Sr(OH)_2$, or $BaCl_2$ and $Ba(OH)_2$ with UO_3 and SeO_2 under mild hydrothermal conditions. Single-crystal X-ray diffraction experiments reveal that the structures of **1**–**3** differ in both connectivity and dimensionality even though all contain the same fundamental building unit, namely $[UO_2(SeO_3)_4]$. This polyhedron consists of a linear uranyl unit that is bound by one chelating and three bridging selenite anions creating a pentagonal bipyramidal environment around the U(VI) center. The crystal structure of **1** contains one-dimensional ribbons where the edges are terminated by monodentate selenite anions. The interiors of the ribbons are constructed from edge-sharing pentagonal bipyramidal UO_7 units. The structure of **2** is also one-dimensional; however, here there are chains of edge-sharing pentagonal bipyramidal UO_7 dimers that are connected by bridging selenite anions. $Ba[(UO_2)(SeO_3)_2]$ (**3**) is two-dimensional, and the highly ruffled anionic sheets present in this structure are formed from both bridging and chelating/bridging selenite anions bound to uranyl moieties. The anionic substructures in **1**–**3** are separated by Ca^{2+}, Sr^{2+}, or Ba^{2+} cations. Crystallographic data (193 K, Mo$K\alpha$, $\lambda = 0.71073$): **1**, triclinic, space group $P\bar{1}$, $a = 5.5502(6)$ Å, $b = 6.6415(7)$ Å, $c = 11.013(1)$ Å, $\alpha = 104.055(2)°$, $\beta = 93.342(2)°$, $\gamma = 110.589(2)°$, $Z = 2$, $R(F) = 4.56\%$ for 100 parameters with 1530 reflections with $I > 2\sigma(I)$; **2**, triclinic, space group $P\bar{1}$, $a = 7.0545(5)$ Å, $b = 7.4656(5)$ Å, $c = 10.0484(6)$ Å, $\alpha = 106.995(1)°$, $\beta = 108.028(1)°$, $\gamma = 98.875(1)°$, $Z = 2$, $R(F) = 2.43\%$ for 128 parameters with 2187 reflections with $I > 2\sigma(I)$; **3**, monoclinic, space group $P2_1/c$, $a = 7.3067(6)$ Å, $b = 8.1239(7)$ Å, $c = 13.651(1)$ Å, $\beta = 100.375(2)°$, $Z = 4$, $R(F) = 4.31\%$ for 105 parameters with 1824 reflections with $I > 2\sigma(I)$.

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