Solventothermal Synthesis of the Lamellar Selenidostannates(IV) 
\( \text{A}_2\text{Sn}_4\text{Se}_9\cdot\text{H}_2\text{O} \ (\text{A} = \text{Rb, Cs}) \) and \( \text{Cs}_2\text{Sn}_2\text{Se}_6 \)

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Reaction of \( \text{A}_2\text{CO}_3 \) with Sn and Se in an \( \text{H}_2\text{O}/\text{CH}_3\text{OH} \) mixture at 115 - 130°C affords the isotypic lamellar selenidostannates \( \text{A}_2\text{Sn}_4\text{Se}_9\cdot\text{H}_2\text{O} \) \( (\text{A} = \text{Rb}) \) and \( 2 \ (\text{A} = \text{Cs}) \). The polyanions \( \frac{2}{1}[\text{Sn}_4\text{Se}_9^{2-}] \) exhibit \( \text{Sn}_4\text{Se}_5 \) molecular building units, in which two adjacent Sn(IV) atoms of an \( \text{Sn}_4\text{Se}_4 \) 8-membered ring are bridged by an additional Se atom. These units connect through \( (\text{SnSe})_2 \) 4-membered rings to afford a 4\textsuperscript{th} anionic net with 16-membered cavities. \( \text{Cs}_2\text{Sn}_2\text{Se}_6 \) \( (3) \) may be prepared by methanolthermal reaction of \( \text{Cs}_2\text{CO}_3 \) with SnSe and Se at 130°C and contains porous \( \frac{2}{1}[\text{Sn}_2\text{Se}_6^{2-}] \) sheets in which \( \frac{1}{1}[\text{SnSe}_3^{2-}] \) ribbons are linked through Se-Se bonds. The resulting 4\textsuperscript{th} net displays 14-membered pores in which the Cs cations reside.

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