

Supplementary Materials: Topotactic Oxidation of Perovskites to Novel $\text{SrMo}_{1-x}\text{M}_x\text{O}_{4-\delta}$ ($\text{M} = \text{Fe}$ and Cr) Deficient Scheelite-Type Oxides

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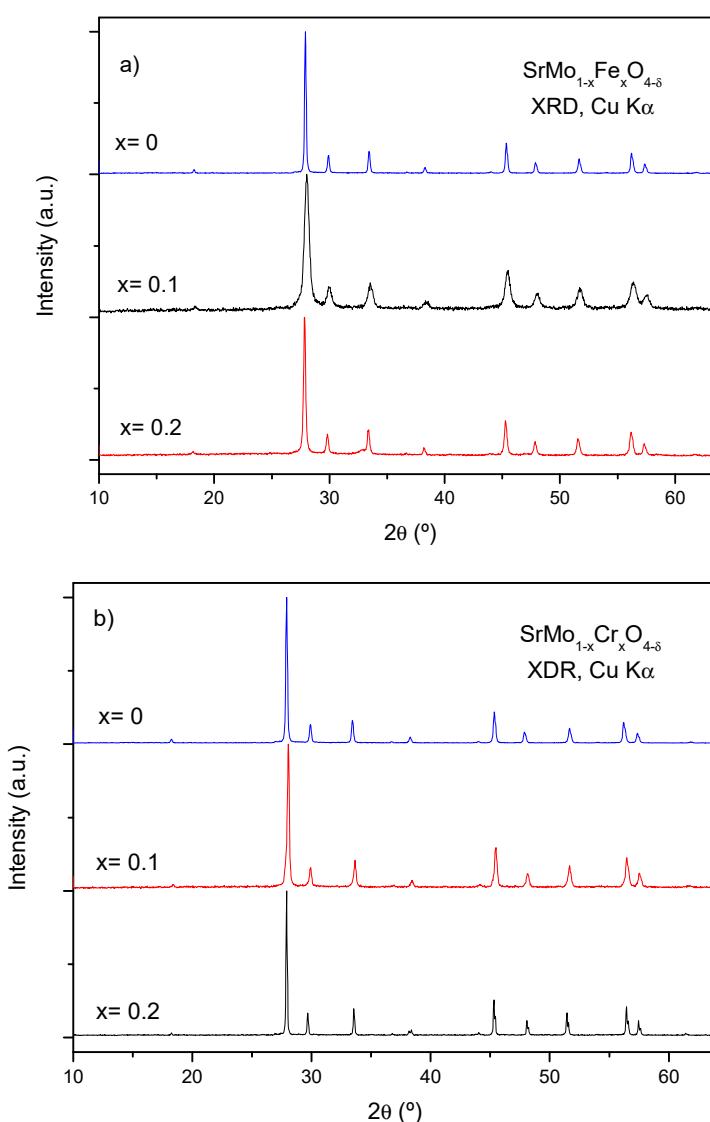


Figure S1. XRD patterns with $\text{Cu K}\alpha$ radiation for (a) $\text{SrMo}_{1-x}\text{Fe}_x\text{O}_{4-\delta}$ ($x = 0, 0.1, 0.2$) and (b) $\text{SrMo}_{1-x}\text{Cr}_x\text{O}_{4-\delta}$ ($x = 0, 0.1, 0.2$), characteristic of pure tetragonal scheelite phases.

Table S1. Unit-cell parameters for $\text{SrMo}_{1-x}\text{M}_x\text{O}_{4-\delta}$ defined in the tetragonal $I4_1/a$ (No 88) space group, $Z = 4$, from XRD at 25 °C.

Unit-Cell Parameters	SrMoO_4	$\text{SrMo}_{0.9}\text{Fe}_{0.1}\text{O}_{4-\delta}$	$\text{SrMo}_{0.8}\text{Fe}_{0.2}\text{O}_{4-\delta}$	$\text{SrMo}_{0.9}\text{Cr}_{0.1}\text{O}_{4-\delta}$	$\text{SrMo}_{0.8}\text{Cr}_{0.2}\text{O}_{4-\delta}$
a (Å)	5.3915(2)	5.3992(4)	5.4019(3)	5.3795(4)	5.3859(2)
b (Å)	5.3915(2)	5.3992(4)	5.4019(3)	5.3795(4)	5.3859(2)
c (Å)	12.0441(2)	12.0681(2)	12.0795(3)	12.1225(5)	12.1381(2)
V (Å ³)	349.84(2)	351.75(1)	352.87(2)	350.33(2)	351.06(3)



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