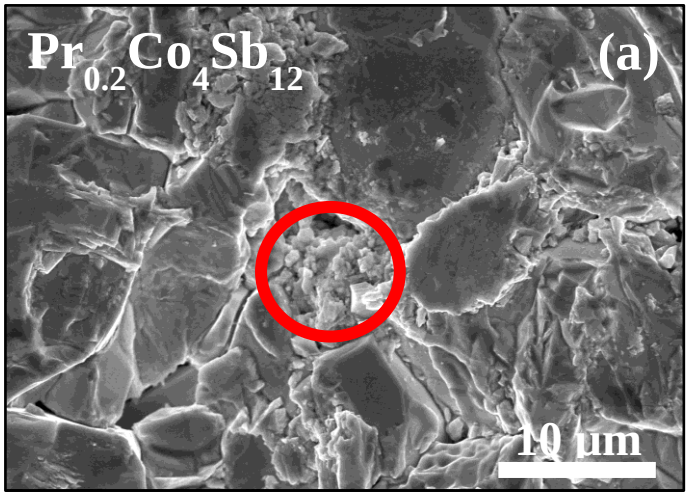
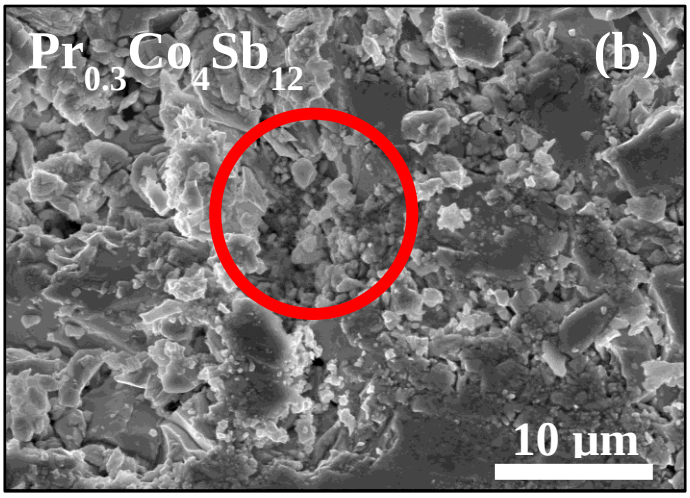
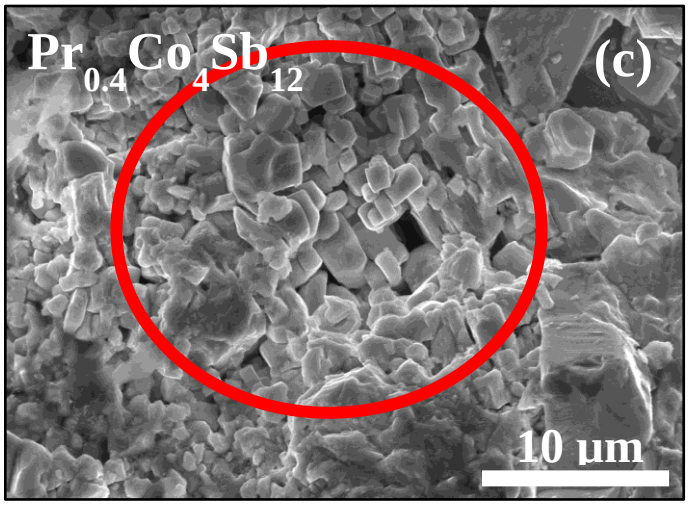
Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supplemental Material

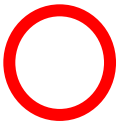






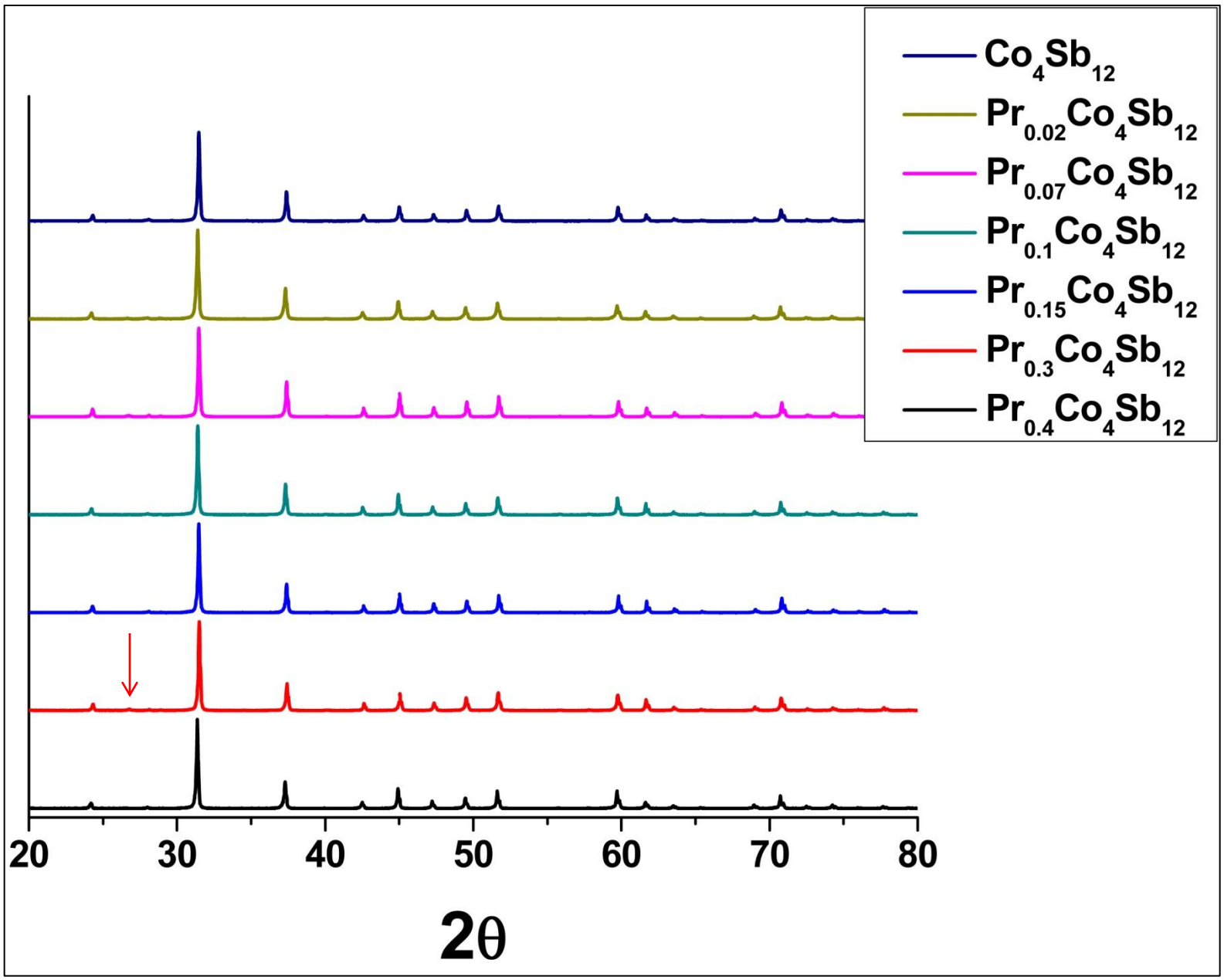
Supplemental Table I.

Sample	Pr (at%)	Sb (at%)	Totals
$Pr_{0.2}Co_4Sb_{12}$	68.28	31.72	$Pr_{2.15}Sb$
$Pr_{0.3}Co_4Sb_{12}$	69.14	30.86	$Pr_{2.24}Sb$
$Pr_{0.4}Co_4Sb_{12}$	69.79	30.21	$Pr_{2.31}Sb$

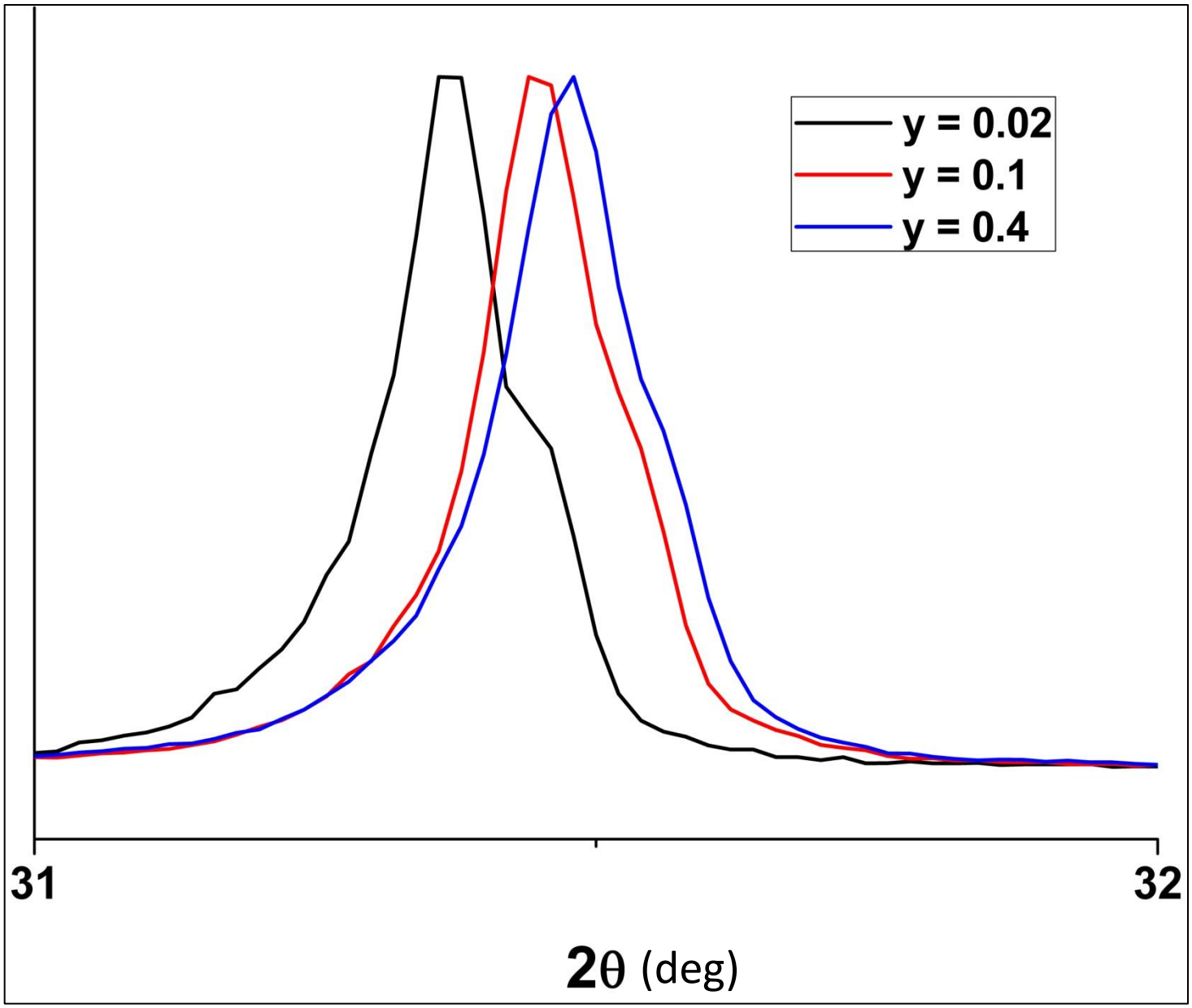


≈ Pr_2Sb

Supp. Fig. 1. SEM images of probable secondary phase Pr_2Sb in samples (a) $Pr_{0.2}Co_4Sb_{12}$ (b) $Pr_{0.3}Co_4Sb_{12}$ and (c) $Pr_{0.4}Co_4Sb_{12}$. Table II at bottom right is atomic percent of Praseodymium and Antimony found in each sample and the total estimated composition of Pr_2Sb found in each SEM image



Supp. Fig. 2. High resolution X-ray diffraction (HRXRD) of all samples $Pr_yCo_4Sb_{12}$ ($0.02 < y < 0.4$) prepared in manuscript. There is little to no secondary phases found in the HRXRD of the samples. All prominent peaks are Co_4Sb_{12}, except for the arrow pointing out a small presence of secondary phase which is found in all samples.



Supp. Fig. 3. High resolution X-ray diffraction (HRXRD) zoom of largest intensity peak in samples $Pr_yCo_4Sb_{12}$ (y = 0.02, 0.1, and 0.4) prepared in manuscript. There is a noticeable peak shift to higher 2θ (deg) as more Pr is added to the Co_4Sb_{12} skutterudite suggesting a decrease in the lattice parameter.