Supporting Information for "Superconductivity and Charge Density Wave in Iodine-Doped CuIr₂Te₄"

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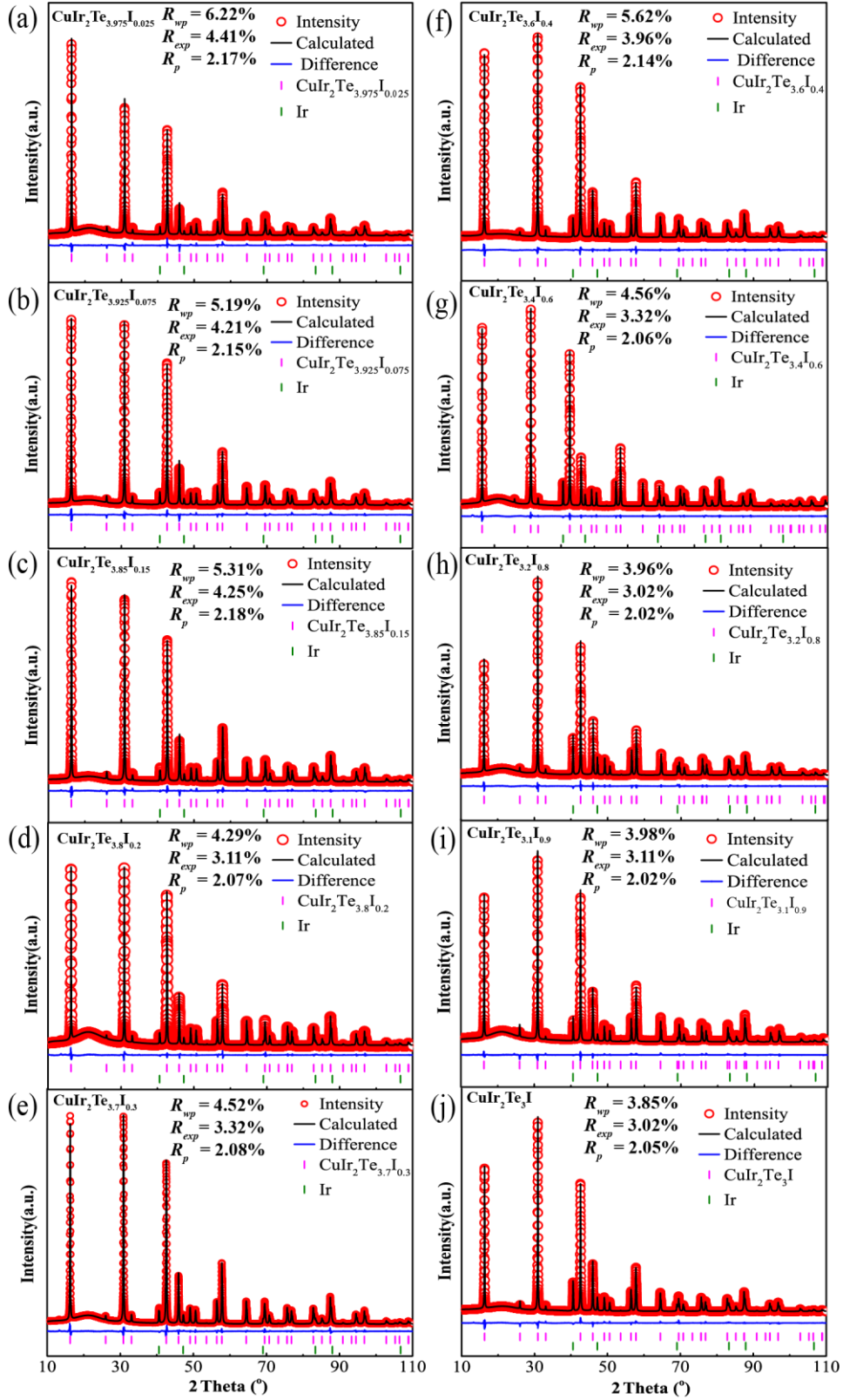[**]Corresponding author Email: luohx7@mail.sysu.edu.cn; Tel: (+0086) 13802768250

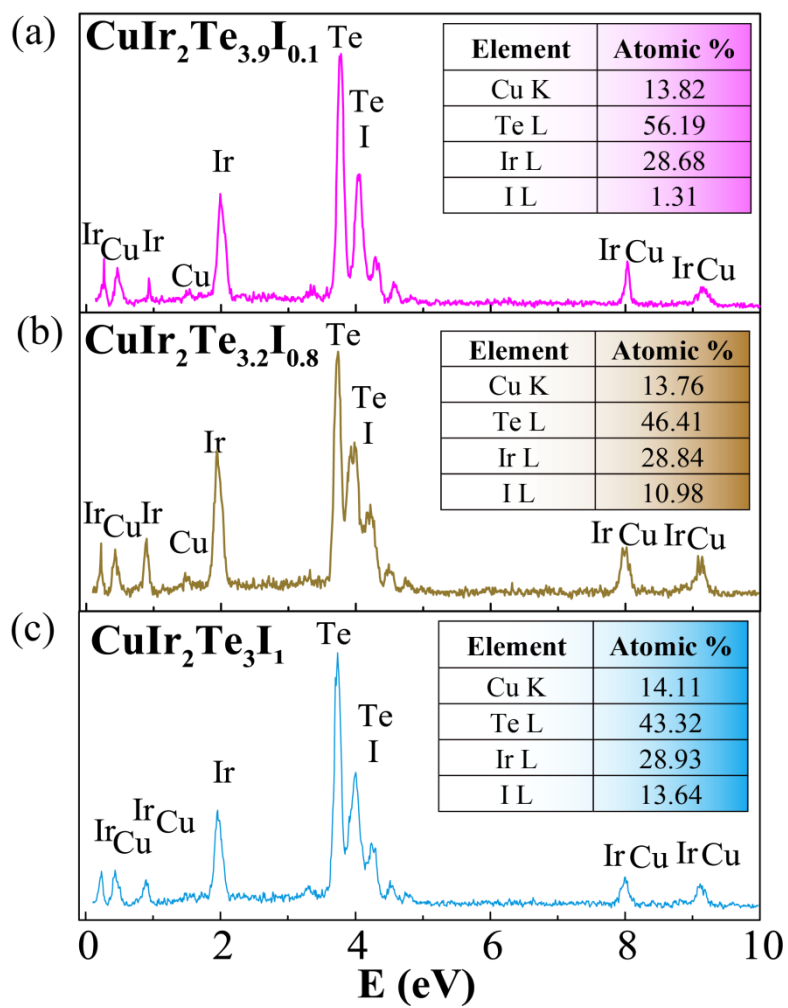**Fig. S1.** The refinement graphs of $CuIr_2T_{4-x}I_x$ polycrystalline samples.

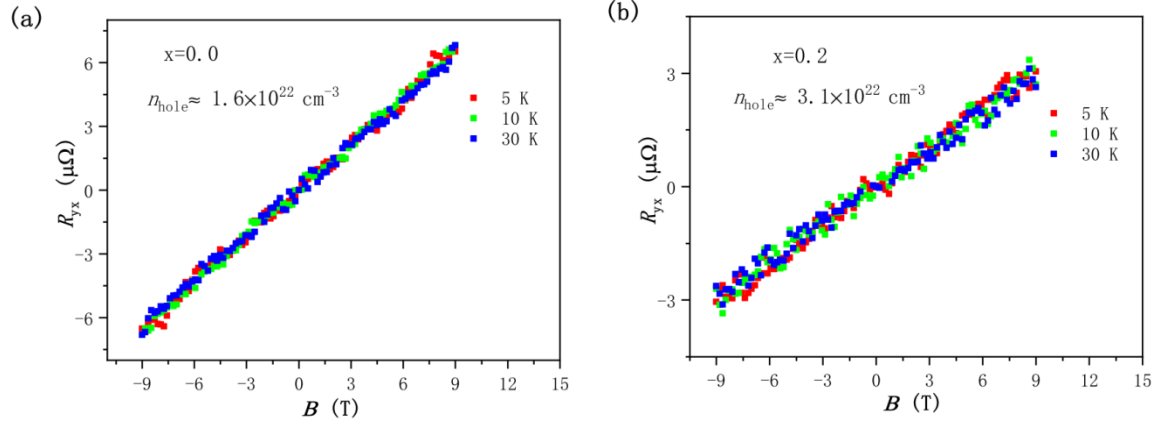**Fig. S2.** EDXS spectrum of $CuIr_2Te_{4-x}I_x$, (a) $x = 0.1$, (b) $x = 0.8$, (d) $x = 1.0$, insets are the corresponding atomic ratios of the elements.

Tab. S1. The element ratios of $CuIr_2Te_{4-x}I_x$ from EDXS results.

Element ratio \ Sample	Cu	Ir	Te	I
$CuIr_2Te_4$ [30]	0.97	1.96	3.93	0
$CuIr_2Te_{3.9}I_{0.1}$	0.98	1.97	3.86	0.09
$CuIr_2Te_{3.2}I_{0.8}$	0.97	1.96	3.17	0.75
$CuIr_2Te_3I_1$	0.95	1.95	2.92	0.92

Fig. S3. Hall results for (a) undoped $CuIr_2Te_4$ and (b) $CuIr_2Te_{3.8}Te_{0.2}$ at low temperatures.