Supporting Information

Probing Thermoelectric Properties of Aluminium-Doped Copper Iodide

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Figure S1: XRD diffractogram of the undoped and Al doped CuI samples showing the most closed pack plane (111) peak shift to higher angles.



Figure S2: (a - d) EDXS data of Al-doped CuI samples of Al 0.05, Al 0.1, Al 0.15, Al 0.2 respectively, (e) fracture surface of Al 0.1 sintered pellet, (f - i) element mapping of Al 0.1 pellet sample.



Figure S3: Photo luminescence spectra of undoped CuI and Al doped CuI powders.(Broad peak at 421 nm corresponds to Cu vacancies whereas peak at 682 nm indicates the formation of extra iodine vacancies in Al 0.1 doped CuI sample.)



Figure S4: (a and b) Peak fitting of Raman spectra of 0.1 mol% aluminium doped CuI powder sample at 150 K, and 300 K respectively. Absence of LO peak at 300 K can be noticed here in Fig. S3(b).