## **Supporting Information**

## High Structural Stability, Reduced Lattice-Thermal Conductivity, and Elevated Energy Harvesting Efficiency in a Lu<sub>2</sub>CoCrO<sub>6</sub>

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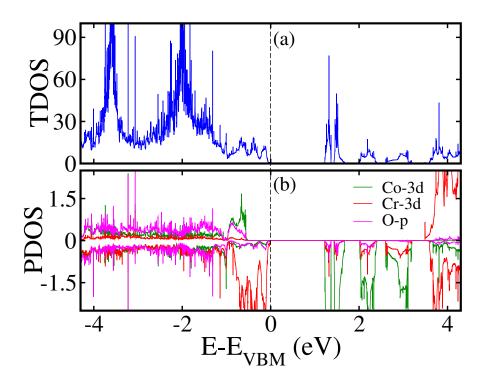


FIG. 1S: (Color line) GGA+U+SOC calculated (a) total density of states (TDOS) and (b) partial density of states (PDOS), highlighting the role of Co-3d/Cr-3d/O-2p orbitals around the Fermi level for the Lu<sub>2</sub>CoCrO<sub>6</sub> structure.