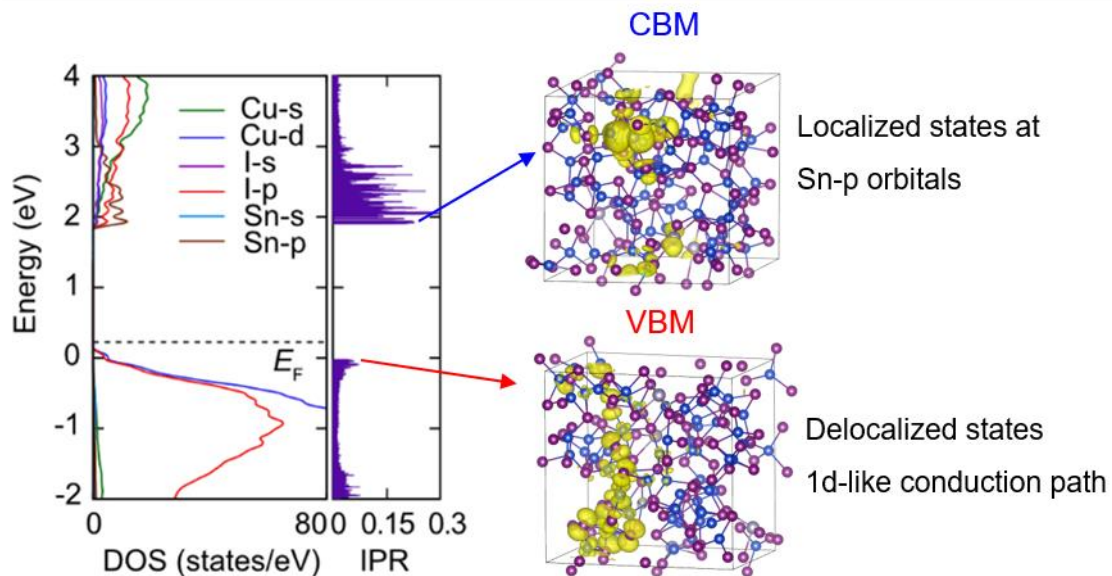


Conduction mechanism of *a*-CuI



Despite the great potential of *a*-CuI:Sn as a new class of transparent p-type semiconductors, the fundamental understanding is still incomplete. To reveal the microscopic origin, structural and electrical properties of *a*-CuI are investigated. Despite the amorphous structure, states at valence band maximum are extended in linear ways due to the hybridization between I-5p state, explaining the high hole mobilities in the experiment. This work will help design new wide-band-gap p-type semiconductors. This work was published at *Physica Status Solidi B*, *accepted*.