Figure 3.3: (a) Top: Schematic figure of the probable configuration of FeLi with a higher Fe oxidation state. Bottom: (Left) EELS data of FeLi and the Fe in bulk. (Right) Compared L3/L2 ratio with reference different iron compounds; (b) ABF image of half charged state showing the Li staging; (c) BFTEM and (d) false-color elemental map of charged FeF₂ with Fe (green) and LiF (red), showing a interconnected network.
Figure 3.4: (a) HAADF and (b) ABF of local clustering of A-site vacancies and O4 square window lithium. (c) HAADF STEM images of a LLTO grain boundary. EELS data of (d) Li K edge, (e) Ti L edge for the grain boundary and the bulk.