Description of additional supplementary files

Supplementary Movie 1 – Time-lapse movie showing the morphological change of CuInP2S6 capacitor under repetitive voltage cycles.

Supplementary Movie 2 – Real time movie showing the process for scratching a bubble protrusion using micromanipulator probe.

Supplementary Movie 3 – Animation of atomic motions for P1 vibrational mode.

Supplementary Movie 4 – Animation of atomic motions for P2 vibrational mode.

Supplementary Movie 5 – Animation of atomic motions for P3 vibrational mode.

Supplementary Movie 6 – Animation of atomic motions for P4 vibrational mode.