IX. Supplemental Information

We here illustrate the band structure between more high symmetry k-points on the surface of the 1st Brillouin zone for all 4 compounds investigated. The interesting behavior of bands near the valence and conduction band edges occurs along U-L-Z-a-Γ-Z-F, so we have plotted this path in the body of this paper. Other combinations such as U-F, F-a, F-L, and F-Γ give no useful insight for near-edge transport study. The Γ-L path is also omitted because its behavior is nearly identical to U-L, since both paths intersect the parabolic L-point pocket. The U-a-Z path contains pertinent band behavior, as seen in the U-Z band plots here. It is, however, the a-Z portion which fully contains this behavior, leaving U-a unnecessary to include.