

Figure 3: Diamonds: Calculated range-parameter for the hopping integrals in the single-layer compounds La_2CuO_4 , $\text{Bi}_2\text{Sr}_2\text{CuO}_6$, $\text{Tl}_2\text{Ba}_2\text{CuO}_6$, and $\text{HgBa}_2\text{CuO}_4$, as well as for the idealized infinite-layer compound, buckled CaCuO_2 , plotted as a function of the distance (in Å) between plane-copper and apical oxygen. For the optimally doped compounds, the observed T_c -values are respectively 40 K, 40 K, 85 K, 90 K, and possibly $\gg 100$ K. Lines: Calculated range-parameters for displacements of apical oxygen.