

Figure 5.27.

Electrical conductivities of several common substances and representative solid electrolytes are shown at temperatures where the materials might be used.  $\beta$ -Alumina is the sodium form, in which  $\text{Na}^+$  is the mobile species. In silver iodide,  $\text{Ag}^+$  is responsible for the electrical conductivity, as it is in  $\text{RbAg}_4\text{I}_5$ . [After Shriver and Farrington, *C&E News*, 63, 42.(1985).]

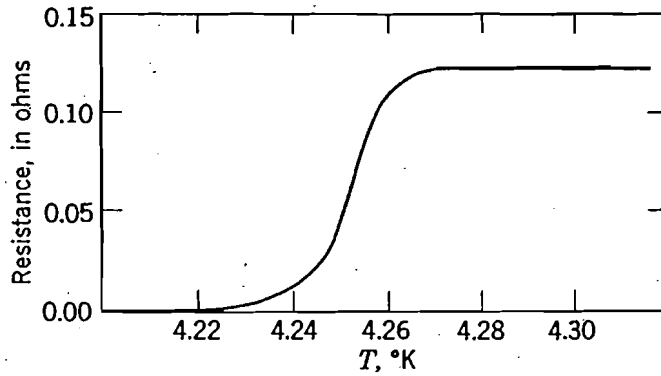


Figure 11.1 Electrical resistivity of mercury as a function of temperature. (H. Kamerlingh Onnes, Leiden Comm. Vol. 122b, 1911.)

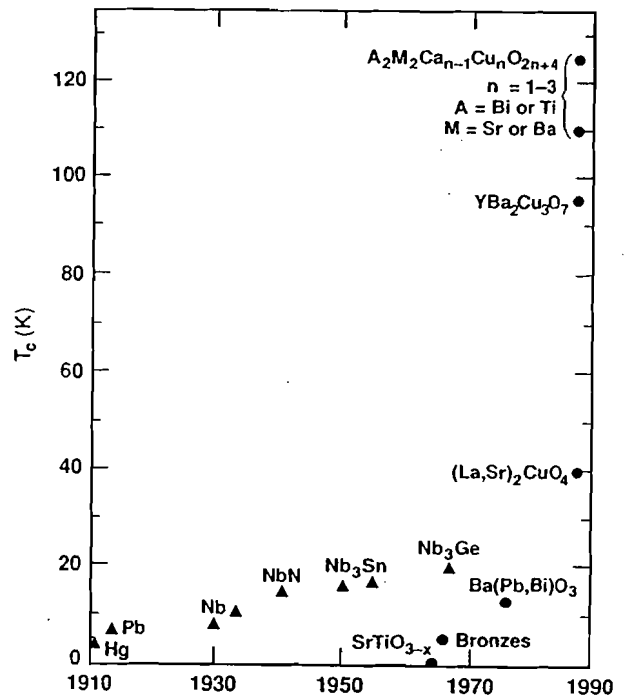
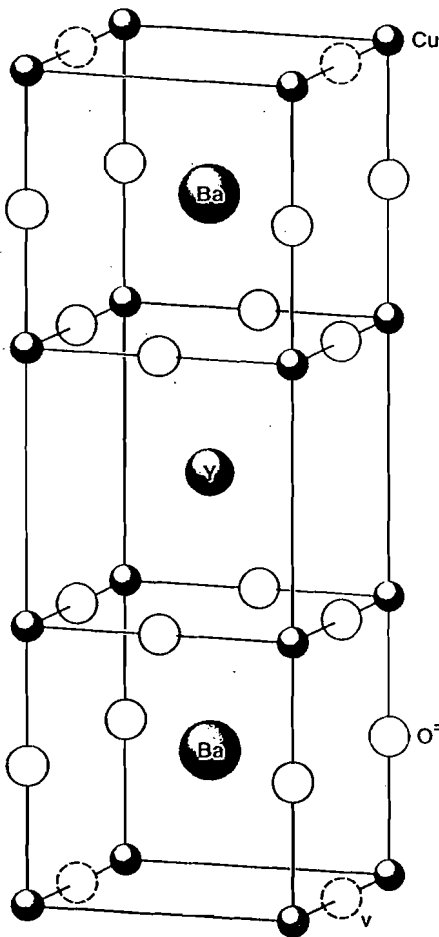


Figure 5.19.

The 1-2-3 structure has three cubic units.  $O^{2-}$  ions are absent from the vertical edges of the Y cell. They are also missing from the terminal horizontal planes  $YBa_2Cu_3O_6$ , but there are two  $O^{2-}$ , shown in dashed circles, in  $YBa_2Cu_3O_7$ .

