



FIG. 3.1 Thermal conductivity of selected classes of materials (adapted from Hust 1983). The conductivities of nearly pure metals are similar at room temperature but differ widely at low temperatures, depending on their purity, as represented by the residual-resistance ratio RRR labeling these curves. (The higher the RRR, the purer the material and the higher the low-temperature thermal conductivity, as described in Sec. 6.3.4). Arrows along the right scale indicate the room-temperature values for several common metals. *Tabulated* data for these and additional materials are given in Appendix A6.7.