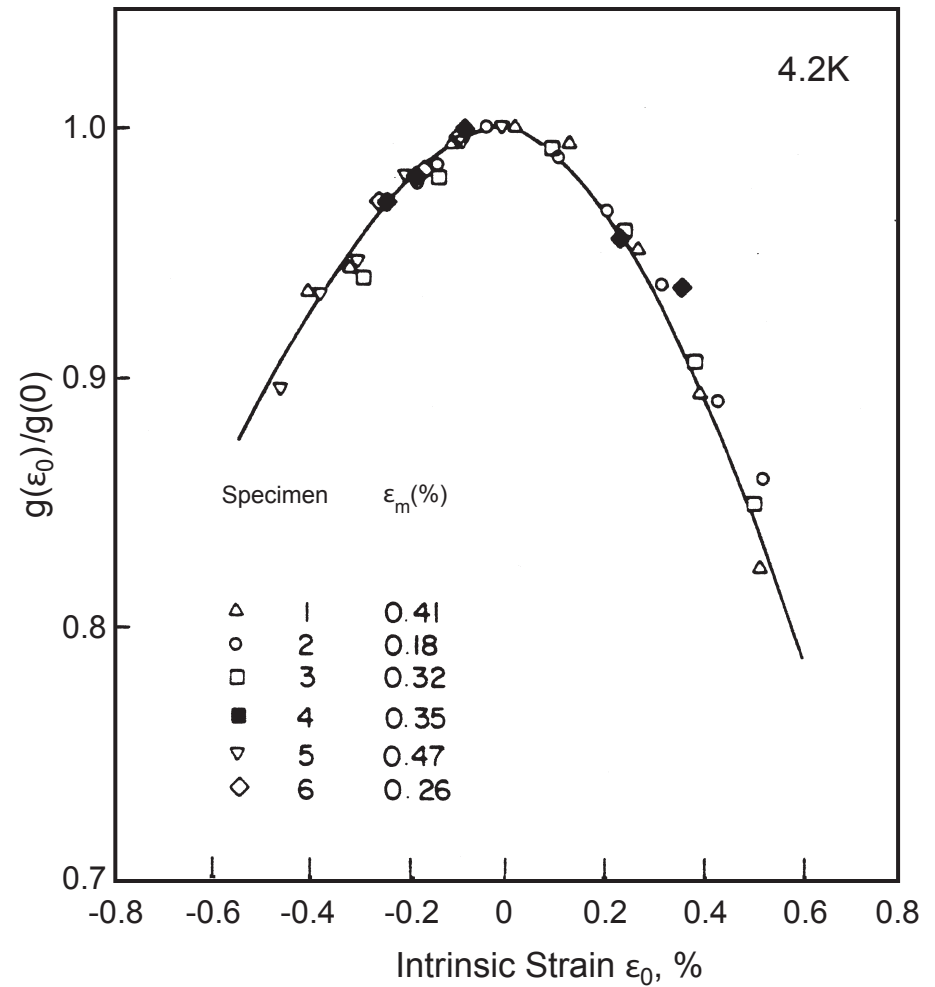


(a)



(b)

FIG. 10.30 Correlation of data for binary multifilamentary  $\text{Nb}_3\text{Sn}$  wires showing the nearly universal effect of axial strain on (a) the effective upper critical field  $B_{c2}^*(\epsilon_0)$  at 4.2 K and (b) the strain-scaling prefactor  $g(\epsilon_0)$  in Eq. (10.18). The results are shown in terms of the *intrinsic* strain  $\epsilon_0$  experienced by the superconducting material, defined as  $\epsilon_0 \equiv \epsilon - \epsilon_m$ , where  $\epsilon_m$  is the strain at the maximum. For each sample,  $B_{c2}^*(\epsilon_0)$  and  $g(\epsilon_0)$  are normalized by their maximum values at  $B_{c2}^*(\epsilon_0=0)$  and  $g(\epsilon_0=0)$ , respectively. The solid curves in each figure are generated from Eqs. (10.21) and (10.22). For the case of binary  $\text{Nb}_3\text{Sn}$ , the normalized correlation curves for both functions are nearly identical. (From Ekin 1980a.)