



FIG. 10.12 The first measurement of the *transport* critical current as a function of magnetic field in granular YBCO, demonstrating extreme weak-link behavior (Ekin et al. 1987). The solid curves show that the *intergranular* transport J_c is sharply suppressed by the application of very low (millitesla) magnetic fields. At the same time, magnetization measurements show that the *intragranular* J_c (light dashed line) is significantly higher than the intergranular transport J_c and thus implicated grain boundaries as the source of the weak links.