



FIG. 6: $I_F^{(1)}(B_{\parallel})$ curves measured after the junction was cooled in perpendicular magnetic field H_{per} of various values.

I_c^{-max} denoting it as I_c^{max} . Similar to [16, 17], we found the deviation of the $I_c(B_{\parallel})$ curve from a "vortex-free" Fraunhofer-like curve (Fig.3, open circles) and we observed a strong suppression of I_c^{max} . For each value of B_{\perp} the vortex density n_A was calculated by using Eq.(12). The dependence of the maximum Josephson critical current I_c^{max} on the density of trapped Abrikosov vortices n_A is shown in Fig. 7 by open squares. It is well known that