



FIG. 3. The dependence of relative total free energy on the position of the disclination ring for the hyperbolic structure with half-height  $D = 2.5 \mu\text{m}$  and different aspect ratio of the cylinder.  $F_r^h$  is the total free energy with disclination ring at  $r' = r_1'$  and  $F_p^h$  is the total free energy with singular point at  $r' = 0$ .