

Fig. 13 Moving target (straight);  $K_P = 0.3$ ,  $K_{Pr} = 1$ ,  $K_D = 0.9$ ,  $K_{Dr} = 1.8$ ,  $K_{D\alpha} = K_{Dr\alpha} = 0.2$ ,  $K_{P\alpha} = 0.3$ ; (a) Quadrotor system performance, and (b) Control performance.