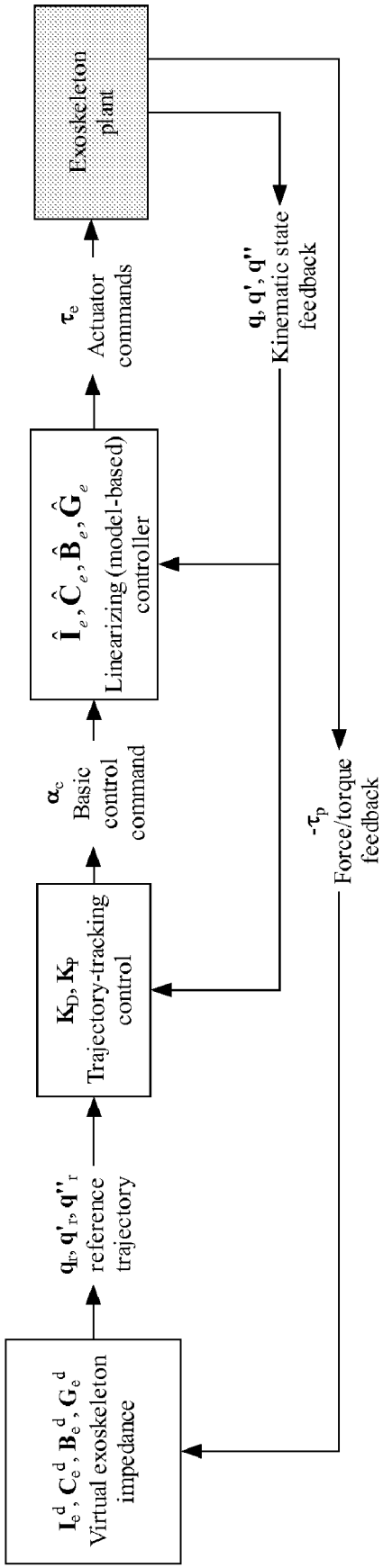
$I_e^d, C_e^d, B_e^d, G_e^d$
Virtual exoskeleton impedance
q_r, q'_r, q''_r
reference trajectory
K_D, K_P
Trajectory-tracking control
α_c
Basic control command
$\hat{I}_e, \hat{C}_e, \hat{B}_e, \hat{G}_e$
Linearizing (model-based) controller
τ_e
Actuator commands
Exoskeleton plant
q, q', q''
Kinematic state feedback
$-\tau_p$
Force/torque feedback

FIG. 13