

# Nonlinear Control for Quadratic Boost Output Voltage Regulation

Fig. 1. Simulation results for the proposed controller and desired output  $x_{ref} = 12$  V

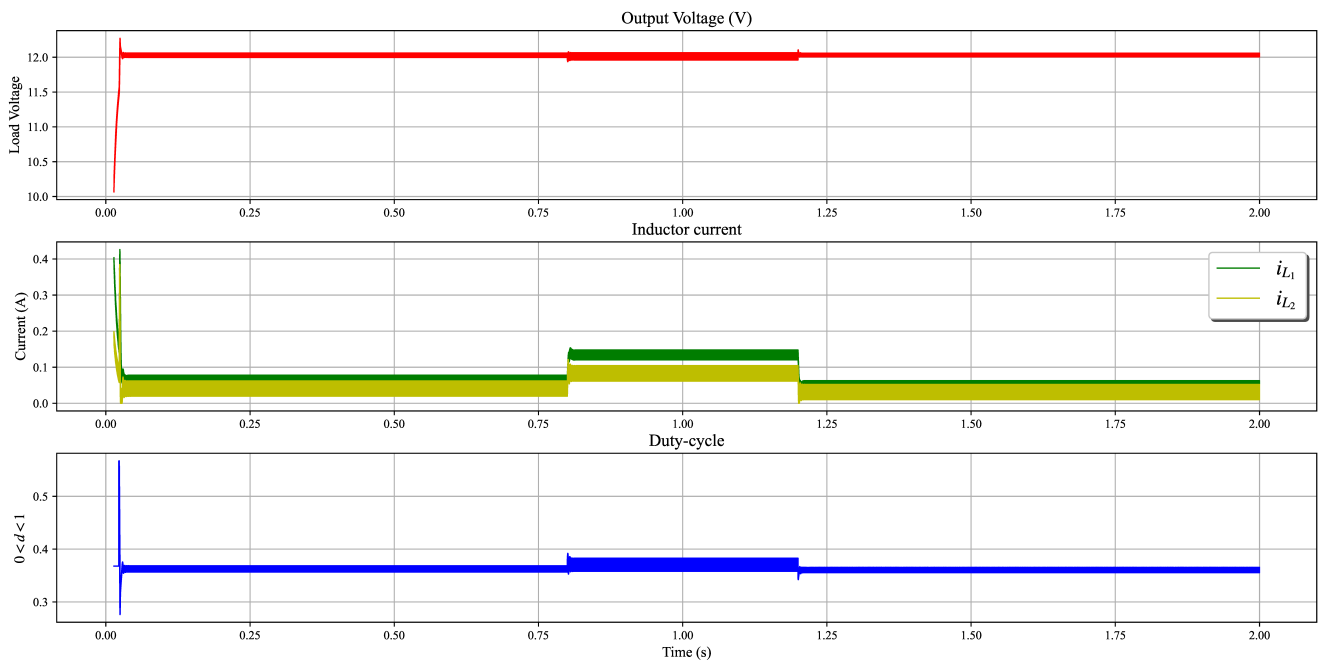


Fig. 2. Zoom in for the proposed controller and desired output  $x_{ref} = 12$  V

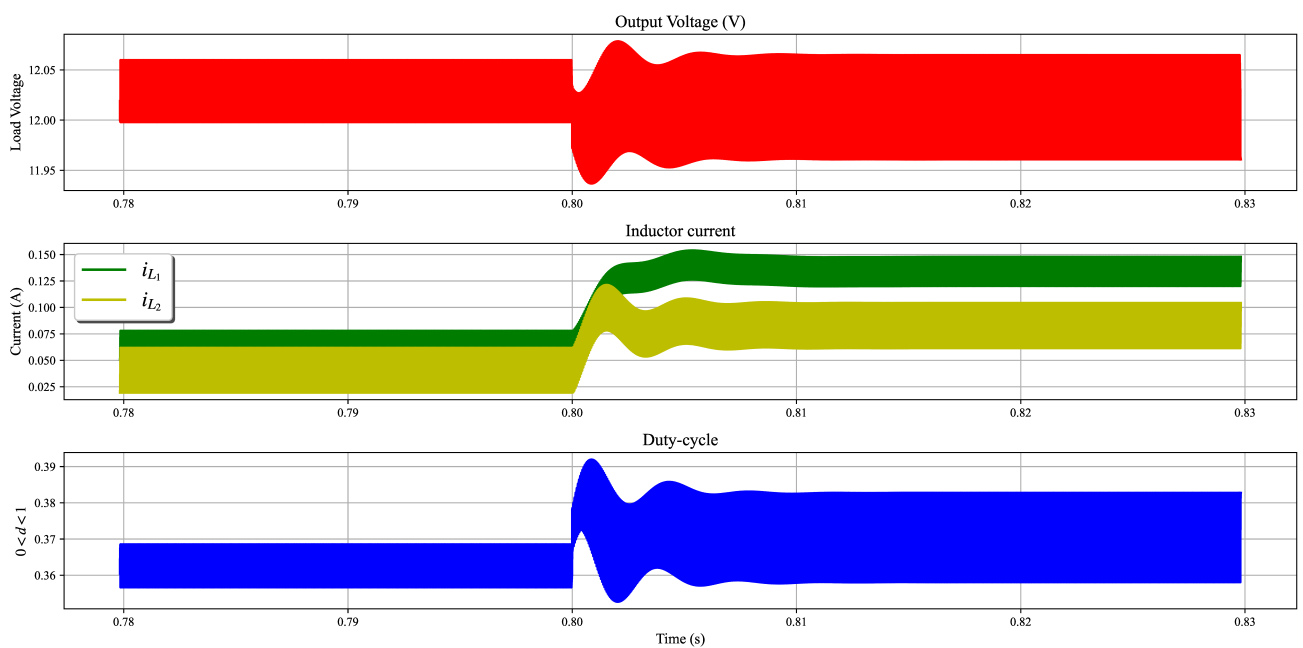


Fig. 3. Simulation results for PI controller and desired output  $x_{ref} = 12\text{ V}$

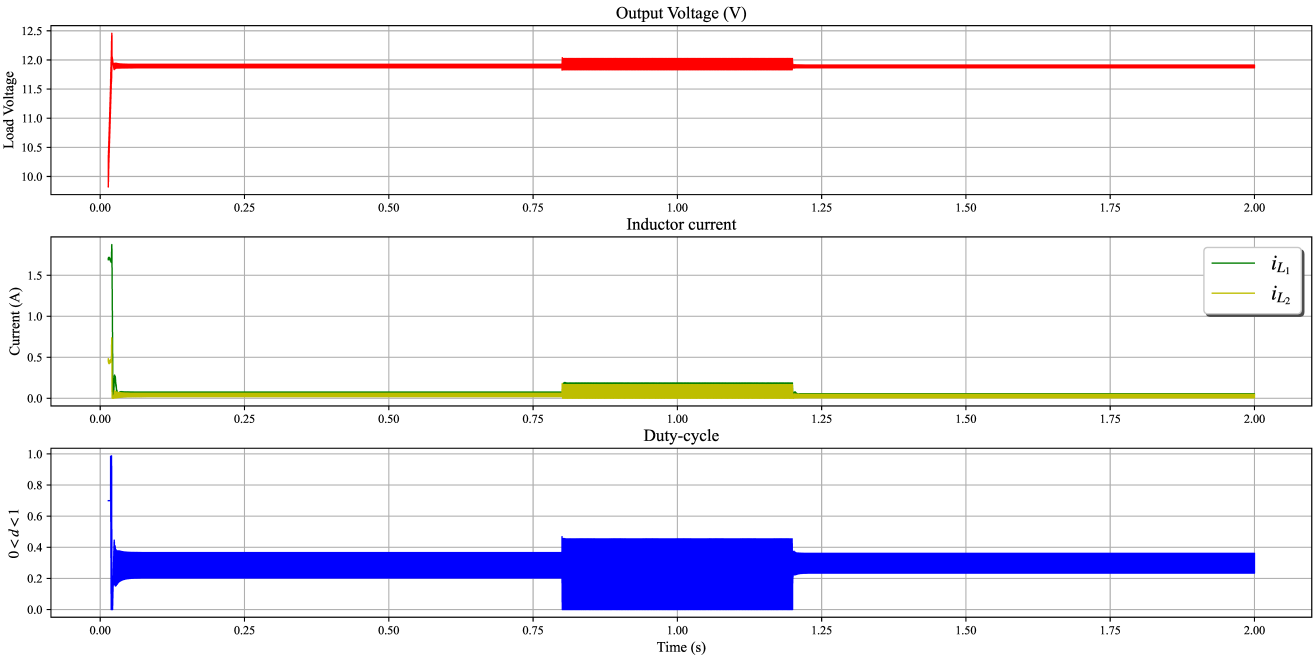


Fig. 4. Zoom in for PI controller and desired output  $x_{ref} = 12\text{ V}$

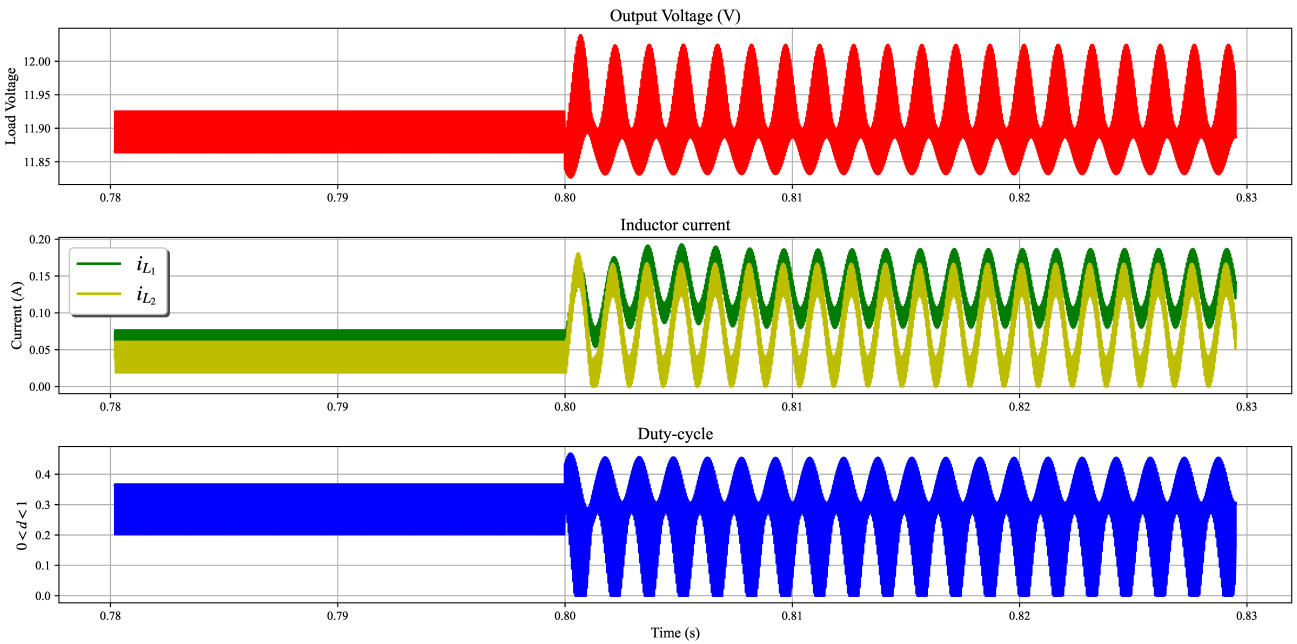


Fig. 5. Simulation results for the proposed controller and desired output  $x_{ref} = 24$  V

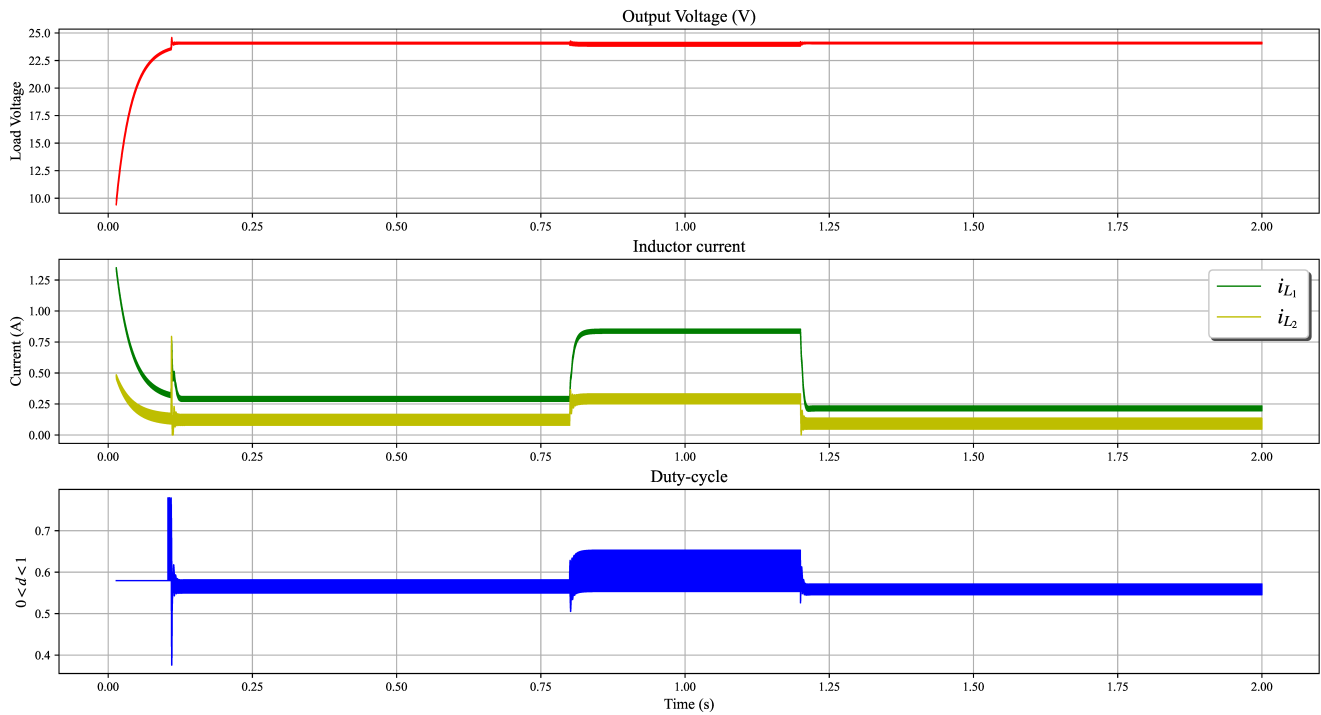


Fig. 6. Zoom in for the proposed controller and desired output  $x_{ref} = 24$  V

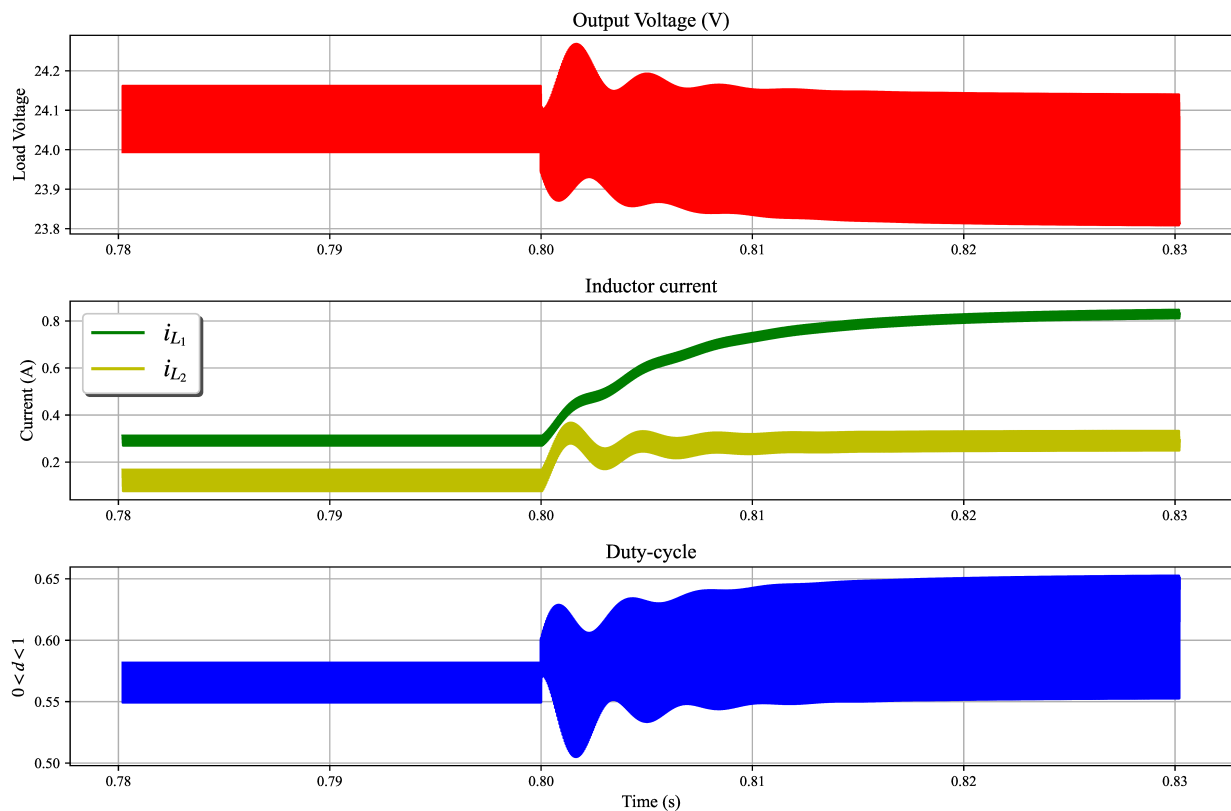


Fig. 7. Simulation results for PI controller and desired output  $x_{ref} = 24$  V

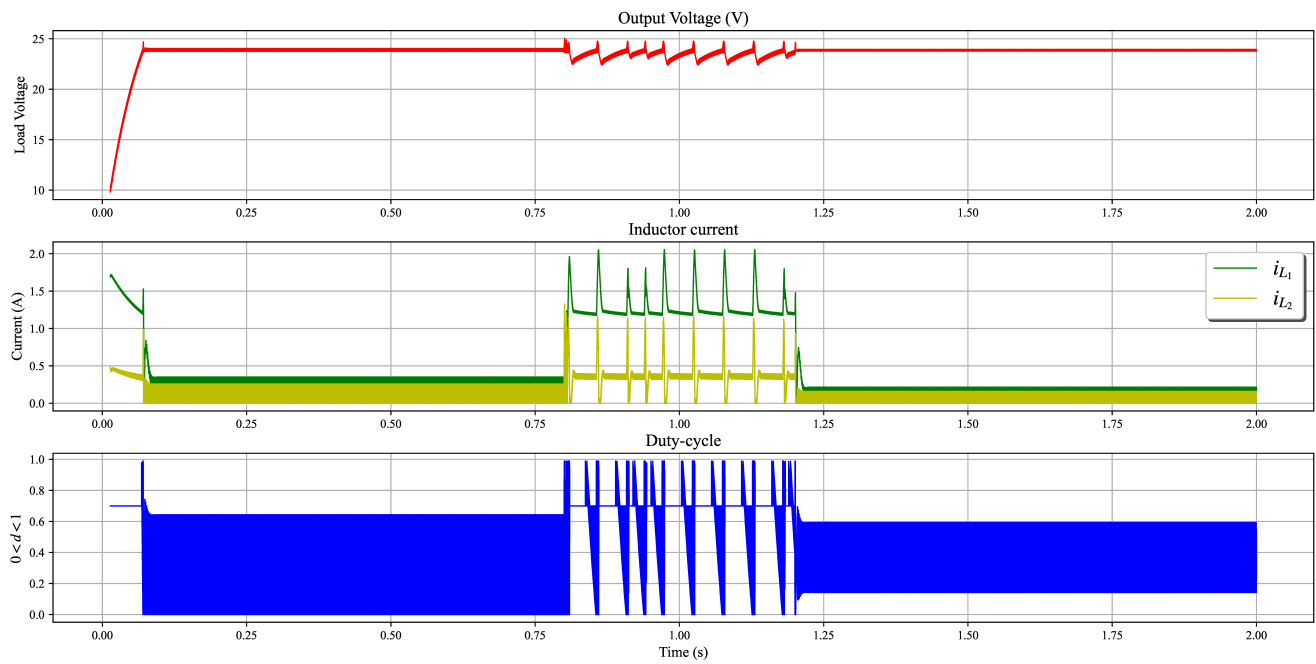


Fig. 8. Zoom in for PI controller and desired output  $x_{ref} = 24$  V

