

Comparative Study Performance of the Induction Motor between SMC and NLC Modes Control

Authors : A. Oukaci, R. Toufouti, D. Dib, I. Atarsia

Abstract : This article presents a multitude of alternative techniques to control the vector control, namely the nonlinear control and sliding mode control. Moreover, the implementation of their control law applied to the high-performance to the induction motor with the objective to improve the tracking control, ensure stability robustness to parameter variations and disturbance rejection. Tests are performed numerical simulations in the Matlab/Simulink interface, the results demonstrate the efficiency and dynamic performance of the proposed strategy.

Keywords : Induction Motor (IM), Non-linear Control (NLC), Sliding Mode Control (SMC), nonlinear sliding surface

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