In this paper, an intelligent controller design method for the chaotic permanent magnet synchronous motor stability is presented. Active control strategy is a powerful control technique in stability chaotic systems. Learning algorithm using active control techniques, and then intelligent controller will be used. The proposed method can reduce the dimensions of the controller. A comparative study has been one with active and adaptive neural fuzzy controller. Simulation results show that the proposed controller can be chaotic permanent magnet synchronous motor will converge to the unstable equilibrium points. The controller can zero error, while has been tracking well desired value.

References

8. Tao Yang, (Member IEEE), and Leon O. Chua, Fellow, (1997), Impulsive Stabilization for Control and Synchronization of Chaotic Systems: Theory and Application to Secure Communication, IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS—I: FUNDAMENTAL THEORY AND APPLICATIONS, vol. 44, NO. 10,

22. Wei, D., Luo, X., Wang, B., Fang, J. (2009), Robust adaptive dynamic surface control of
Design of Intelligent Controller for Chaotic Permanent Synchronous Motor


Index Terms

Computer Science, Control Systems

Keywords

Neural fuzzy, chaotic, permanent magnet motor, synchronization