

## عنوان مقاله:

Maximum Torque per Ampere Sensorless Speed Control of Synchronous Reluctance Motors

## محل انتشار:

هشتمین کنفرانس بین المللی پیشرفت های اخیر در مهندسی راه آهن (سال: 1402)

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## خلاصه مقاله:

Nowadays, Synchronous Reluctance motors (SynRM) have received much attention for many applications such as tractions applications and become more potentially important in the application of AC motor drives. Since modern speed control methods are based on the elimination of the number of sensors in industrial applications and also to reduce the cost and improve reliability, sensorless speed control methods have been proposed for SynRM drives. This paper presents a robust and high-performance sensorless control scheme for SynRM. Also, the maximum torque per ampere (MTPA) control strategy is used to reduce the rotor chopper losses and increase the whole drive system efficiency. The performance of the proposed method has been investigated and finally, simulation results are taken from MATLAB/SIMULINK to confirm the effectiveness of the proposed sensorless speed control system for the SynRM.

## کلمات کلیدی:

(Synchronous reluctance motor (SynRM); sensorless control; maximum torque per ampere (MTPA).

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1708492>

