

## عنوان مقاله:

Analysis and Simulation of Acoustic Noise in Finite Element Switched Anorexia Motors

## محل انتشار:

هشتمین کنگره ملی تازه های مهندسی برق و کامپیوتر ایران (سال: 1400)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

Due to high importance of noise in switched reluctance motor (SRM), a coupled electromagnetic-structure simulation model is created for this motor using ANSYS finite element (FE) package. Since the main reason for producing noise and vibration in the SRM is the radial force applied to the stator pole, the radial force waveform is predicted using the 2D FE transient analysis in the developed electromagnetic model. Determination of the frequency modes and how to change the stator structure are considered in the created structure model. Applying the proposed simulation model to an  $\lambda/6$  SRM, the simulation results are presented and evaluated.

## کلمات کلیدی:

switched reluctance motor, vibration, noise, finite element method, ANSYS, electromagnetic simulation model

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1368754>

