

## عنوان مقاله:

Nonlinear Active Noise Control Based on VirtualSensing Technique in an Enclosure with a Flexible Panel

## محل انتشار:

سومین کنفرانس بین المللی آکوستیک و ارتعاشات (سال: 1392)

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## خلاصه مقاله:

Recently, the attempts to overcome the nonlinear conditions have been taken into the consideration in many researches in active noise control (ANC), thus nonlinear filters have been improved widely. Moving the place of quite zone from error microphones to other points is another goal in new ANC. Therefore, virtual sensing in ANC has been proposed to improve the performance of ANC in real life. In this paper to overcome nonlinear situations in ANC systems nonlinear FSLMS algorithm has been chosen and for the purpose of moving the place of quite zone, the remote microphone virtual sensing technique is considered. This ANC system is implemented experimentally in an enclosure with a flexible panel. The experimental results show better sound attenuation in the place a part from the physical error point due to using virtual sensing technique. In addition, the performance of two different algorithms (i.e. linear FXLMS and nonlinear FSLMS) are compared for different input noise signals and is shown that FSLMS has better performance but is more difficult to implement and more complicated to tune the parameters

## کلمات کلیدی:

Nonlinear active noise control, FXLMS, FSLMS, Virtual sensing technique

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/270939>

