**عنوان مقاله:**

Parameter Estimation of Noisy Multichannel Autoregressive Signals

**محل انتشار:**

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**خلاصه مقاله:**

This paper is concerned with estimation of multichannel autoregressive (MAR) model parameters using noisy observations. The NILS method proposed in [1] for estimation of the parameters of noisy scalar autoregressive signals is generalized to the multichannel case. An improved least-squares based parameter estimator is introduced so that the variance- covariance matrix of the multichannel noise can be estimated in an iterative manner. With this, the noise induced estimation bias can be removed to yield the unbiased estimate of the MAR parameters. In a simulation study, the performance of the proposed unbiased estimation algorithm is evaluated and compared with that of existing parameter estimation methods.

**کلمات کلیدی:**

autoregressive signals, multichannel, least-squares method, parameter estimation, noisy observations.

**لینک ثابت مقاله در پایگاه سیویلیکا:**

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