

## عنوان مقاله:

Estimation of the Bistatic Echolocation from Underwater Target Using Ship Noise based on Normal-Mode Model

# محل انتشار:

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### خلاصه مقاله:

In this paper, a novel application that uses the broadband noise from a ship-of-opportunity to estimate the scattering from underwater objects is reported. The propagation is based on the normal-mode model. The source localization (location of propeller) is initially realized using incoherent broadband matched-field processing. Then, by utilizing an estimator that relies on Normal-Modes, the target echo below the sea surface is calculated to evaluate the location of the target. The proposed idea is illustrated using simulation and then verified using the acoustic data from a ٢-١٩ underwater communication trial in Grand Passage, Nova Scotia in Canada. Experimental results show that the proposed technique can be a reliable signaling method and environmentally friendly that can be applied to the fields of .underwater communication and ocean monitoring for a shallow water environment

کلمات کلیدی: Bistatic echolocation, Normal-mode model, Matched-field processing, Underwater Localization, Ship-of-opportunity

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