Localization of distributed radiation sources from a printed circuit board in the near field using wavelet transform

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Abstract

© 2018 by IOP Publishing Ltd. In this paper we describe algorithms for localization of distributed radiation sources from a printed circuit board in the near field using wavelet transform. The radiation sources are presented in the form of a set of simple oscillators - Hertz dipoles. Comparison of the two methods of localization for distributed radiation sources using wavelet transform is performed using Tikhonov regularization and LASSO regression. The model examples show that the application of LASSO regression using wavelet transform gives better results.

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