

#### عنوان مقاله:

Magnetic Resonance Imaging Noise Elimination with Thresholding UsingTeaching-Learning-based Optimization Algorithm

### محل انتشار:

اولین کنفرانس ملی پژوهش های کاربردی در علوم برق ،کامپیوتر و مهندسی پزشکی (سال: 1397)

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#### خلاصه مقاله:

Noise elimination from images is one of the most important fields of image processing Wavelet-based methods are always associated with Thresholding that are presented togaussian noises elimination. Multiplicity wavelets have properties such as symmetry, highlevelapproximation simultaneously and the image decomposes more accurately and retainsthe edges. In this paper, after magnetic resonance imaging (MRI) decomposition, usingteaching-learningbased optimization (TLBO), appropriate thresholding is used. The TLBOalgorithm is a population-based algorithm inspired by the impact that a teacher has on hislearners. Using the teaching-learning-based optimization algorithm to calculate theappropriate threshold, noise elimination methods increase. Simulation results show that bycalculating the .appropriate threshold using TLBO algorithm, multiply wavelet transform isbetter than other methods

# كلمات كليدى:

Magnetic resonance imaging, Teaching-learning based optimization, Noise elimination

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