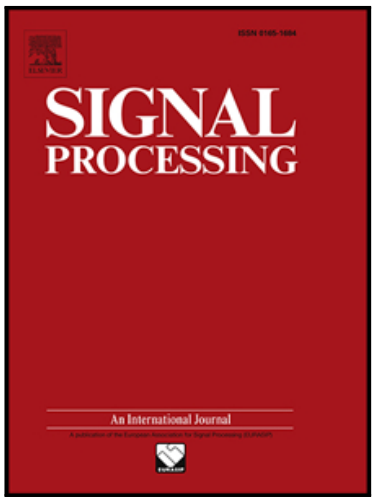

Improvement in accuracy for dimensionality reduction and reconstruction of noisy signals. Part I: The case of random signals

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Highlights

- A novel interpretation of the problem of dimensionality reduction and reconstruction of random signals is studied.
- The underlying idea is to construct a transform which has more parameters to optimize than those in the known optimal transforms.
- The proposed transforms provide, under a certain condition, better associated accuracy than that of the known optimal transforms.