

# Image compression using discrete orthogonal transforms defined on the evolvments of two-dimensional fields

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## *Abstract*

The article provides a comparative analysis of the effectiveness of two-dimensional discrete orthogonal transforms (DOT) for image compression. Several evolvments of two-dimensional fields are shown that provide low correlation of transformants when applying one-dimensional DOTs to them. The article also explores the possibility of using one-dimensional DOTs defined on such evolvments as an alternative to two-dimensional ones.

*Keywords:* image compression, discrete orthogonal transform, DOT, two-dimensional field.

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