

## A new multiresolution near-field to near-field transform suitable for multi-region FDTD schemes

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In this paper, new Discrete Wavelet Transform (DWT)-based compression techniques are applied to the computation of the near-field to near-field transform in a Multi-Region FDTD (MR/FDTD) scheme. The compression is applied to both radiating fields on the source surface and incident fields on the excitation surface, which significantly decreases the computation cost of the interactions between the volumes.

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