عنوان مقاله:

Application of Optimal-Dimensionality Sampling of Spherical Wave Expansion in Near-Field Far-Field Transformation

محل انتشار:

چهارمین کنگره بین المللی مهندسی برق، کامپیوتر و مکانیک (سال: 1399)

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خلاصه مقاله:

In this paper, spherical wave expansion (SWE) with optimal-dimensionality sampling scheme developed to the vector field and is applied to transformation of far-field to near-field. We have shown that for the radiation patterns which cannot be exactly expressed by sphericalmodes due to the truncation of the expansion, ringing artifacts are observed in the reconstruction fields in this procedure. We have suggested to use the weighted spherical wave expansion (WSWE) in order to minimize this effect

کلمات کلیدی:

Far-field to near-field transformation, Optimal-dimensionality sampling, Weighted Spherical Wave Expansion

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