EXTRACTION OF EFFECTIVE PARAMETERS OF A COMPOSITE META-MATERIAL STRUCTURE

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ABSTRACT. The aim of this paper is to study the electromagnetic properties of a periodic structure in the context of meta-materials. The design tool is the HFSS software which uses the finite element method. The extraction of effective parameters by the reflection-transmission method demonstrates the meta-material behavior of the studied structure.

KEYWORDS: metamaterials, effective parameters, negative refractive index, simulation.