

260

Accession number:20123815457066

Title:Terahertz mirage: Deflecting terahertz beams in an inhomogeneous artificial dielectric based on a parallel-plate waveguide

Authors:Mendis, Rajind (1); Liu, Jingbo (1); Mittleman, Daniel M. (1)

Author affiliation:(1) Department of Electrical and Computer Engineering, MS-378, Rice University, Houston, TX 77251, United States

Corresponding author:Mendis, R.

Source title:Applied Physics Letters

Abbreviated source title:Appl Phys Lett

Volume:101

Issue:11

Issue date:September 10, 2012

Publication year:2012

Article number:111108

Language:English

ISSN:00036951

CODEN:APPLAB

Document type:Journal article (JA)

Publisher:American Institute of Physics, 2 Huntington Quadrangle, Suite N101, Melville, NY 11747-4502, United States

Abstract:The field of metamaterials and the formalism of transformation optics have provided a prescription for constructing artificial dielectrics with unique properties such as light trapping and cloaking. Here, we describe a different approach to creating an inhomogeneous artificial medium, based on waveguide techniques, which does not rely on engineered subwavelength-scale components. We demonstrate a mirage effect in which an object several times larger than the selected wavelength is rendered invisible by bending a beam around it. © 2012 American Institute of Physics.

Number of references:15

Main heading:Dielectric materials

Controlled terms:Dielectric waveguides - Metamaterials

Uncontrolled terms:Artificial dielectric - Artificial medium - Light-trapping - Mirage effects - Parallel plate waveguide - Tera Hertz - Transformation optics - Waveguide techniques

Classification code:701.1 Electricity: Basic Concepts and Phenomena - 708.1 Dielectric Materials - 951 Materials Science

DOI:10.1063/1.4752241

Database:Compendex

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