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Accession number:20115014594203

Title:Waveguided spoof surface plasmons with deep-subwavelength lateral confinement

Authors:Martin-Cano, Diego (1); Quevedo-Teruel, O. (1); Moreno, Esteban (1); Martin-Moreno, L. (2); Garcia-Vidal, F.J. (1)

Author affiliation:(1) Departamento de Fisica Teorica de la Materia Condensada, Universidad Autonoma de Madrid, E-28049 Madrid, Spain; (2) Instituto de Ciencia de Materiales de Aragon (ICMA), Departamento de Fisica de la Materia Condensada, CSIC-Universidad de Zaragoza, E-50009 Zaragoza, Spain

Corresponding author:Garcia-Vidal, F.J.(fj.garcia@uam.es)

Source title:Optics Letters

Abbreviated source title:Opt. Lett.

Volume:36

Issue:23

Issue date:December 1, 2011

Publication year:2011

Pages:4635-4637

Language:English

ISSN:01469592

E-ISSN:15394794

CODEN:OPLEDP

Document type:Journal article (JA)

Publisher:Optical Society of America, 2010 Massachusetts Avenue NW, Washington, DC 20036-1023, United States

Abstract:We present a new type of waveguide scheme for terahertz circuitry based on the concept of spoof surface plasmons. This structure is composed of a one-dimensional array of L-shaped metallic elements horizontally attached to a metal surface. The dispersion relation of the surface electromagnetic modes supported by this system presents a very weak dependence with the lateral dimension and the modes are very deep-subwavelength confined with a long-enough propagation length.

Number of references:26