

479

Accession number:WOS:000308598300009

Title:Fiber-drawn double split ring resonators in the terahertz range

Authors:Singh, N. (1); Tuniz, A. (1); Lwin, R. (1); Atakaramians, S. (1); Argyros, A. (1); Fleming, S.C. (1); Kuhlmeiy, B.T. (1)

Author affiliation: (1) Univ Sydney, Sch Phys, IPOS, Sydney, NSW 2006, Australia

Source title:OPTICAL MATERIALS EXPRESS

Abbreviated source title:OPT MATER EXPRESS

Volume:2

Issue:9

Issue date:SEP 1 2012

Pages:1254-1259

Language:English

ISSN:2159-3930

Document type:Article

Publisher:OPTICAL SOC AMER,2010 MASSACHUSETTS AVE NW, WASHINGTON, DC 20036 USA

Abstract:We present a novel method for producing metamaterials based on double split ring resonators with a magnetic resonance at terahertz (THz) frequencies. The resonators were made by fiber drawing, a scalable method capable of producing large volumes of metamaterials, demonstrating that this technique can be extended to complex meta-atoms. The observed resonances occur at larger wavelengths relative to the resonator size, compared to single split ring resonators, and are in good agreement with simulations. (c) 2012 Optical Society of America

Number of references:30

Main heading:Materials Science; Optic