



Ultrashort Electromagnetic Modes in the Low Frequency Region of the Spectrum in a Nanocylinder Array

Sirbu L., Sergentu V., Muller R., Ursaki V., Tiginyanu I.M.

https://doi.org/10.1007/978-94-017-8572-3_19

Abstract

In this work we present the theoretical model of existence of ultrashort modes in low frequency region of the electromagnetic spectrum in a system of nanocylinders array. These modes have no analogue in a spectrum with only one nanocylinder. For nanodot deposited or filled-in pores produced from semiconductor or conductive polymers, monomers, composites etc., the SPR may be found in MIR range or in a range of frequencies with much higher wavelengths, like THz even GHz.