RESONANT SCATTERING OF GHZ WAVES BY A STRUCTURE OF TWO DIELECTRIC RINGS

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Resonance scattering on the main magnetic mode by a linear structure consisting of two dielectric rings oriented along the wave vector of an incident linearly polarized electromagnetic wave of the GHz band has been experimentally investigated. In the scattering spectrum of the reflected wave, the resonance frequency splits and the amplitudes of both peaks increase significantly compared to the amplitude for a single ring in the near zone. There is no splitting of the resonant frequency in the transmitted signal, the amplitude of the transmitted signal in the far zone increases significantly compared to a single ring.

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