Abstract

The multiple step subwavelength metal grating with relief structure is designed and analyzed in which the profile of grating structure is having a relief structure with multiple steps. The optical presentation of traditional structure is evaluated and compared in terms of reflectivity over visible and ultra violet spectrum with the help of Opti-FDTD. It is shown that, near the ultra violet band multiple reflections can be found compared to traditional metal grating in the same
parameters. With these characteristics, designed metal grating with multiple steps is expected to find applications in optical communication as multichannel reflector.

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Index Terms
Computer Science
Communications

Keywords
Metal Grating Fdtd Multichannel Reflector.