Different Multi-layer Photonic Configurations for Light Filtering in Optical Communications

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***Abstract*—In this paper, we study the optical properties of periodic and quasiperiodic multi-layer configurations for light filtering in optical communications. The reflection spectrums of periodic and quasiperiodic multilayer structure are obtained using the finite-difference time-domain method. The optical filtering properties of the multi-layer structures are shown by comparing the reflection spectrum with the ITU-T dense wavelength division multiplexing standard.**

***Keyword*—multi-layer structure, optical filter, quasiperiodic structure**

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