Spectral crossover in the photon crystal

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Results of theoretical research of possibility of formation of a spectral crossover in a photon crystal are presented. A spectral crossover define equal attenuation fashions. Conditions of existence of these fashions are found. Two cases of occurrence of a spectral crossover for the blank photon crystal are analysed. On a photon crystal generalisation of results is discussed with ferromagnetic inclusions.

Keywords: *spectrum crossover, equal attenuation modes, circular polarization, photonic crystal, metal inclusions.*

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