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标题: Transmission characteristic of Panda eyes fiber in Terahertz Regime
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摘要: With the realization of terahertz wave generator and detector, electromagnetic terahertz wave wavelength range (30 mu m similar to 3000 mu m) attracted significant attention and has been extensively investigated. Many potential applications of terahertz waves have been dramatically explored including medical diagnosis, security screening, military detection, radio astronomy, atmospheric studies, and communication. In this paper, we proposed a kind of photonic crystal fiber with Panda eyes structure. Using finite element analysis method, the transmission properties of Panda eyes photonic crystal fiber in terahertz wave regime was analyzed. The results show that terahertz photonic crystal waveguide with a low transmission loss can be designed if there are suitable parameters. When the transmission frequency f=0.5THz and d/Lambda=0.8, the minimum transmission loss is less than 0.5dB/m.
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