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标题: High-speed rainbow trapping and release by mechanical approaches in the terahertz regime

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摘要: A novel tunable slow light structure is proposed to achieve high-speed rainbow trapping and releasing. The physical characteristics of the structure were investigated both analytically and numerically. The results show that rainbow trapping and releasing can be achieved by the 50 nm (1/6 wavelength) adjustment of the relative position. In addition, the process could be high-speed with micro-electro-mechanical system (MEMS) technology. In practice, the fabrication of this model is not difficult. Our structure might be used to construct a new tunable sub-wavelength optical resonator in the terahertz regime.

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