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标题: Optically switchable and tunable terahertz metamaterials through photoconductivity

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摘要: We present both theoretical and experimental cases for realizing optically switchable and tunable split-ring resonator (SRR) metamaterials operating in the THz regime. This is achieved by suitably placing photoconducting semiconductors in the various SRR designs. Exciting the semiconductor by an optical pump beam, the realization of single- and multi-band switching, blue-shift and red-shift tunability, and broad-band phase modulation are demonstrated.

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