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Title:Optical switching of terahertz radiation from meta-atom-loaded photoconductive antennas

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Abstract:Optical switching of the spectrum and polarization of terahertz radiation from split-ring resonator-loaded photoconductive antennas has been demonstrated. The switching is based on the sensitivity of the resonance of a split-ring resonator on a photoconductive substrate to a change in the capacitance induced by optical pulse irradiation. The spectral and polarization characteristics of the split-ring resonator-loaded photoconductive antennas are discussed in terms of the coupling between the electric dipole induced by the pump laser and the eigenmodes of the split-ring resonators.

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