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Title:Dual-band terahertz metamaterials based on nested split ring resonators
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Abstract:Two dual-band terahertz metamaterials based on nested split ring resonators (SRRs) were designed and fabricated on a flexible plastic substrate. Each nested SRR structure composed of two electric field coupled resonators exhibited two transmission minimums, which inherently come from the LC resonances of the respective SRRs. The primary and secondary resonance frequencies can be individually fine-tuned by adjusting the geometry of the respective resonator. The fabricated devices exhibited very low insertion loss of 3 dB in the transmission band and the high attenuation of 27 dB in the stop band. © 2012 American Institute of Physics.
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