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Title:Terahertz spectroscopy of the reactive and radiative near-field zones of split ring resonator
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Abstract:A terahertz microscope has been used to excite and observe the resonant modes of a single split ring resonator in the reactive and radiative near-field zones. The two lowest resonant modes of an isolated split ring resonator with their corresponding radiation patterns are reported; they showed good agreement to simulations. The passage from the reactive to radiative near-field zone is also discussed. Furtherour result introduced a novel technique to perform terahertz time-domain spectroscopy of samples a few tens of micrometers in size by measuring the in-plane radiative nearfield zone. © 2012 Optical Society of America.
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