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标题: Far-infrared properties of hybrid plasmonic geometries

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摘要: Plasmonic structures made of periodically arranged metallic rings integrated into subwavelength holes are investigated at the far-infrared terahertz frequencies. The emergence and the interplay of various resonances sustained by such plasmonic samples are elucidated. To reveal a coherent physical picture, relevant dimensions of the samples are modified and their impact on the resonance properties is analyzed. The experimental work is fully supported by numerical simulations. The understanding of the interplay of various resonances will foster applications which require plasmonic substrates to exhibit simultaneously resonances at well-defined frequencies and line widths. (C) 2012 Optical Society of America

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