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标题: Ultra-broadband microwave metamaterial absorber
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摘 要: A microwave ultra-broadband polarization-independent metamaterial absorber is demonstrated. It is composed of a periodic array of metal-dielectric multilayered quadrangular frustum pyramids. These pyramids possess resonant absorption modes at multi-frequencies, of which the overlapping leads to the total absorption of the incident wave over an ultra-wide spectral band. The experimental absorption at normal incidence is above 90% in the frequency range of 7.8-14.7 GHz, and the absorption is kept large when the incident angle is smaller than 60 degrees. The experimental results agree well with the numerical simulation. (C) 2012 American Institute of Physics. [http://dx.doi.org/10.1063/1.3692178]
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