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标题: Terahertz Horn Antenna Based on Hollow-Core Electromagnetic Crystal (EMXT) Structure

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摘要: An all-dielectric terahertz (THz) horn antenna based on hollow-core electromagnetic crystal structure is designed, fabricated and characterized. Simulation shows that the antenna works above 100 GHz, with better than 30 dB return loss and highly directional radiation pattern. Fabrication of the antenna is done using a THz polymer-jetting rapid prototyping technique. Characterization of the antenna is performed using a THz time-domain spectrometer. Measurement results of the far-field radiation patterns show good agreement with simulation results.

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