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Title:Study on the focusing characteristics of conical metal nanowires

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Abstract:The focusing characteristics of terahertz (THz) surface plasmon polaritons (SPPs) on conical metal nanowires were studied. The field distribution on cross sections of nanowires was investigated in detail, and the breadth of the ring facula, which was 2.4 times of the radius of nanowires, was obtained. Specially, the method for solving the intension of THz SPPs on conical metal nanowires was presented. Then, the curves of the intension of THz SPPs on different nanowires were obtained by using the method.

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