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Title

Mechanism for THz generation from InN micropylramid emitters

Source

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Abstract

We have investigated characteristics of THz waves generated by using a regenerative amplifier in InN micropylramids. Our experimental results indicate that when the density of the micropylramids becomes sufficiently high, the THz output power is dramatically enhanced. In comparison, the PL intensity stays more or less a constant regardless of the density. By measuring the dependences of the THz output power and polarization on the incident angle and pump polarization angle, we have deduced the contributions to the THz output powers from optical rectification and photocurrent surge. (13 References).