Abstracts

GaN Gunn diodes for THz signal generation

E. Alekseev and D. Pavlidis. "GaN Gunn diodes for THz signal generation." 2000 MTT-S International Microwave Symposium Digest 00.3 (2000 Vol. III [MWSYM]): 1905-1908.

The frequency and power capability of GaN-based Gunn diodes are evaluated using transient hydrodynamic simulations. GaN Gunn oscillators with 2 /spl mu/m-thick GaN Gunn diodes are predicted to have a fundamental frequency of 148-162 GHz and power density of >10/sup 5/ W/cm/sup 2/. Due to their high frequency and power characteristics, applications of these devices are envisaged for THz signal generation.

❑ Return to main document.