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Title:Gyrotron development for high power THz technologies at IAP RAS

Authors:Bratman, V.L. (1); Bogdashov, A.A. (1); Denisov, G.G. (1); Glyavin, M. Yu (1); Kalynov, Yu K. (1); Luchinin, A.G. (1); Manuilov, V.N. (1); Zapevalov, V.E. (1); Zavolsky, N.A. (1); Zorin, V.G. (1)

Author affiliation:(1) Institute of Applied Physics of the Russian Academy of Sciences, 46, Ul'yanov St, Nizhny Novgorod, Russia

Corresponding author:Glyavin, M. Y.(glyavin@appl.sci-nnov.ru)

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Abstract:The review summarizes recent experimental results in the field of THz gyrotrons developed for various applications. A CW gyrotron with the operation frequency of 0.26 THz has been successfully used for DNP spectroscopy A pulsed high-harmonic Large Orbit Gyrotron (LOG) with the frequency of 0.55 THz and kW level of output power has been used for THz breakdown and obtaining dense plasma in gases. A powerful pulsed 0.67 THz/200 kW gyrotron is under development for remote detection of ionization sources. © Springer Science+Business Media, LLC 2012.

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