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Title:Celebrating 50 years of the laser: (Scientific session of the general meeting of the physical sciences division of the russian academy of sciences, 13 December 2010)

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Abstract:A scientific session of the general meeting of the Physical Sciences Division of the Russian Academy of Sciences (RAS) was held in the Conference Hall of the Lebedev Physical Institute, RAS on December 13, 2010. The session of the general meeting of the Physical Sciences Division of the RAS was held to celebrate the 50th anniversary of the creation of lasers. The terahertz range continued to remain the least controlled technique in the evolution of lasers over a period of time and was too short in wavelength for the methods of classical vacuum electronics and low in frequency for the methods of quantum electronics to be applied. Terahertz radiation was relatively safe for living organisms due to its low photon energy and was used for the detection of pathologies and foreign masses by terahertz tomography techniques. A compact highly robust solenoid was also improved at the IAP to increase the output frequency of gyrotrons and contribute the advancement of lasers.

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