

Method of determination temperatures of excited vibrational and rotational levels by emission spectra of nitrogen molecules

Contact Phone

Abstract

In this paper, we study the most optimal areas of emission spectra of the second positive nitrogen system for determining the molecular temperatures (temperatures of excited vibrational and rotational levels) of plasma components. The criteria for selection of these spectrum parts was: weak influence of radiation reabsorption, high sensitivity to separately rotational and vibrational temperatures, selection of data which will be displayed reliably even with weak parameters of the measuring device.

Type of Book of Abstracts

Primary authors: PRYSIAZHNA, Olena (Taras Shevchenko National University of Kyiv); KOLOMIETS, Oksana (Taras Shevchenko National University of Kyiv)

Presenter: PRYSIAZHNA, Olena (Taras Shevchenko National University of Kyiv)

Session Classification: Plasma Physics

Track Classification: Plasma Physics