AIP Conf. Proc. / Volume 996 / Issue 1

Impurity Line Emissions in VUV Region of TCABR Tokamak

AIP Conf. Proc. -- April 7, 2008 -- Volume 996, pp. 230-234
PLASMA AND FUSION SCIENCE: 17th IAEA Technical Meeting on Research Using Small Fusion Devices; DOI:10.1063/1.2917016

Issue Date: 7 April 2008

ABSTRACT

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Spectral emissions in the vacuum ultraviolet region from 50 nm to 320 nm have been measured on TCABR tokamak using an one meter VUV spectrometer and a MCP coupled to a CCD detector. Among the 98 emissions classified, 37 are from first order diffraction, 29 are from second order, 24 are from third order, 7 from fourth order, and one from fifth order diffraction. Main impurity lines are OII to OVII, CII to CIV, NIII to N V, FVII, besides working gas plasma hydrogen Lyman lines.