JOURNAL OF PLASMA AND FUSION RESEARCH

The Journal of the Japan Society of Plasma Science and Nuclear Fusion Research
Vol. 86, No.12, December 2010

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Atmospheric plasma generated by microwave heating of magnetite (Fe_3O_4)-graphite composite powder material. There can be four structural steps: a luminous layer ($t = 0.0 - 0.2$ s), hotspots on the material ($t \geq 0.2$ s), flare like emissions ($t \geq 0.4$ s), and a luminous body above the material ($t \geq 1.0$ s). The structure formation indicates a process of plasma-material mixing through chemical reduction of the magnetite powder. Each vertical line depicts the spectrometer-slit image for the 1D-spatially resolved spectra. (Akihiro MATSUBARA *et al.,* Plasma and Fusion Research Vol.5, 041 (2010) http://www.jspf.or.jp/PFR/)

Published Monthly by
The Japan Society of Plasma Science and Nuclear Fusion Research
3-1-1, Uchiyama, Chikusa-ku, Nagoya 464-0075, Japan
Tel 052-735-3185, Fax 052-735-3485, E-mail: plasma@jspf.or.jp, URL: http://www.jspf.or.jp/