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Recent Progress of Ion Heat Transport Study on LHD

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SEM pictures of carbon dust observed on the graphite target irradiated by Ar/H<sub>2</sub>/N<sub>2</sub> plasmas at different N<sub>2</sub> injection ratio to hydrogen. The injection of a small amount of nitrogen gas led to significant suppression of carbon dust formation on the graphite surface. With increasing N<sub>2</sub> injection ratio, the carbon dust shape changes into polyhedral particles at an N<sub>2</sub> content of 0.3 – 0.7 % and clusters made of smaller particles at an N<sub>2</sub> content > ~ 2 %. (Masaaki KYO *et al.*, Plasma and Fusion Research Vol.5, 004 (2010) <http://www.jspf.or.jp/PFR/>)



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