

Possible Way of Reducing Heat and Particle Loads on Divertor Plates

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Abstract

The heat and the particle loads on divertor plates of plasma from the scrape-off layer (SOL) are studied in conditions of edge localized modes. Computer experiments with self-consistent simulation of neutral particles in the SOL of tokamaks with deuterium plasma are performed varying the size of the edge localized mode and the regime of the neutral component with gas puffing. The results for optimization of the heat and particle loads on the targets will be discussed in aspect of ITER conditions with ELM discharges.