

Abstract Submitted  
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**Recent progress of inertial confinement fusion experiments in China** SHAOEN JIANG, Laser Fusion Research Center, CAEP — The experimental progresses for inertial confinement fusion (ICF) on Shenguang laser facilities in China since 2000 are reviewed in this paper. Many experiments were made on Shenguang II (SG-II) and Shenguang III prototype (SG-III YX). Eight beams of  $0.35\mu$  m laser with pulse duration of 1 ns and total energy of 2 kJ enter into a hohlraum to create intense X-ray radiation of 180 eV on the SG-II laser facility. The experiments on SG-II included much physics research, which consisted with hohlraum physics, implosion physics, fluid dynamical instability, opacity and shock wave driven by radiation. A lot of experimental data were obtained on SG-II. The DT neutron yield driven by radiation achieved  $10^8$  on SG-II. After SG-III YX was completed in 2006, the ICF experiments were mainly be made on SG-III YX that was a 8-beam, 351-nm, Nd:glass laser with an on-target energy capability in excess of 8 kJ. The radiation temperature was about 220 eV and the DT neutron yield driven by radiation was over  $10^{10}$  on SG-III YX.

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