Improvement of Plasma Facing Materials (PFM)-Tungsten for divertor components

→ New dispersion strengthened tungsten (DS-W) alloys containing TiO2 particle

Nano-dispersion of oxide titanium which is stable at high temperature

Inhibition of grain coarsening (Pinning effect)

ITER-W: the G.S. increased drastically with decrease of bending strength
DS-W: did not exhibit drastic change of the G.S and the B.S.