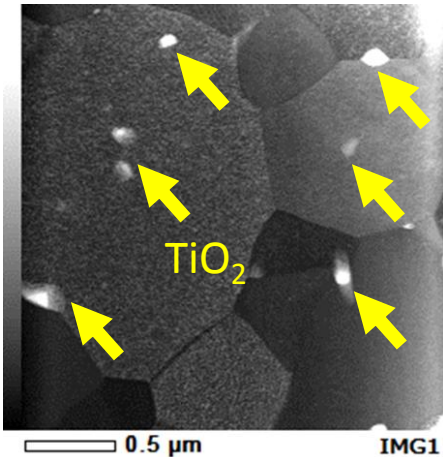


THERMAL CHANGE OF MICROSTRUCTURE AND MECHANICAL PROPERTIES OF DISPERSION STRENGTHENED TUNGSTEN

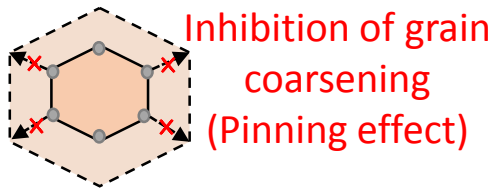
Improvement of Plasma Facing Materials (PFM)-Tungsten for divertor components

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

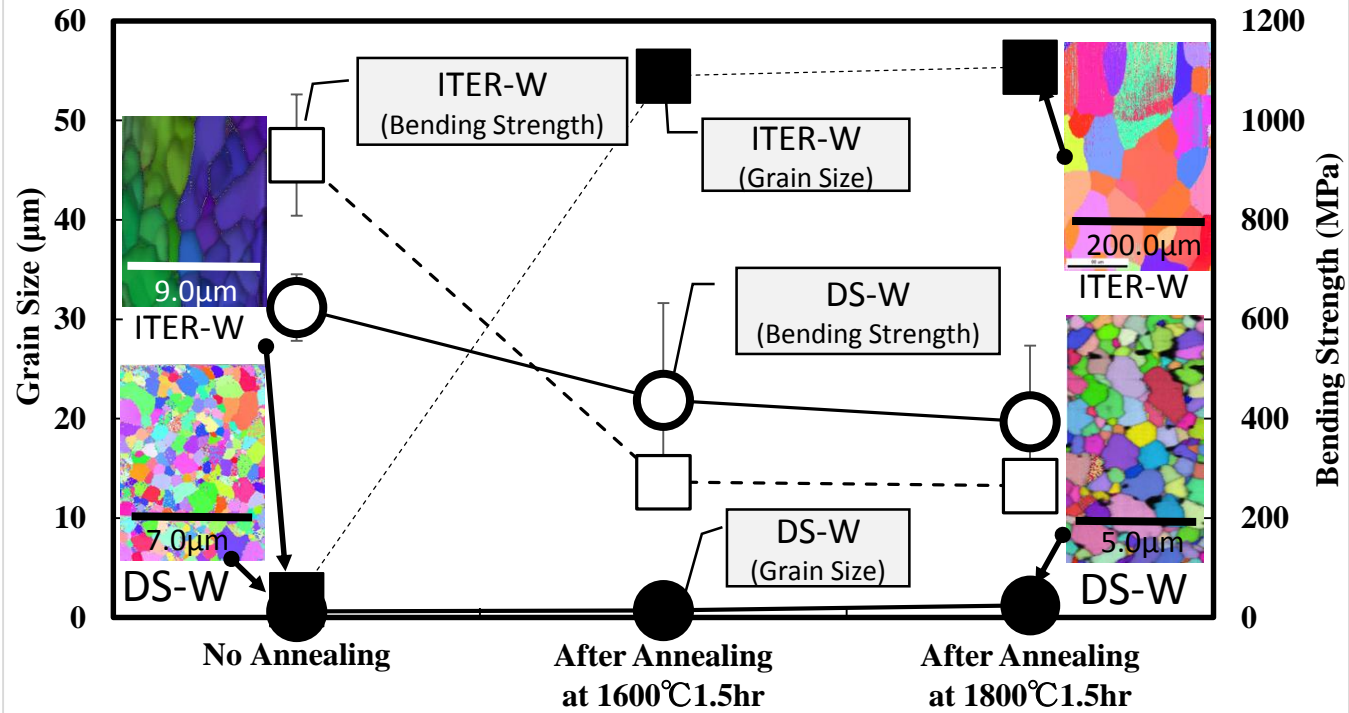
Microstructure



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



Thermal Change and after annealing (ITER-W v.s DS-W)



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.