LEO912-OMEGA TEM

To understand the radiation-stability of candidate materials for advanced nuclear fuel cycles, samples of TiC, ZrC, TiC, ZrN were irradiated with high energy protons using proton irradiation. As shown in Fig. 1 high densities of Frank loops were observed in ZrC irradiated to 1.5dpa and TiC to 1dpa at 800°C. these were measured using the Leo 912 TEM.

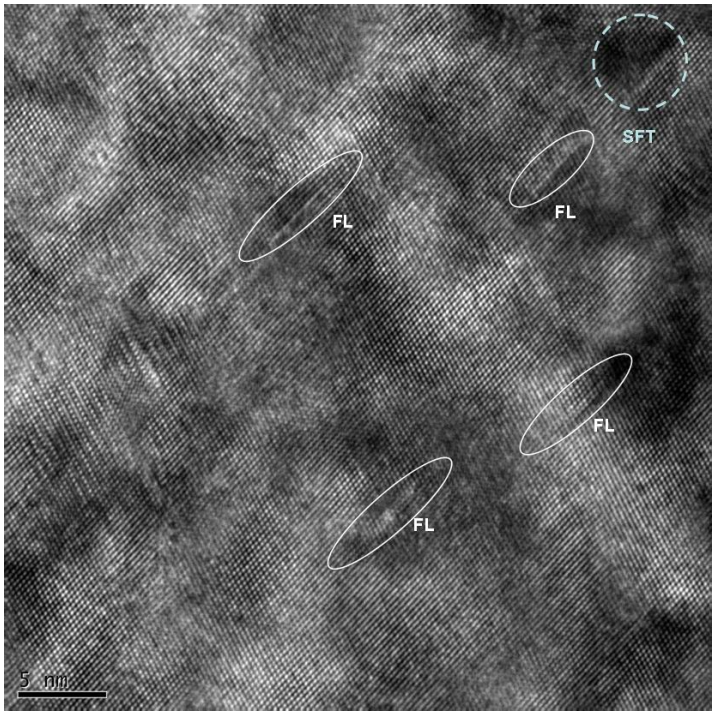

Figure 1. High Resolution TEM image ZrC irradiated at 800°C with dose of 1.5dpa