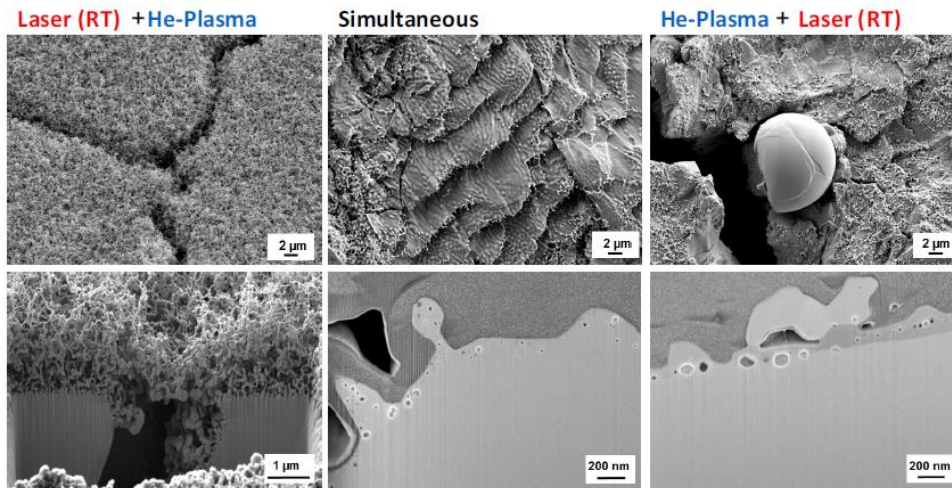


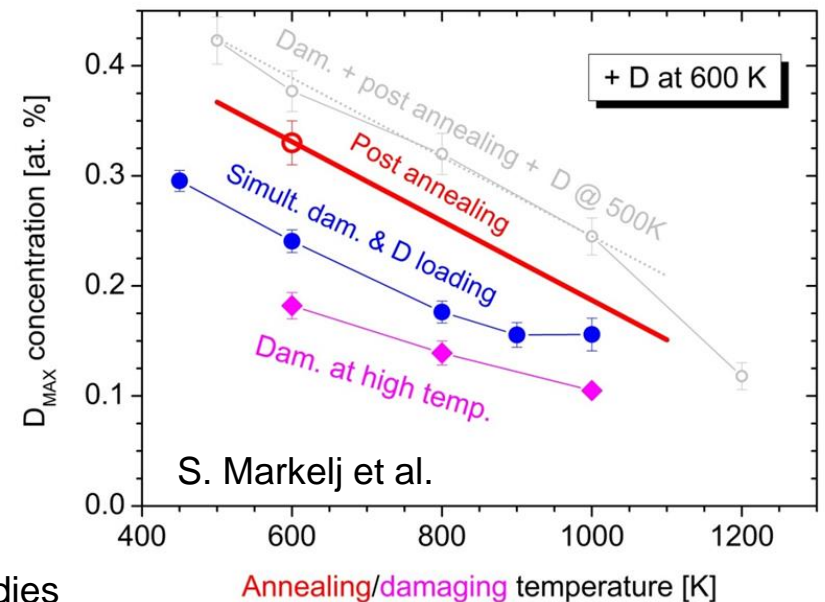


Preparation of PFCs for the Efficient use in ITER and DEMO – PWI Studies within the EUROfusion Consortium

- Study of plasma-wall interaction and qualification of plasma-facing materials and components for ITER (Beryllium and Tungsten) and DEMO (Tungsten/RAFM steels/liquid materials LiSn)
- Power-load qualification for steady-state conditions in linear plasmas, electron beams, ion beams and neutral beams as well as for transients with heat (LASER, e beam) pulses
- Determination of material erosion, transport, deposition and mixing
- Determination of fuel retention by implantation including the role of neutrons
- Comprehensive experimental analysis with standard tools and novel techniques
- Model development and validation against experiments
- Extrapolation to ITER conditions with e.g. ERO and WalIDYN



Synergistic effects in combined particle and heat pulse studies
[M. Wirtz et. al.]



Fuel retention studies in self-damaged W