



Analysis for PSI-2 exposed materials, focusing on funding the relevant regime for fuzz formation in AUG He campaign

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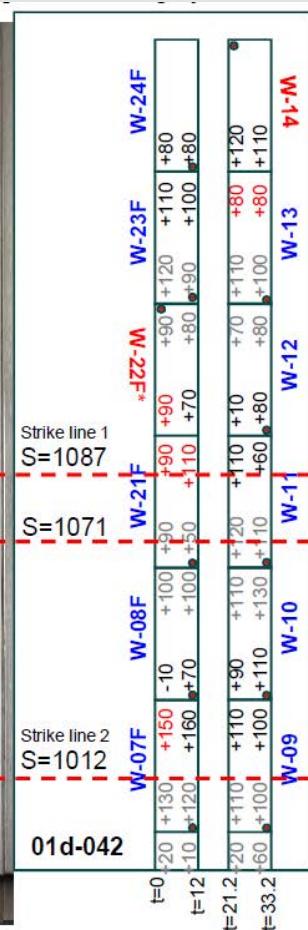
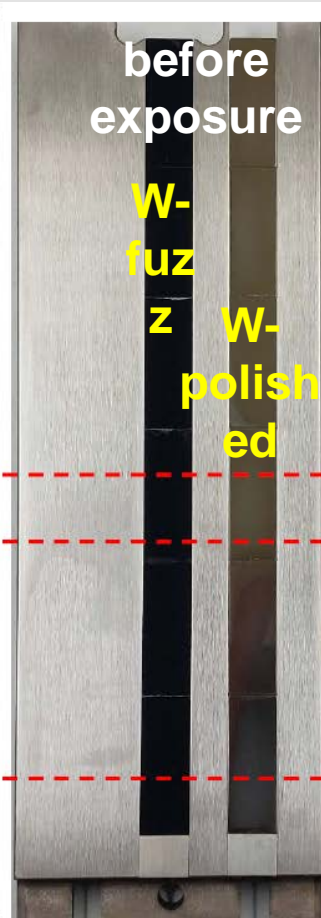
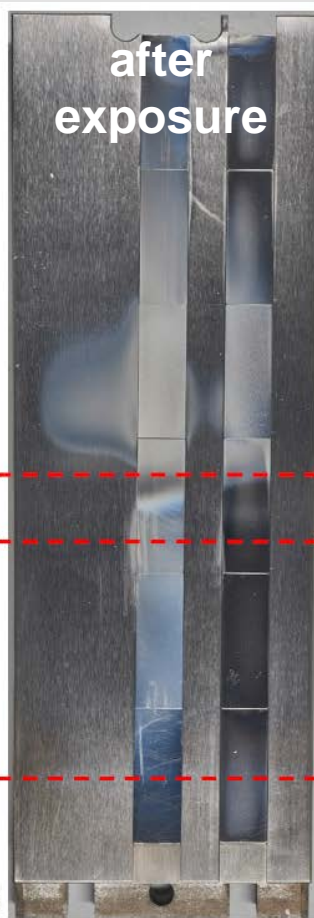
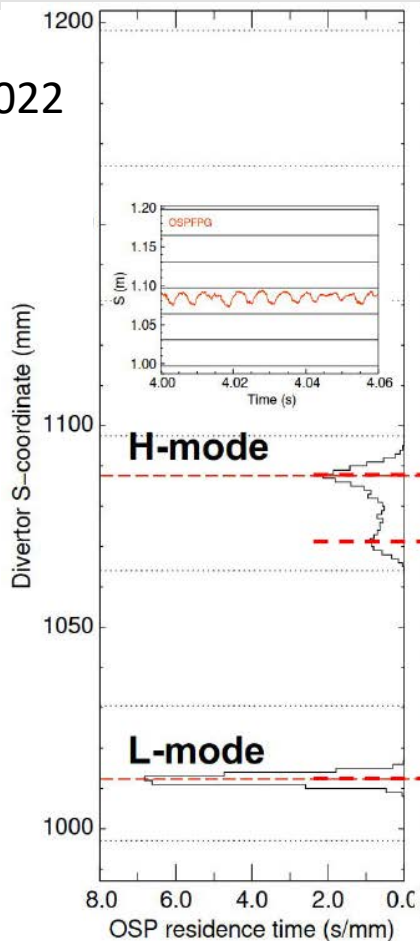


AUG He exposure

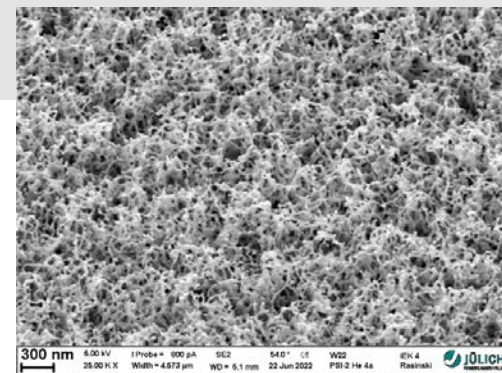
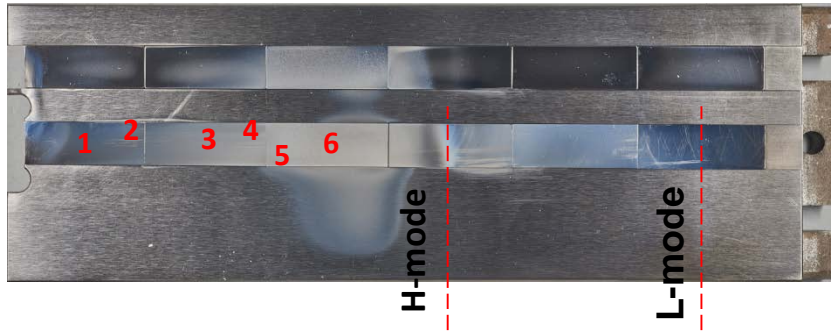


Session 19.07.2022

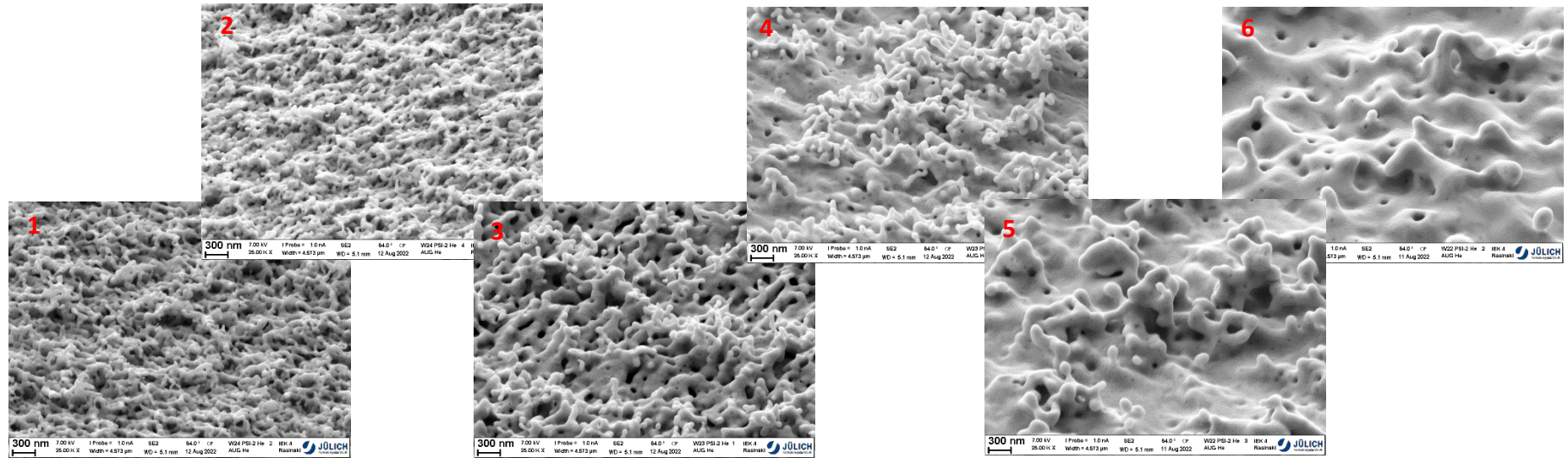
- 8 ok H-mode
- 6 ok L-mode



AUG He fuzz investigation



SEM image of a PSI-2 fuzz

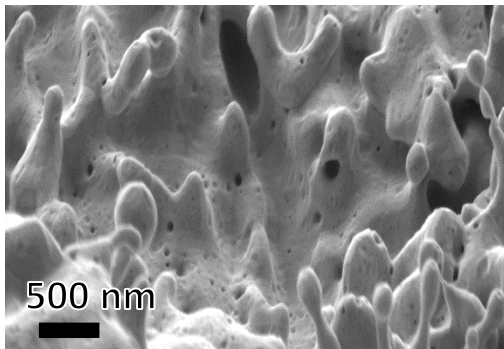
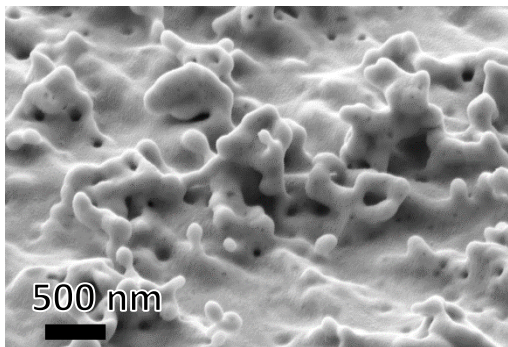


SEM images of AUG He fuzz

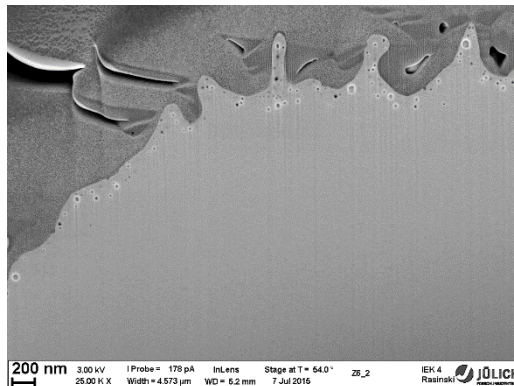
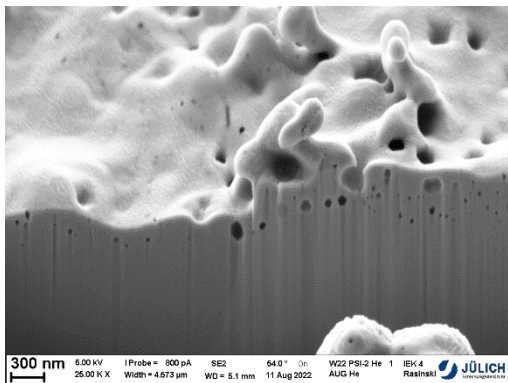
AUG He fuzz analysis



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- Similarities between fuzz formed during AUG He and simultaneous PSI-2 He plasma and laser.
- Fuzz structures and bubble formation present after AUG He might be reproducible by simultaneous laser and plasma loading



SEM image of a surface and FIB-cross section of the He and laser exposed sample (absorbed power density 0.76 GW/m^2 , 1000 pulses): simultaneous laser and He-plasma exposure at $850 \text{ }^\circ\text{C}$;



Comparison between linear devices and tokamak environment for fuzz formation

- Check previous exposures in PSI-2 with simultaneous plasma and laser loading
- Find best conditions to reproduce AUG He fuzz
 - From existing exposures
 - New PSI-2 exposures

