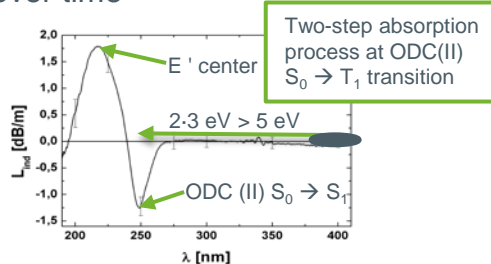
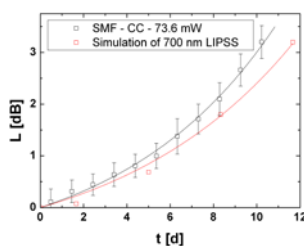


# Launch-Fiber for UV Single-Mode Systems

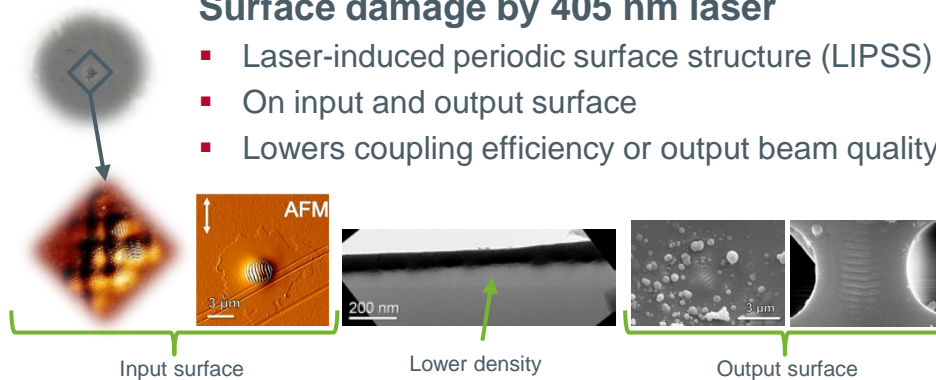
## Power loss in 405 nm laser system

- At CW power densities of 0.5 – 2.5 MW/cm<sup>2</sup>
- Loss of fiber output power over time



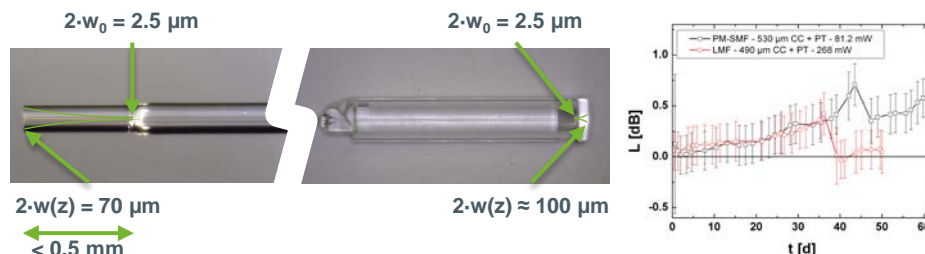
## Surface damage by 405 nm laser

- Laser-induced periodic surface structure (LIPSS)
- On input and output surface
- Lowers coupling efficiency or output beam quality



## Mitigation by cleaved Launch-Fiber

- Reduced power density and roughness on surface
- Highly stable transmission over several months



Laboratory for  
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and Waveguides**

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