

Università degli Studi di Trieste

Dipartimento di Fisica

Alumnorum Colloquia

Giovanni Piredda

Josef Ressel Center for material processing with ultrashort pulsed lasers, Research Center for Microtechnology, Vorarlberg University of Applied Sciences, Dornbirn, 6850, Austria.

Tuesday, October 17, 4.00 PM - Lecture Room A, F building, Physics Dept. - via Valerio, 2 – Trieste

Ultrashort-pulse laser microfabrication.

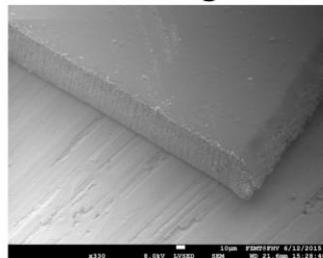


Light pulses of sub-picosecond duration can ablate any material with minimal effects on the areas surrounding the ablation zone. Material processing with ultrashort laser pulses is for this reason of great interest for many practical applications. In this talk, I will present a brief introduction to the technique and some examples of the applicatio

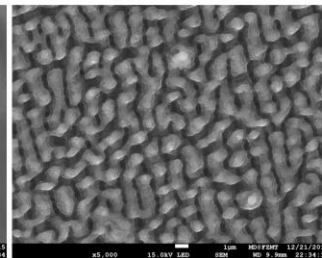
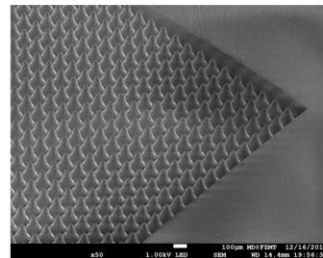
ns we are developin

g at the “Josef-Ressel-Center for material processing with ultrashort pulsed lasers”; two examples are modification of surface-liquids interaction by surface patterning and the cutting of brittle materials where the mechanical properties of the cut edges have to be preserved.

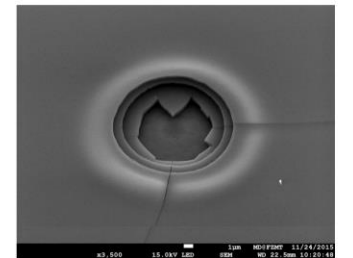
Laser cutting



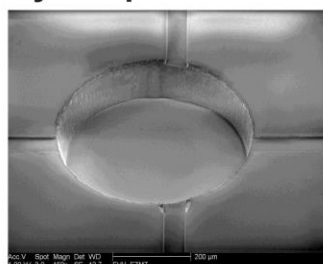
Surface functionalization



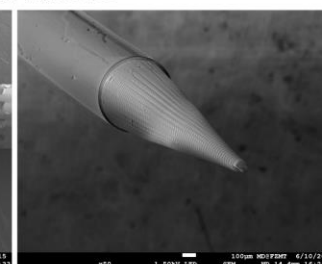
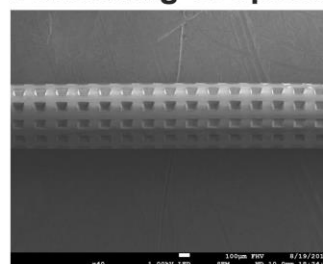
Thin film ablation



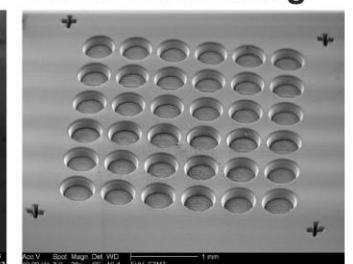
Hybrid process



Patterning of optical fibers



Laser structuring



Organizzazione a cura di: E. Milotti, E. Vesselli

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Everyone interested in the topic is welcome to attend

Informazioni: seminari@ts.infn.it