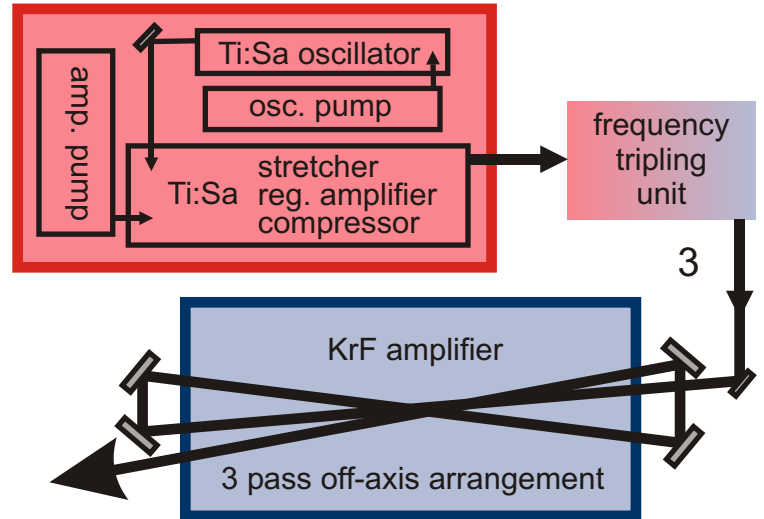


UV - Ultrafast Laser



The laser system

The UV ultrafast laser system comprises a Ti:sapphire laser whose pulses are converted into the UV spectral range by frequency tripling, and a special excimer gain module for amplification in the UV. In this way sub-picosecond pulses are obtained at 248 nm with an average power of up to 10 W.

Specifications

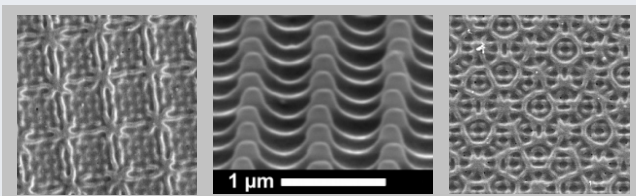
Wavelength	248 nm
Pulse length	200 - 700 fs
Rep-rate	10 - 300 Hz
Pulse energy	5 - 50 mJ

Applications

Materials processing

- Ultrashort pulse duration
- Short (UV) wavelength

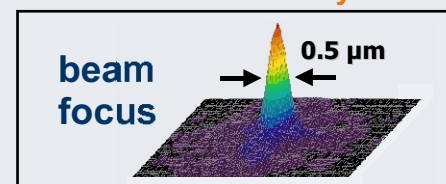
unprecedented materials processing quality



Plasma / X-ray generation

- High pulse contrast (10^{10})
- High Strehl-ratio

$>10^{19}$ W/cm² focused intensity



Dr. Peter Simon psimon@llg.gwdg.de +49-(0)551-5035-21

Laser-Laboratorium Göttingen e.V.
Hans-Adolf-Krebs-Weg 1
D-37077 Göttingen