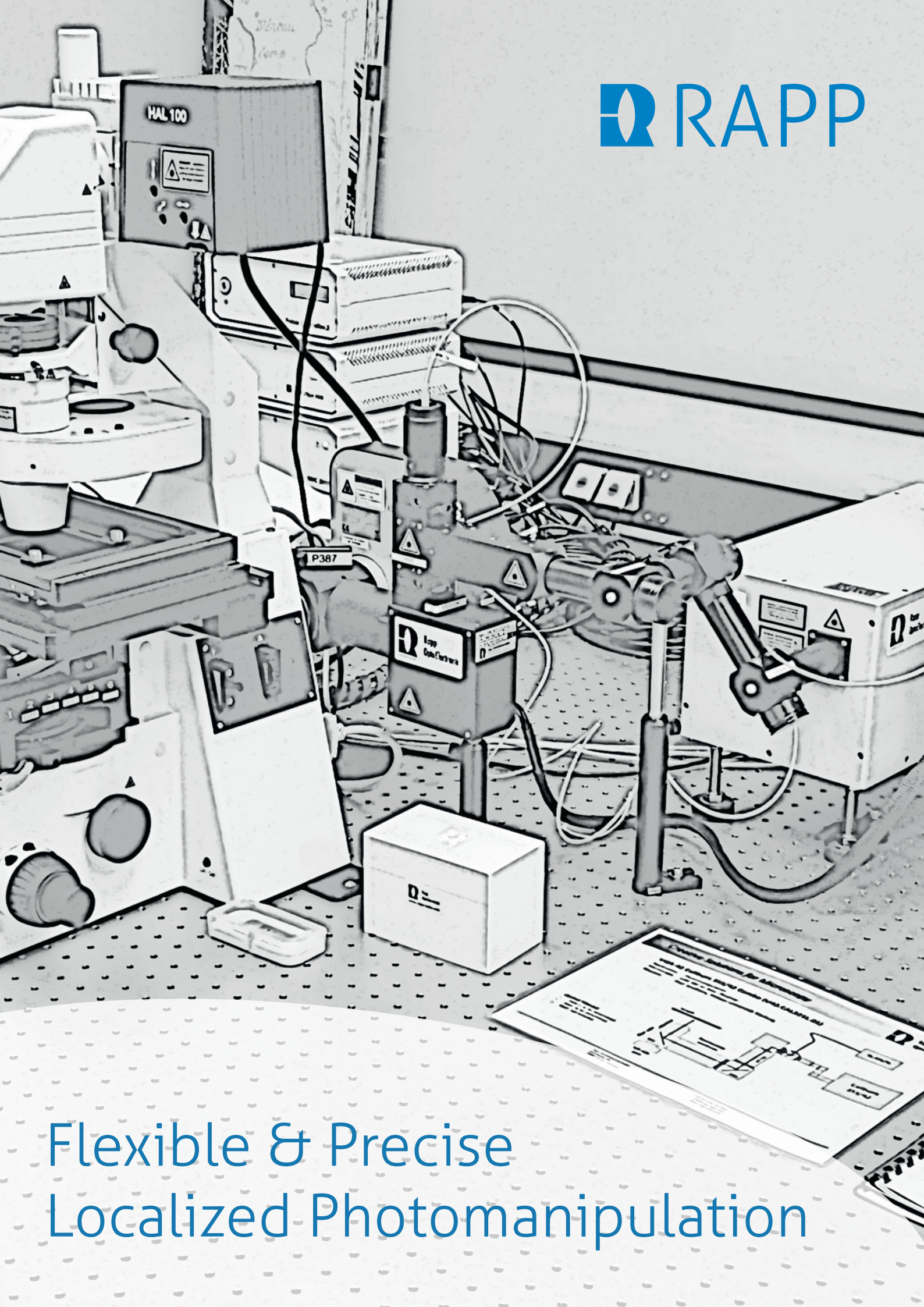




Flexible & Precise
Localized Photomanipulation



Photomanipulation Systems

Fixed Illumination

(AiWon Series)

Scanned Illumination

(UGA-42 Series)

Point Spot (Firefly)



Shaped Spot (Geo)

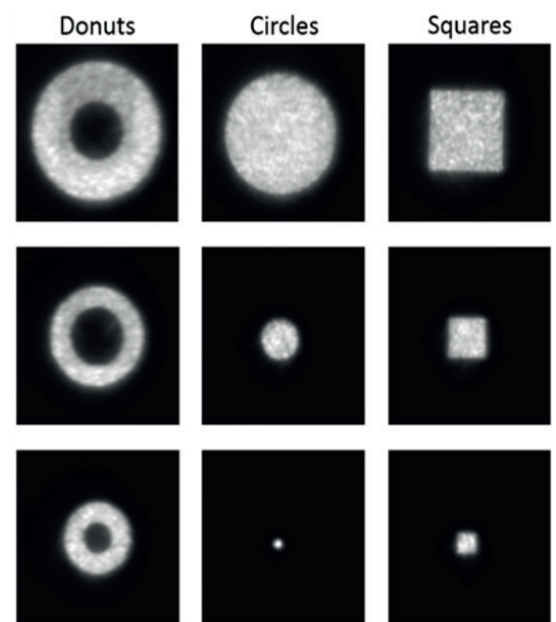


Ablation / Cutting (Caliburn)



Features

- Fast and precise laser photomanipulation
- Compatible with almost all imaging techniques, microscopes and software packages
- High quantity of pre-defined Regions of Interest (ROIs)
- User-friendly ROI editor
- Multiple laser lines in one experiment
- Wide range of laser wavelengths (deep UV – near IR)
- High dynamic power range
- Cutting from fine structures up to large areas (Caliburn)
- Fully software controlled
- Bi-directional communication with external devices
- Upgradable on-site
- Maintenance free
- Made in Germany



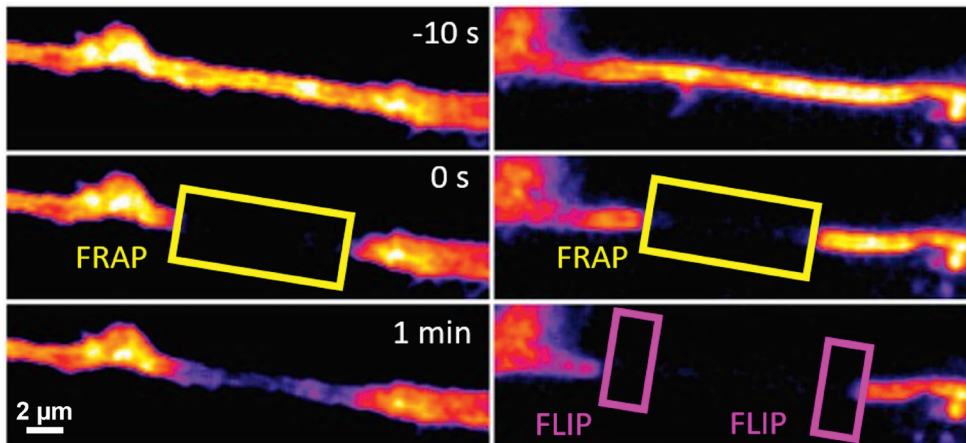
Example of available illumination spot shapes (Geo)



Typical Applications



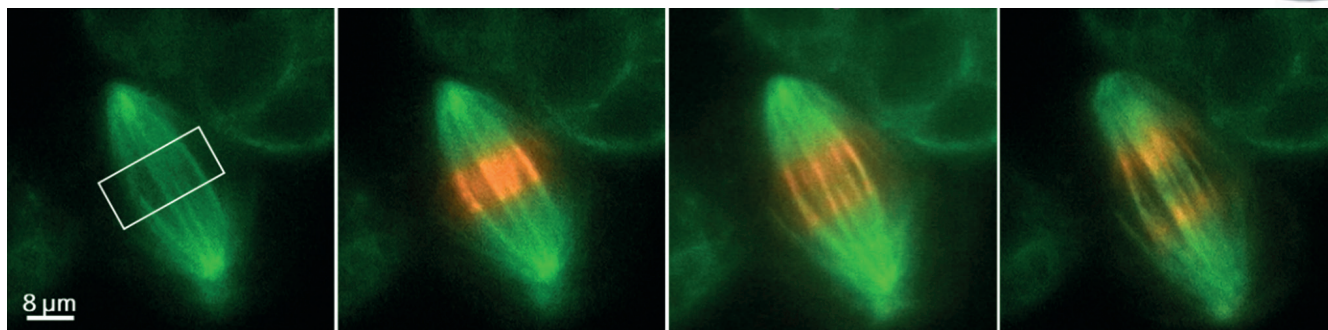
Point Spot Photomanipulation



Fluorescence Recovery after Photobleaching (FRAP) and Fluorescence Loss in Photo-bleaching (FLIP) at the axon initial segment of cortical neurons shows the bi-directional lateral diffusion of Neurofascin186 to enter the Axon initial segment. (A. Ghosh et al. 2020, eLife)



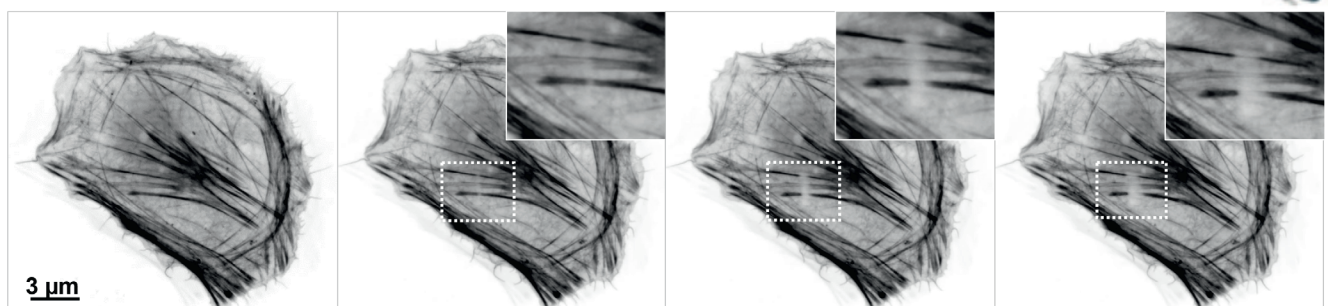
Shaped Spot Photomanipulation



Observation of spindle elongation during mitosis by photoconversion of mEos2 labelled tubulin. (K. Thorn, University of California, San Francisco (UCSF), USA)



Ablation / Cutting

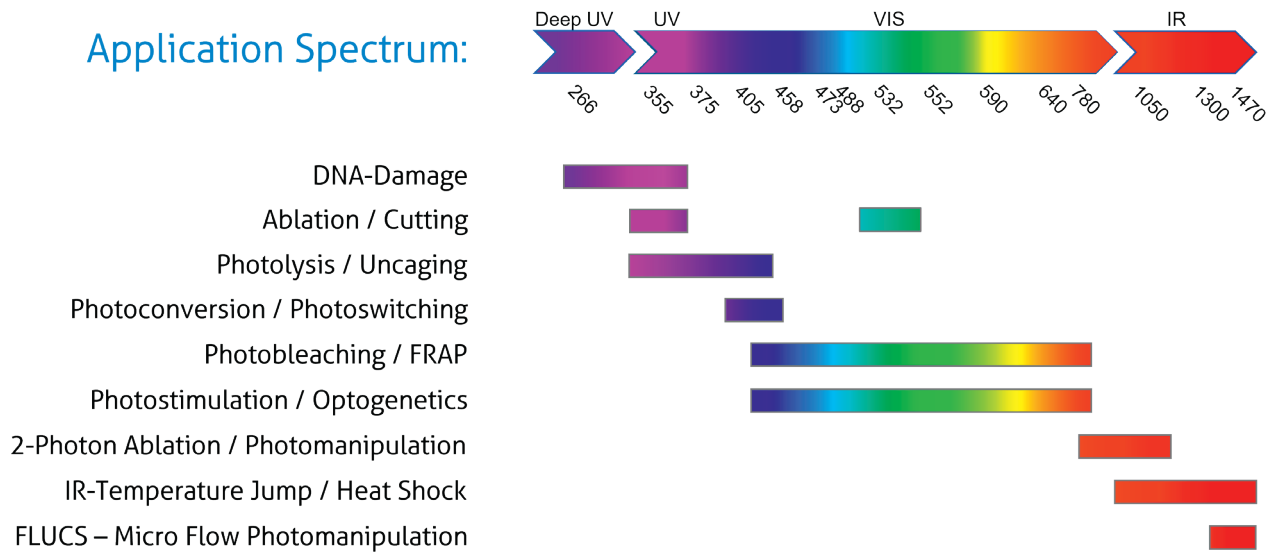


Cutting of actin stress fibers in single cells to analyze the relaxation as measure of tension and internal forces. (N. Hampe & R. Merkel, Helmholtz Research Center Jülich, Germany)



Photomanipulation with Multiple Laser Lines

Application Spectrum:



Compatibility

- Compatible with upright and inverted [microscopes and macroscopes](#) (Zeiss, Olympus / Evident, Leica and Nikon) as well as [Multi-Photon](#) systems (Sutter Instrument)
- Compatible with various [imaging techniques](#) like Epifluorescence, LSM, Spinning Disk, Light Sheet, Super-Resolution, Multi-Photon, etc.
- Compatible with all [imaging software packages](#) (ZEN, cellSens, NIS, Micro-Manager, Meta-morph, Volocity, AbbeLight, etc.)



Key Features

- ✓ Easy to use
- ✓ Maintenance free
- ✓ Tailored to application
- ✓ Upgradable

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