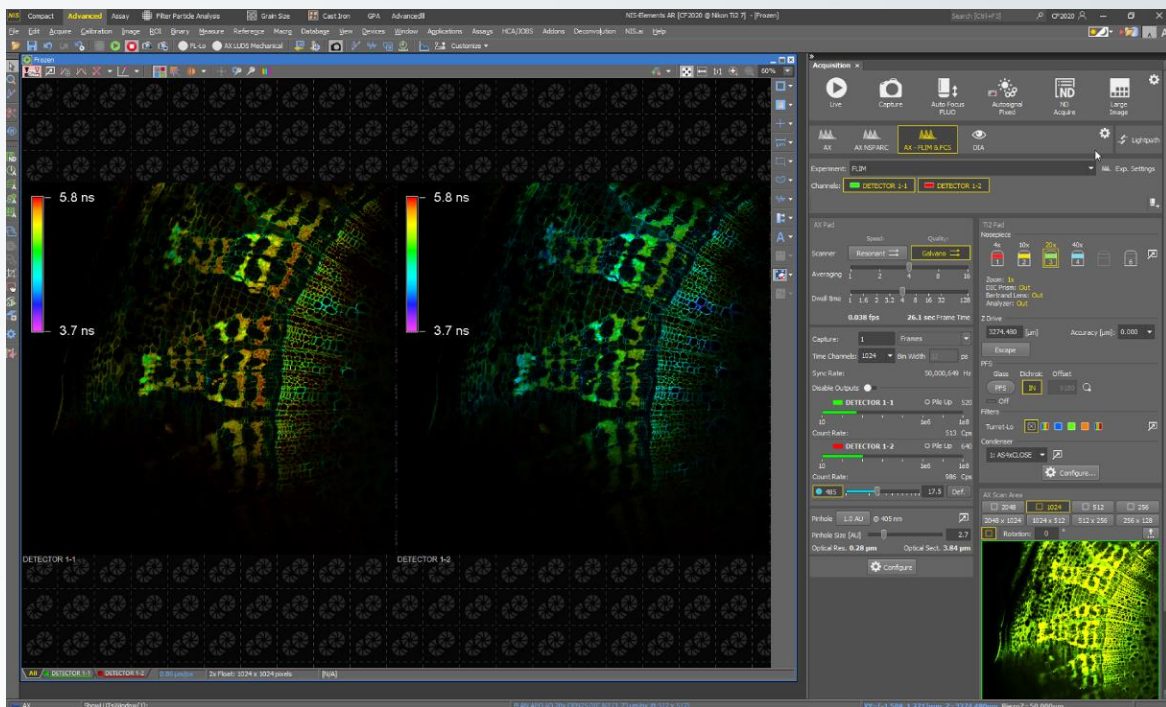


Becker & Hickl FLIM Integration for Nikon AX

Precision Meets Performance

Becker & Hickl's cutting-edge FLIM technology now seamlessly integrated with the NIS-Elements software of the Nikon AX confocal microscope. Our state-of-the-art systems deliver unmatched temporal resolution and near-ideal efficiency, empowering researchers to push the boundaries of scientific discoveries



System Highlights:

- Control all B&H's TCSPC-hardware and experiment parameters with NIS Elements Software
- 4x B&H picosecond diode lasers, 60 ps to 120 ps pulse width (FWHM⁽¹⁾) with three repetition rates: 20 MHz, 50 MHz, 80 MHz and CW
- Up to 3x parallel detection channels equipped with B&H hybrid single photon detectors featuring an IRF ~ 20 ps FWHM⁽²⁾
- High photon count rates up to 80 MHz continuously and 120 MHz peak count, 4 ps time-channels, time jitter ~11 ps⁽³⁾
- Motorized sample movement for imaging, 3D-FLIM
- Seamlessly switchable emission filters

(1) Wavelength based (2) Detector based (3) Divided by $\sqrt{2}$



Becker & Hickl GmbH

Record Fluorescence Lifetime Decay in Every Individual Pixel Ensuring no Detail is Missed

With its three input channels, picoseconds time precision and an extremely high-count rates detection, the SPC-QC-104 module records phenomenal FLIM images with an instant 1st-moment fit for a quick contrast-FLIM analysis or further multi-exponential fit analysis within a matter of seconds.

Featuring near-ideal photon efficiency and minimal acquisition time, the B&H's acquired FLIM images exhibit pixel-level precision, yielding detailed fluorescence decay profiles across a numerous number of picosecond-accurate time channels.

Once recorded, the images can be swiftly exported to B&H's renowned SPCImage software, opening the door for a rapid precise fitting, image segmentation, phasor plot analysis and more, facilitating advanced analysis and interpretation of the data.

Calculated in every pixel, SPCImage creates colored-coded images of the amplitude- or intensity-weighted lifetimes, amplitude of the decay components, amplitude ratios, or other combinations of the decay parameter, such as FRET intensities, distances and fraction of interacting proteins, bound and unbound fluorophores or the fluorescence lifetime redox ratio FLIRR.

