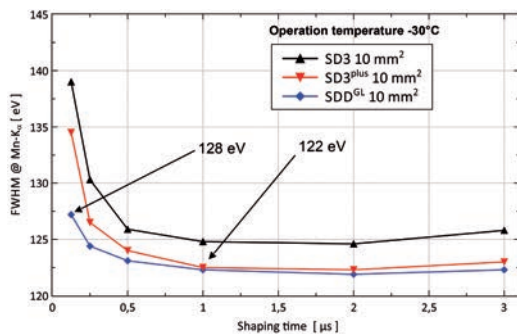


## SDD<sup>GL</sup> - Genius Line

**Best energy resolution with our unique detector design:** PNDetector is proud to present the newest generation of high resolution Silicon Drift Detectors – SDD Genius Line. These sensors are based on the well-established droplet shaped SDDs. A redesign of the drift ring structure pushes the energy resolution for short signal processing times to unrivaled low levels and enables high resolution spectroscopy at extremely high count rates.

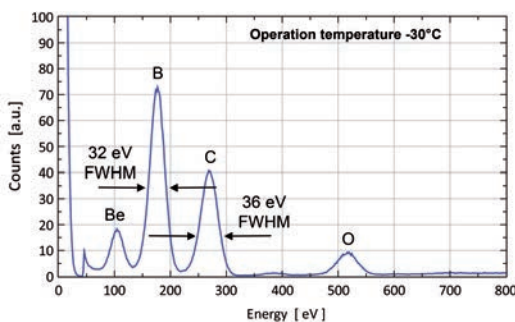
### Highest performance at highest speed



#### High resolution at lowest signal processing times

- ▶ The new drift ring design especially increases the performance of the detectors for very short signal processing times. Measurements at **lowest shaping times of 125 nsec** reveal **extraordinary energy resolutions < 128 eV FWHM @ Mn-K $\alpha$** .
- ▶ Want to detect signals at several hundred kcps output count rate with 128 eV energy resolution? **The SDD<sup>GL</sup> detector is your choice!**

### The best energy resolution on the market



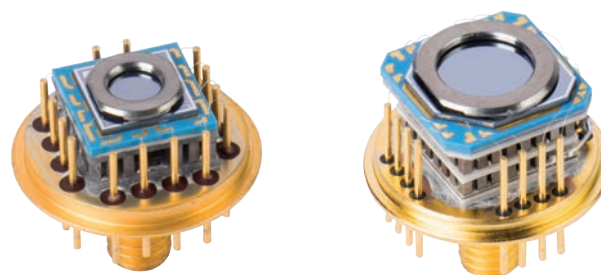
#### Ultra high spectroscopic resolution

- ▶ The SDD<sup>GL</sup> detectors achieve unmatched energy resolution values **< 122 eV FWHM @ Mn-K $\alpha$**  and **36 eV @ C-K** at chip temperatures of only -30°C.

#### Extreme light element performance

- ▶ Together with the excellent performance of our **pnWindow technology**, light element measurements **down to Lithium** are performed and elements as **Be, B** and **C** are fully separated with best energy resolution and Peak-to-Valley ratio.

*SDD<sup>GL</sup> detector modules are compatible with our standard SD3 detector modules. They are available with 10 mm<sup>2</sup> and 30 mm<sup>2</sup> active area.*



Ask us for detailed information!