## Development of X-ray crystal analyzers

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X-ray crystal analyzers are the key for success in application of XIS and XES, as well as XAFS with laboratory X-ray sources. In the last 16 years, we developed most analyzers to cover such applications, which include spherically bent analyzers, cylindrically bent analyzers, both with diced, striped and stand free type, and also few Johansson type of cylindrical and spherical curvature. The energy resolution can be down from meV of stand free type to few eV for very short radius analyzers.

Our patented spherically striped-bent crystal analyzers open a door to very short curvature radius analyzers, both in silicon and germanium. Our anodic bonding stand free flat-diced analyzers is also proved its value in very high energy resolution for XIS, XES and XAFS.

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