Novel TEM EDS Detector for High Solid Angle Detection

"High solid angle detection of X-rays, using multiple detector systems in combination with probe corrected STEM, allows for analytical characterization on the atomic level. Due to the limited space around the sample, the arrangement of a high solid angle EDS detector can be achieved by a fixed mounted, annular arrangement of multiple detectors around the upper pole piece or by a high tilt of the sample towards a very large detector. In principle an increase of the solid angle by a factor of two can be achieved by the additional arrangement of a detector below the sample. According to that, a new high solid angle multiple EDS detector was developed."