Ildikó CORA - *CV*

Education and degrees
2009 - Diploma in Geology, Mineral Sciences at Eötvös Loránd University, Budapest, Hungary
2014 - Ph.D., Eötvös Loránd University

Research activities
-Transmission Electron Microscopy
-Electron crystallography
-III-nitride and oxide wide bandgap semiconductors

Hungarian PI of 1 bilateral and 1 international project, participant of 12 former and ongoing international and Hungarian projets. Author and co-author of 42 papers in international journals and papers in conference proceedings with ca. 900 independent citations and H=14.
https://m2.mtmt.hu/gui2/?type=authors&mode=browse&sel=authors10029180

I had experiences in classical X-ray diffraction methods (micro X-Ray diffraction and Rietveld refinement (Simthsonian Inst., NMNH) and single crystal X-ray diffraction and structure determination and refinement (HAS, RCC)). I applied these experiences in electron crystallography with the combination of techniques of precession electron diffraction and diffraction tomography for structure determination and refinement of submicrometer sized single crystals. I have a one and a half decade long experiences on structure and chemical characterization using conventional and advanced transmission electron microscopy (e.g. high resolution (scanning) transmission electron microscopy combined with simulations and *in situ* heating measurements). I worked earlier on minerals (clay materials, apatite) and other inorganic materials (like alloys), in the last decade with oxide and nitride semiconductors (Ga_2O_3, AlN, GaN, ZnO) concentrating on the characterization of their crystal structure, and their defects.