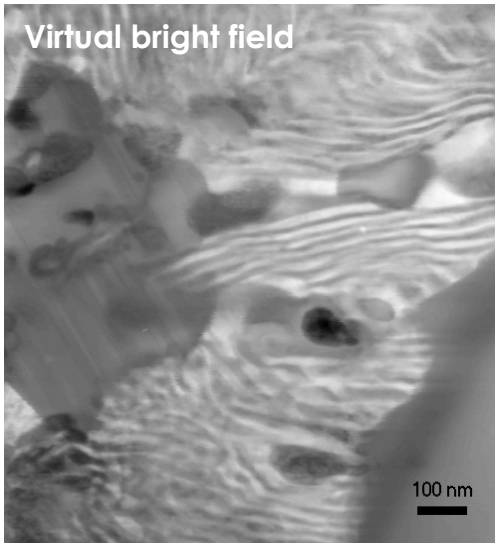
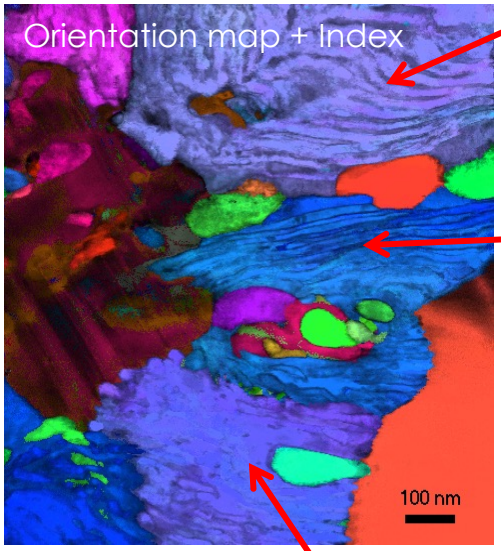
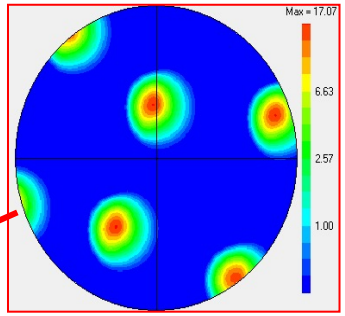
ASTAR : Orientation & Phase map of Nd based magnetic material

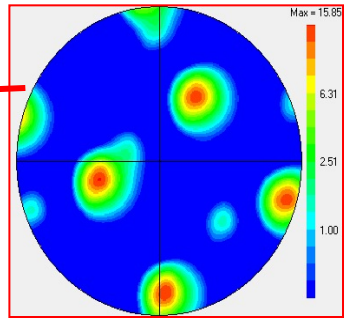


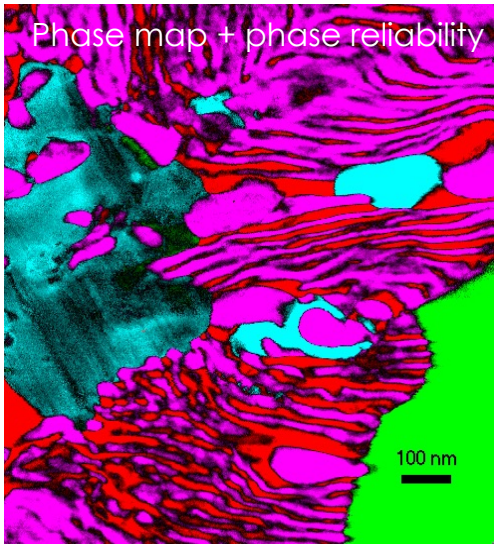
Acquired on a JEOL 2100F
500x500 pixels Step size: 2 nm
Precession angle: 1.2°
100 fps

{111} pole figures for Iron and Neodynium hydride



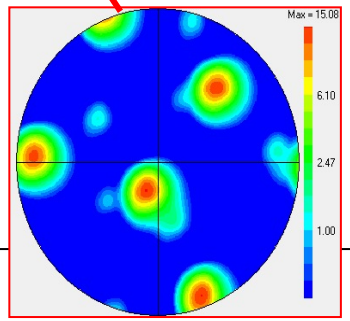






Phase color code

- Fe
- $Fe_{14}Nd_2B$
- Fe_2B
- NdH_2



Credits:

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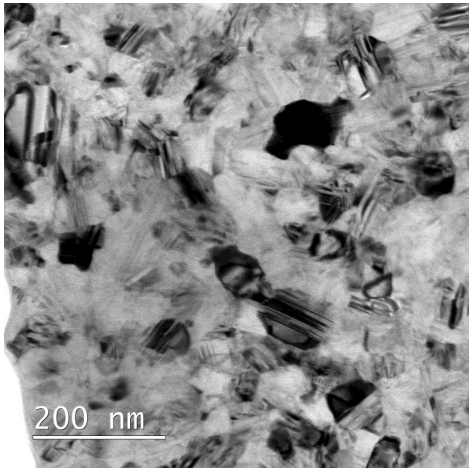
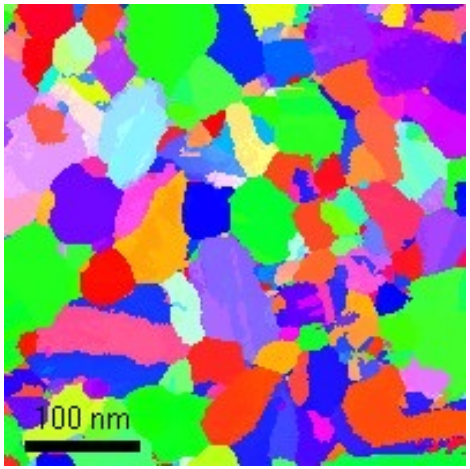
Dept. of Material- and Geosciences
TU Darmstadt

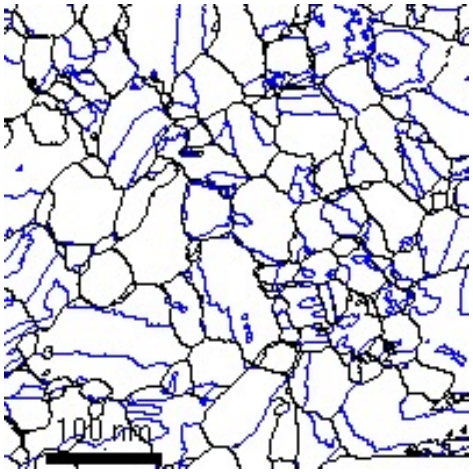
ASTAR : Orientation maps of polycrystalline Si



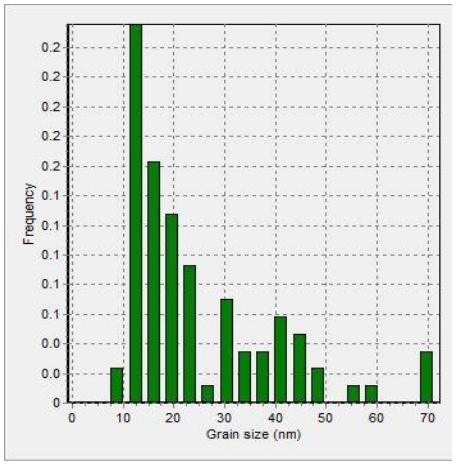
Virtual Bright Field

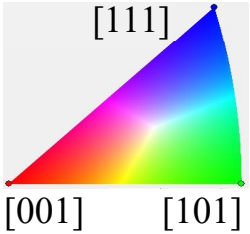


Orientation Map - z



Grain boundaries

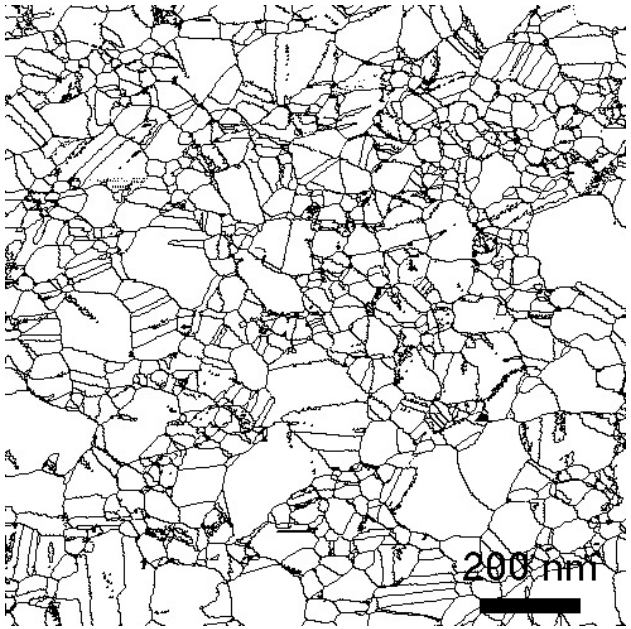




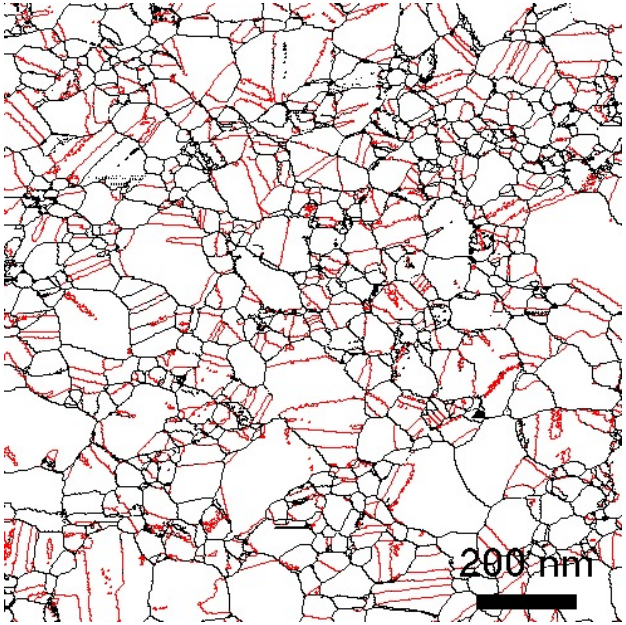
Blue lines represent twin Boundaries reconstructed with a tolerance of 5° from 60° <111>.

Courtesy Dr. A.Darbal NanoMEGAS USA , JEOL ARM200F
step size: 2 nm , Precession angle: 0.4°

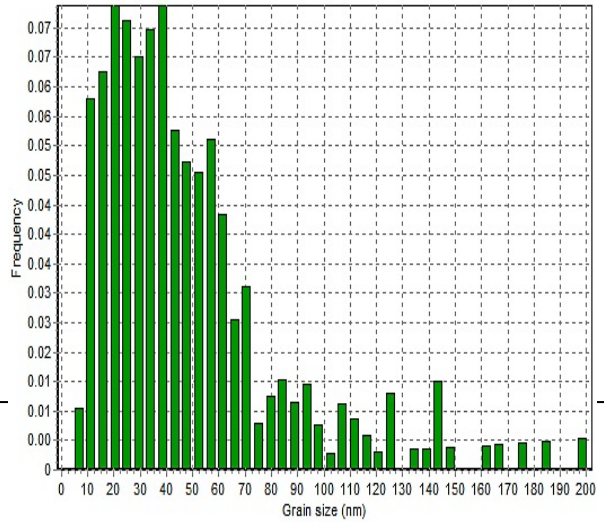
ASTAR : Copper Grain size disribution



Grain Boundaries map
Cu fcc



Grain Boundaries map with twins (red)
Cu fcc



Courtesy: Dr. A. S Sologubenko, ScopeM , ETH Zurich, Switzerland