Regular-Size Pictures to "Radiation Damage in Cobalt"

- Here are the pictures to my Diploma Thesis and the publications resulting from it.
  The picture expands to its full size when you click on it. Their size then is about what you would have produced on photographic paper in the dark room.
- The first relevant micrograph in the thesis is picture 4.1; i.e. the first picture in chapter 4. It is also more or less Fig. 1 in paper 1.
  Like all the other ones, it results from a scan of the micrographs glued into my copy of my thesis paper. The negatives are long since gone.
  - Yes, I do realize that often no scale is included. I always told my students that this is a deadly, unforgivable sin. And so it is. My kids will probably find it reassuring that I once was a sinner. But I did give the magnifications, after all, in the picture captions.
    I also give you both the captions from my thesis and the ones from the publications.
  - Just once, right here, I also give you the huge size that the negative would have allowed, Click on "large size picture"

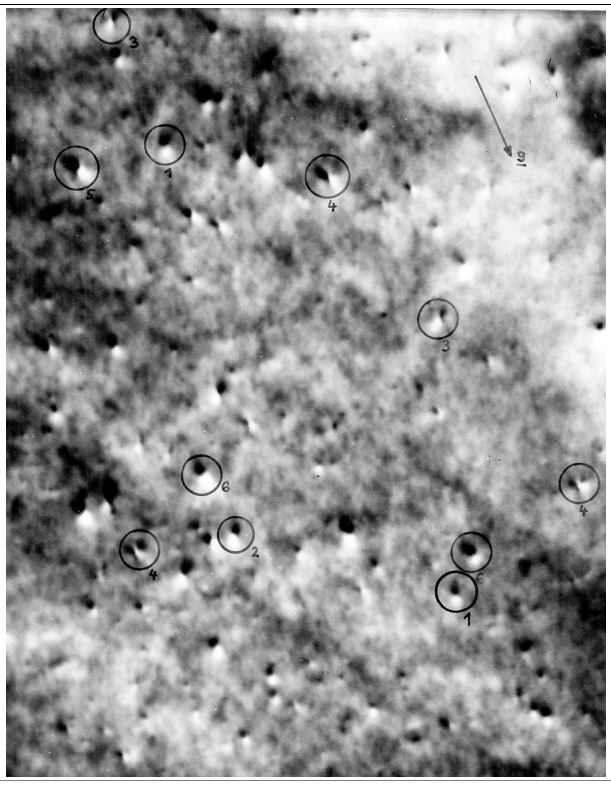


Fig. 4.1 in Thesis. Original figure caption:.
Fig. 4.1. Typische Dunkelfeldaufnahme von S-W-Kontrasten bei Folienorientierungen nahe {0001} und g=11-20,
v=500 000x, Dosis ≈ 2,4 · 10^{11} cm^2; 60 keV Au^{++} Ionen

Fig. 1 in paper 1

Fig.l. D81·k field micrograph sbowing black-whitc coutrasts in Co. .Foil normal is near {OOOl}. Typical examples of thc A... B and C,. contrasts (sec text) arencircled. With respect to thc astel'isks see Fig. 2

Large size picture

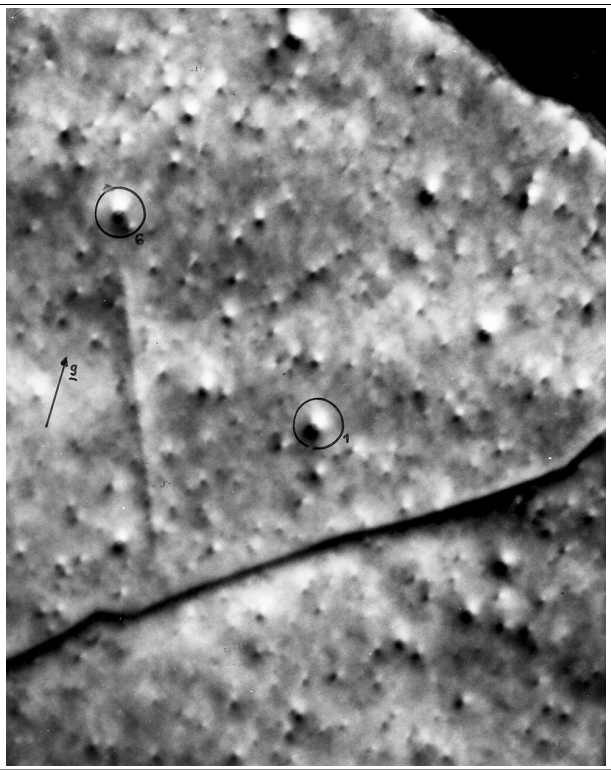


Fig. 4.2 in Thesis. .
As Fig. 4.1 but with higher dose (≈ 9,4 · 10^{11} cm^2)

Large size picture

Fig. 4.3 in Thesis
Picture of the probe of an irradiation experiment with two specimen. Read the text for details

Large size picture

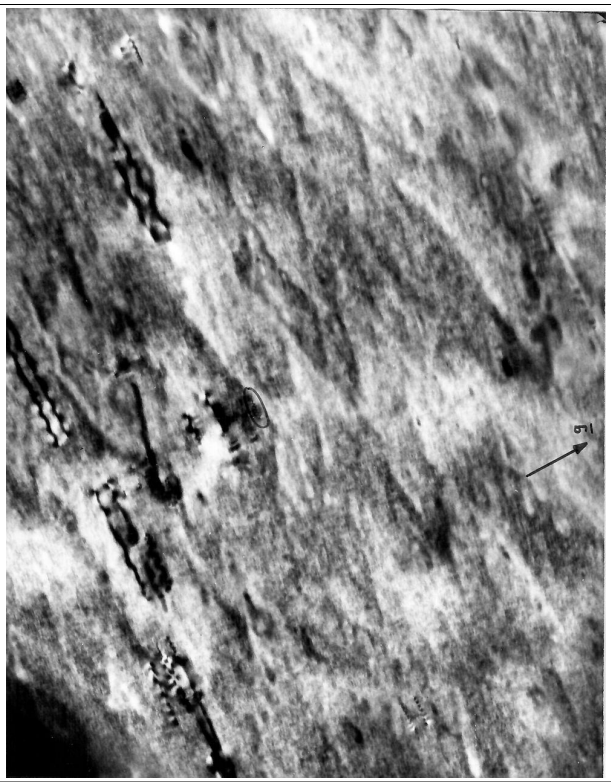


Fig. 4.4 in Thesis
Irradiated (2-310) oriented specimen showing no defect contrast. Read text for details

Parts used for **Fig. 5 in paper**

Fig. 5. Dark field micrograph of an irradiated specimen with foil normal near {1l20}. The marked dislocation indicates that the resolution is high enough to detect loops on the {0001} plane with diameters > 3 nm

Large size picture

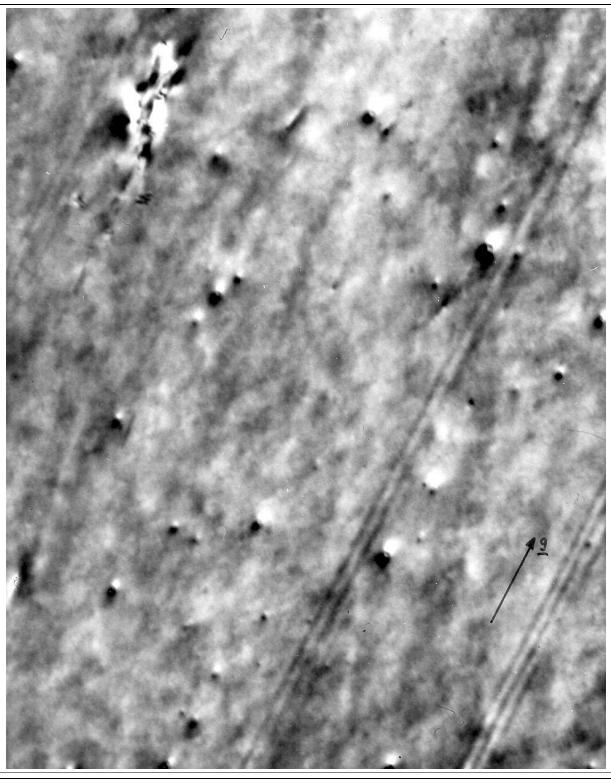


Fig. 4.5 in Thesis.
(11-22) orientation. Read text for details

Parts used for **Fig. 4 in paper**

Fig.4. Dark field micrograph of black-white contrasts in a specimen with foil normal near {1l-22}; normal of the image plane near {110l}

Large size picture

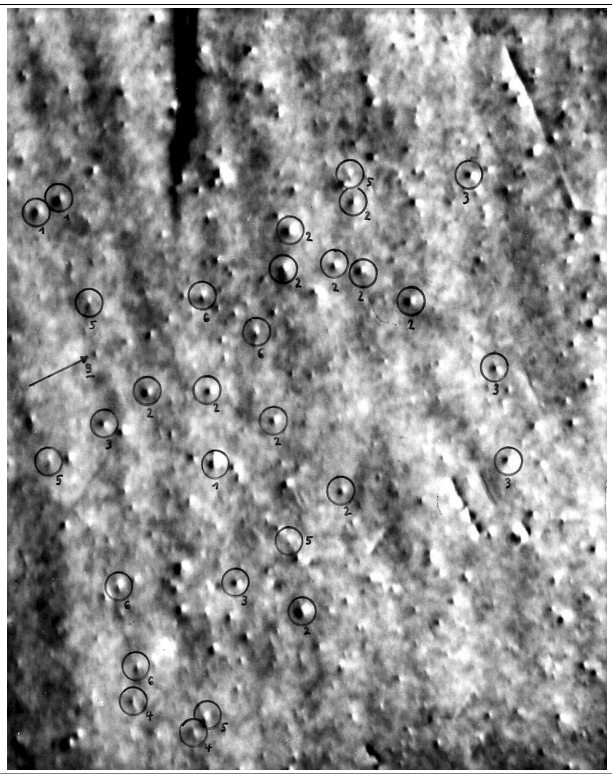


Fig. 5.2 in Thesis.
First picture of 3 looking at the same area with different diffraction conditions. For comparing experiment with theory

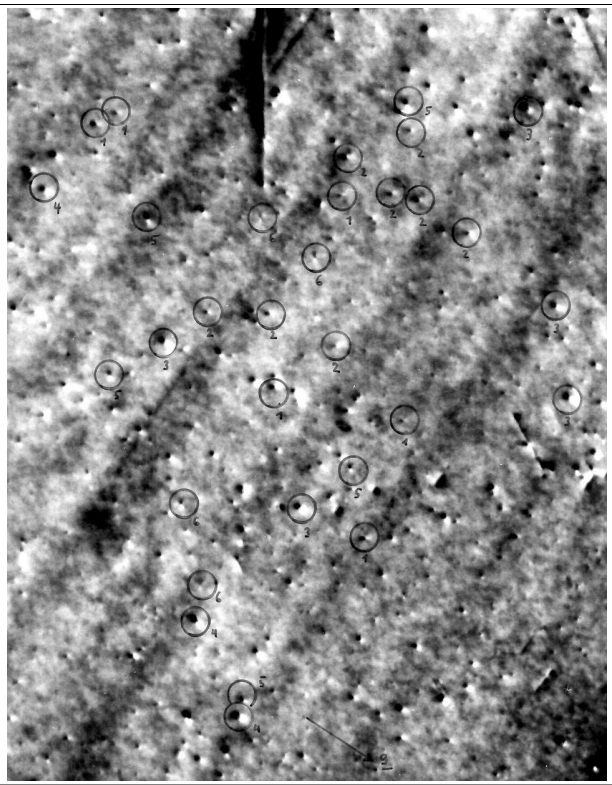


Fig. 5.3.
Second picture for comparing experiment with theory

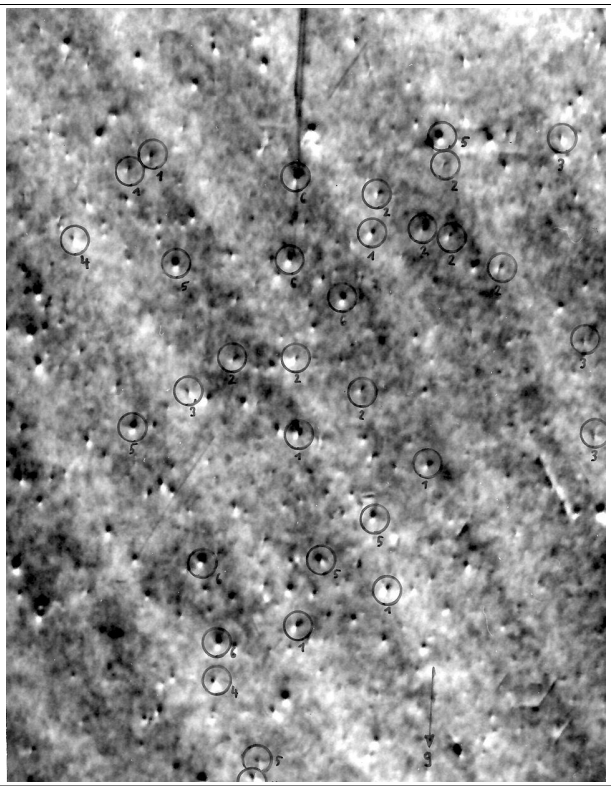


Fig. 5.4.
Third picture of 3 for comparing experiment with theory

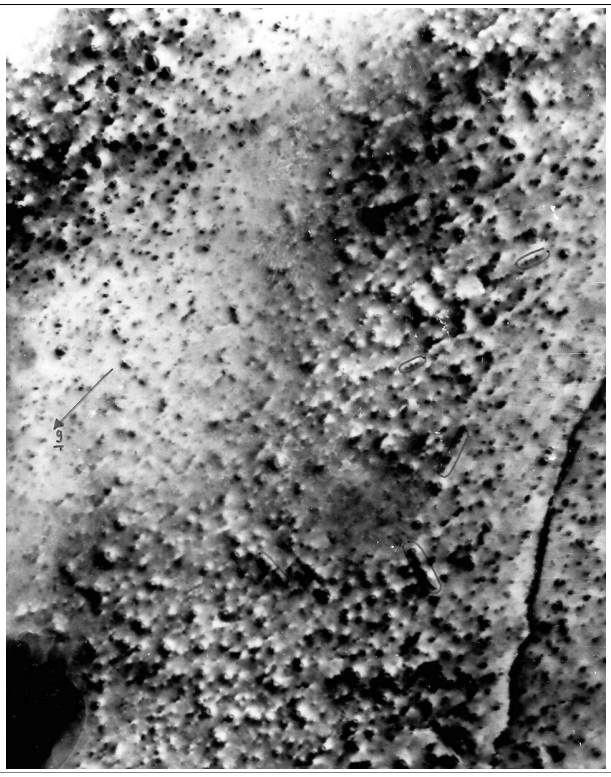


Fig. 5.5 in Thesis.
High dose experiment

Fig. 5.6 in Thesis.
"Butterfly" contrasts. See text for details

Parts used for **Fig. 3 in paper**

Fig. 3. Dark field micrograph showing "butterfly" contrasts". Foil normal is neal' {OOOl}

Large size picture

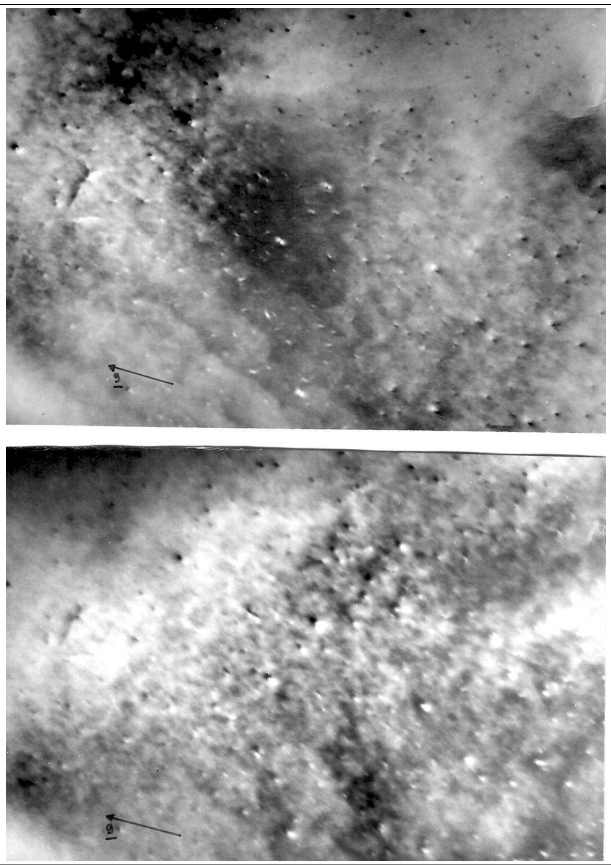


Fig. 5.7 and 5.8 in Thesis.
See text for details

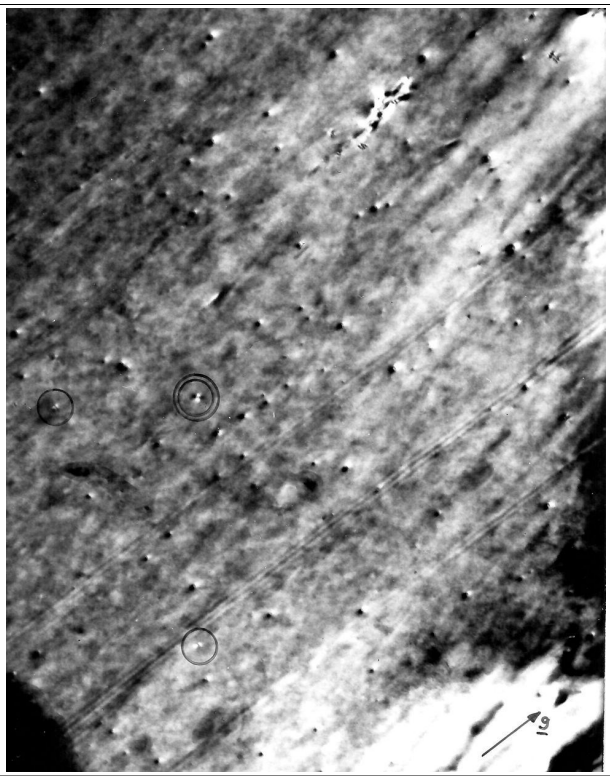


Fig. 5.9 in Thesis.
See text for details

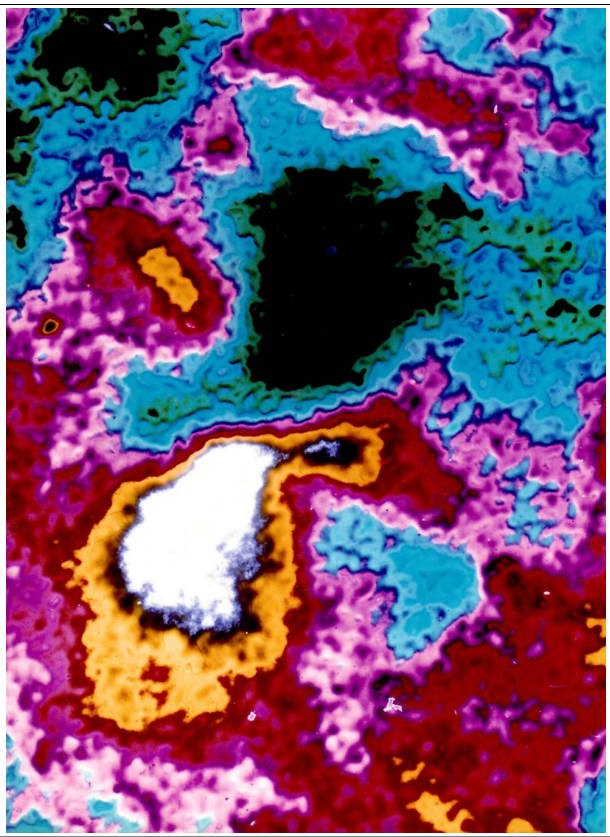


Fig. 9.3 in Thesis.
Grey tones converted to color. Rather tricky and time consuming then. See text for details

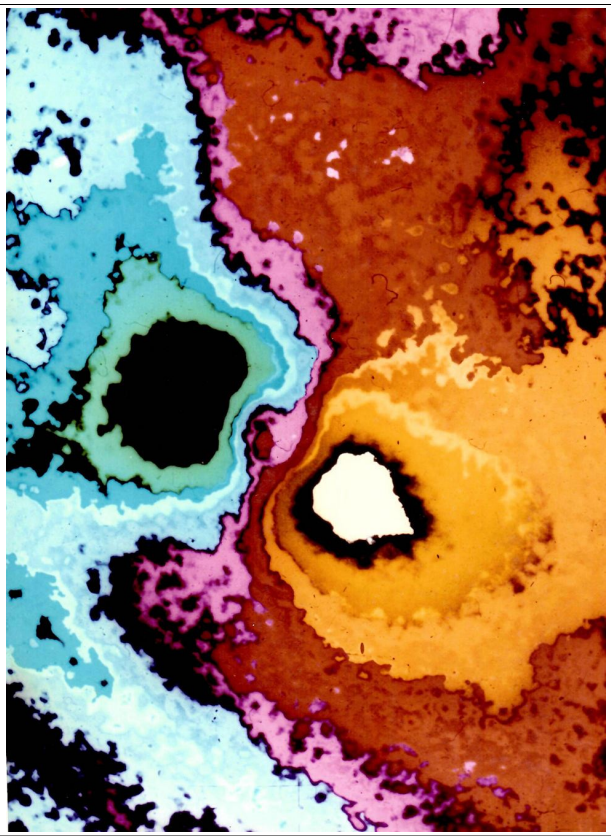
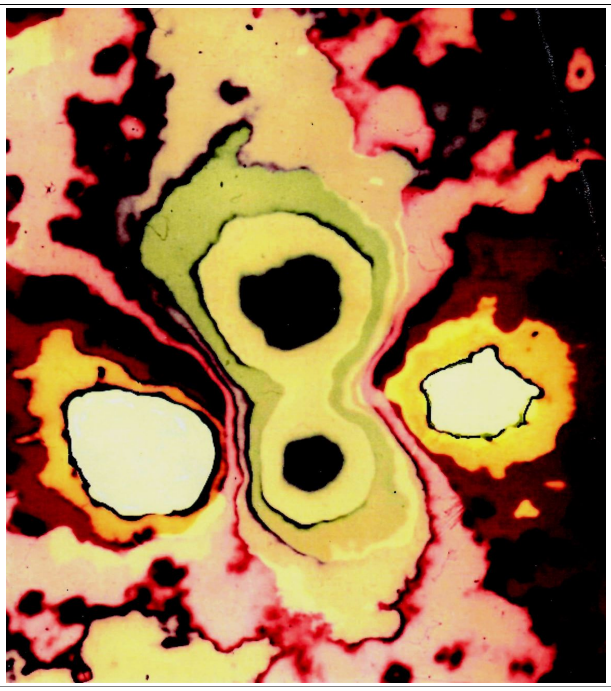
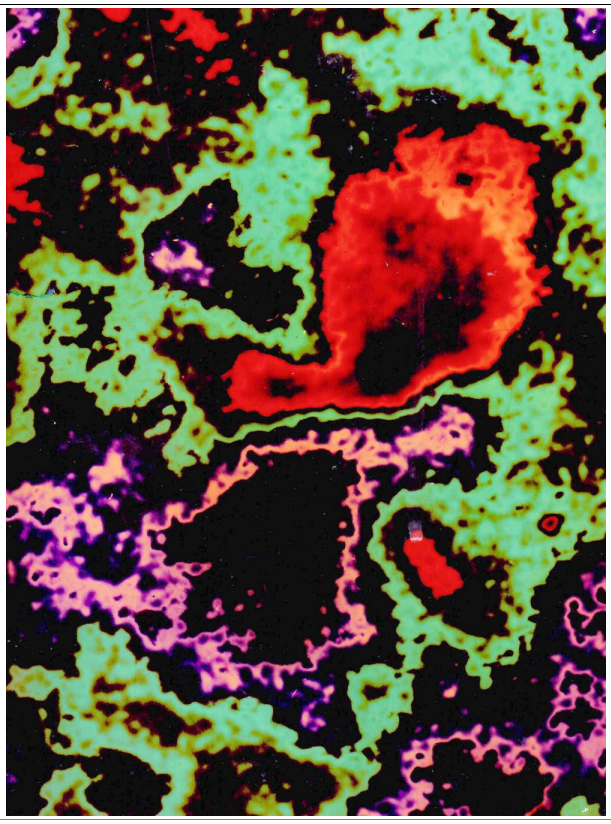


Fig. 9.4 in Thesis.
Grey tones converted to color. Rather tricky and time consuming then. See text for details



Not in thesis or published.
Another conversion of grey tones to color.



Not in thesis or published.
Another version of 9.3 above