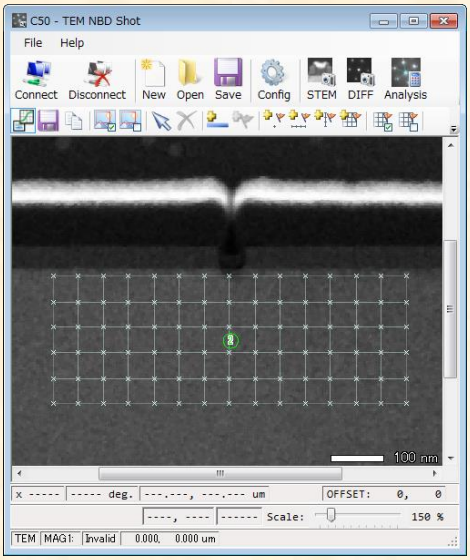
NBD STADIUM

【NBD Strain Analysis Software】

Corresponding model:
JEOL: TEM (JEM-2800/2100F)

TEMography.com
By SYSTEM IN FRONTIER INC.

『SHOT』



《Get procedure of diffraction pattern》

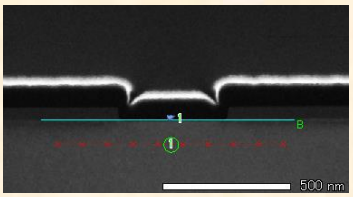
① It photos a STEM image.

② The photography position of a diffraction pattern is created.

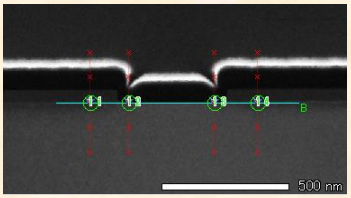
③ Photography is started.

※A scanning parameter uses the preset value of TEM.

【Profile-Horizontal】

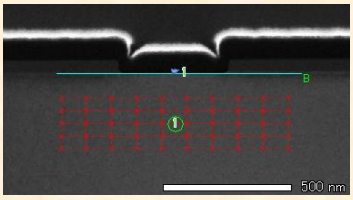


【Profile-Vertical】



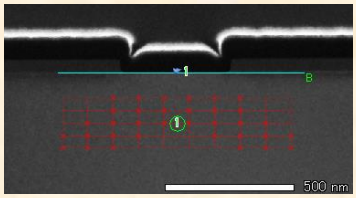
It photos the diffraction pattern which is in fixed distance from an interface.

【grid】



A diffraction pattern is photoed with a grid.

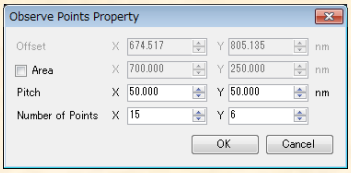
【grid with skip】



An unnecessary position is skipped.

【grid property】

Input the number of photographs, and the interval of a position.



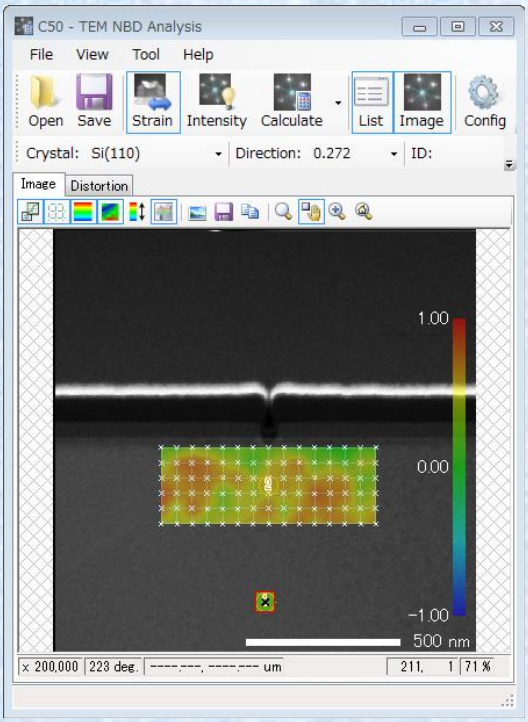
《Photography Time》

X:100piece×Y:20piece (2,000piece)

→ about 55minutes

- Drift compensation : 1 time / 100 piece
- Image resolution : 1024x1024

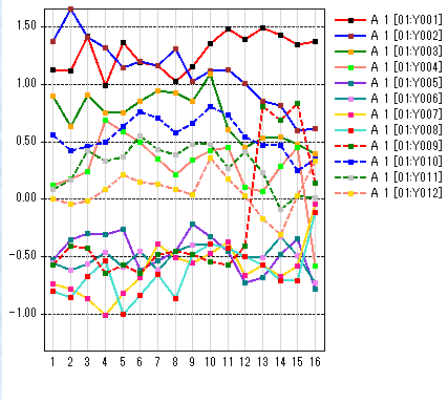
『Analysis』

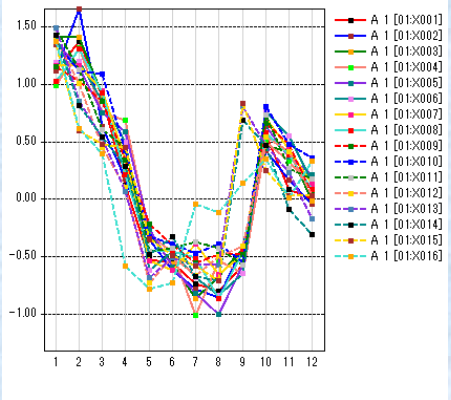


An analysis result can be checked visually.

- Map
- Chart

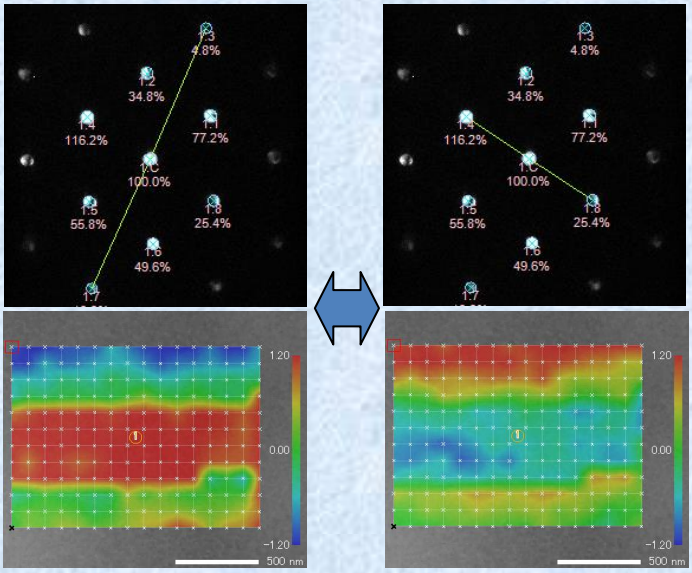
Rate (%) = (A - B) ÷ A × 100
A : Standard distance
B : Operation distance





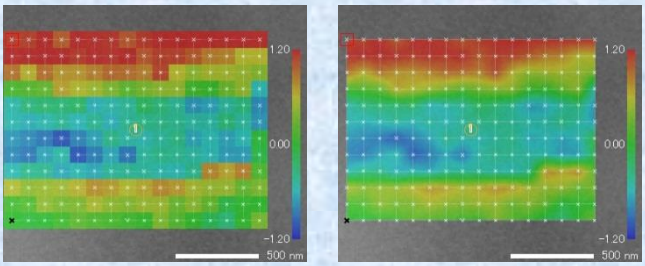
《Change a direction》

【Horizontal】 【Vertical】

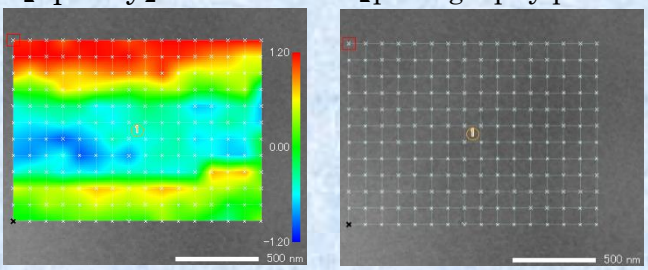


《Change the display method》

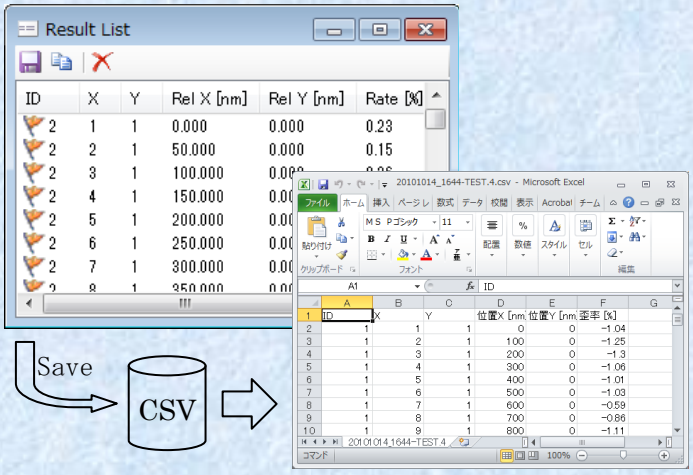
【analyzed result】 【gradation】



【opacity】 【photography position】

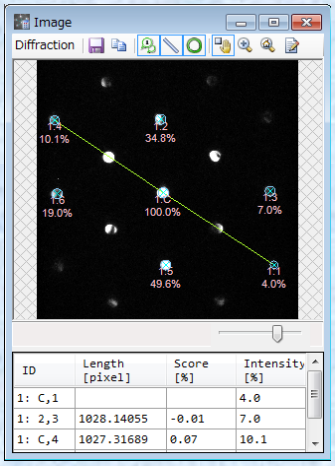


《The analyzed result》



A more detailed graph can be created using EXCEL®.

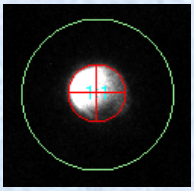
《Diffraction pattern》



The detected spot is checked on a diffraction pattern.

In the case of a mistake of the detected spot, it can edit manually.

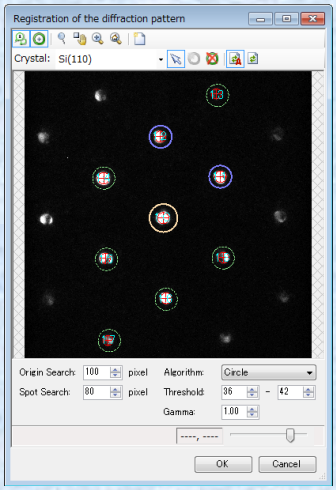
《The detection method of a spot》



- Circle
  A center is detected from the outline of a spotting point.
- Center-of-gravity
  The center of gravity of luminosity is detected.
- Peak position
  The maximum position is detected from a projection image.

Computation time (2,000 piece)
→ about 12 minutes
※Image resolution
1024 x 1024

《Registration of a diffraction spot》



If the position of the spot is registered beforehand, a detection mistake is reduced and it can detect at high speed.

A spot can be saved as a template. If it is the same crystal, it is not necessary to create.

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