

## The Siemens Reports

There are a lot of internal Siemens reports concerning the analysis of integrated circuits; some were actually written by me (in later years). Here I only want to preserve for eternity or at least the next few years (whatever comes first) only the two first ones that employed high-voltage electron microscopy. While I contributed unsubstantially to the first one, I was not involved in the second one and only include it for completeness' sake.

Here is the first one:

### Kristallfehler in hochintegrierten Schaltkreisen aus Silizium

#### (Crystal Lattice Defects in Highly Integrated Silicon Devices)

B.O. Kolbesen K.R. Mayer

As pointed out in the [backbone](#), the project report to the grant provider in 1979 is almost all there is about very involved work that started some time in 1975 and took several man years of work. The report is written in the [true language](#). From the links below you can access the text and the pictures separately

**Text:**

[Chapter 1-2](#)

[Chapter 3-4](#)

[Chapter 5](#)

[Chapter 6-End](#)

**Abbildungen (Pictures)**

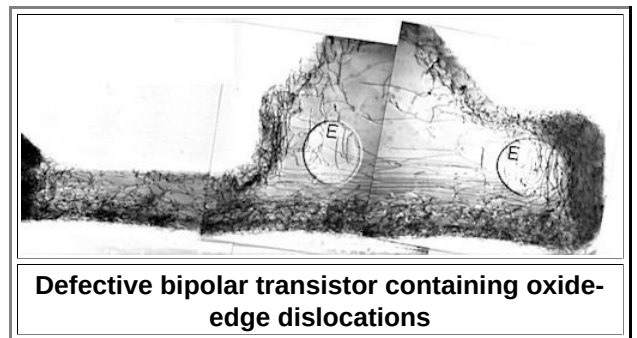
[Abb. 1 - 22](#)

[Abb. 23 - 45](#)

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**More pictures:**

[Auxiliaries](#)



Here is the second report:

### Kristallfehler in integrierten Schaltkreisen aus Silizium, insbesondere in Hinblick auf Größtintegration (VLSI)

#### (Crystal Lattice Defects in Integrated Silicon Devices, in particular with respect to very large integration (VLSI))

G. Franz, B.O. Kolbesen

This report is from 1981 and marks the end of a large funded project. It wasn't the end of investigating defects in IC's however. In 1985, for example, Siemens had a major setback due to some especially nasty defects. More to that [here](#).

● Text:

● Abbildungen (Pictures)

Neither the picture on the right nor any one in this report are from me.

Most were taken by my colleague and friend **Horst Strunk** at the **MPI** in Stuttgart in collaboration with B.O. Kolbesen.

