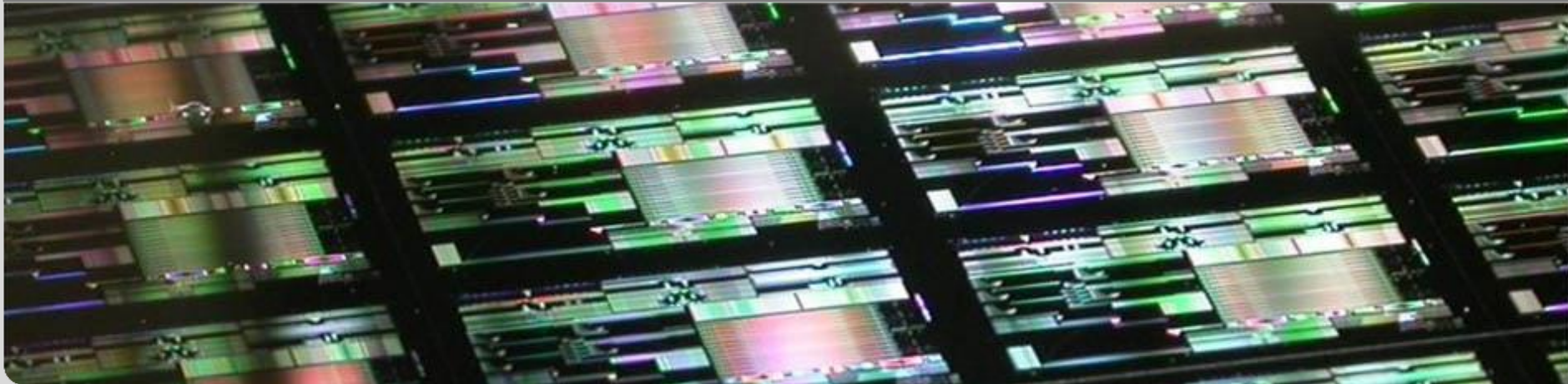
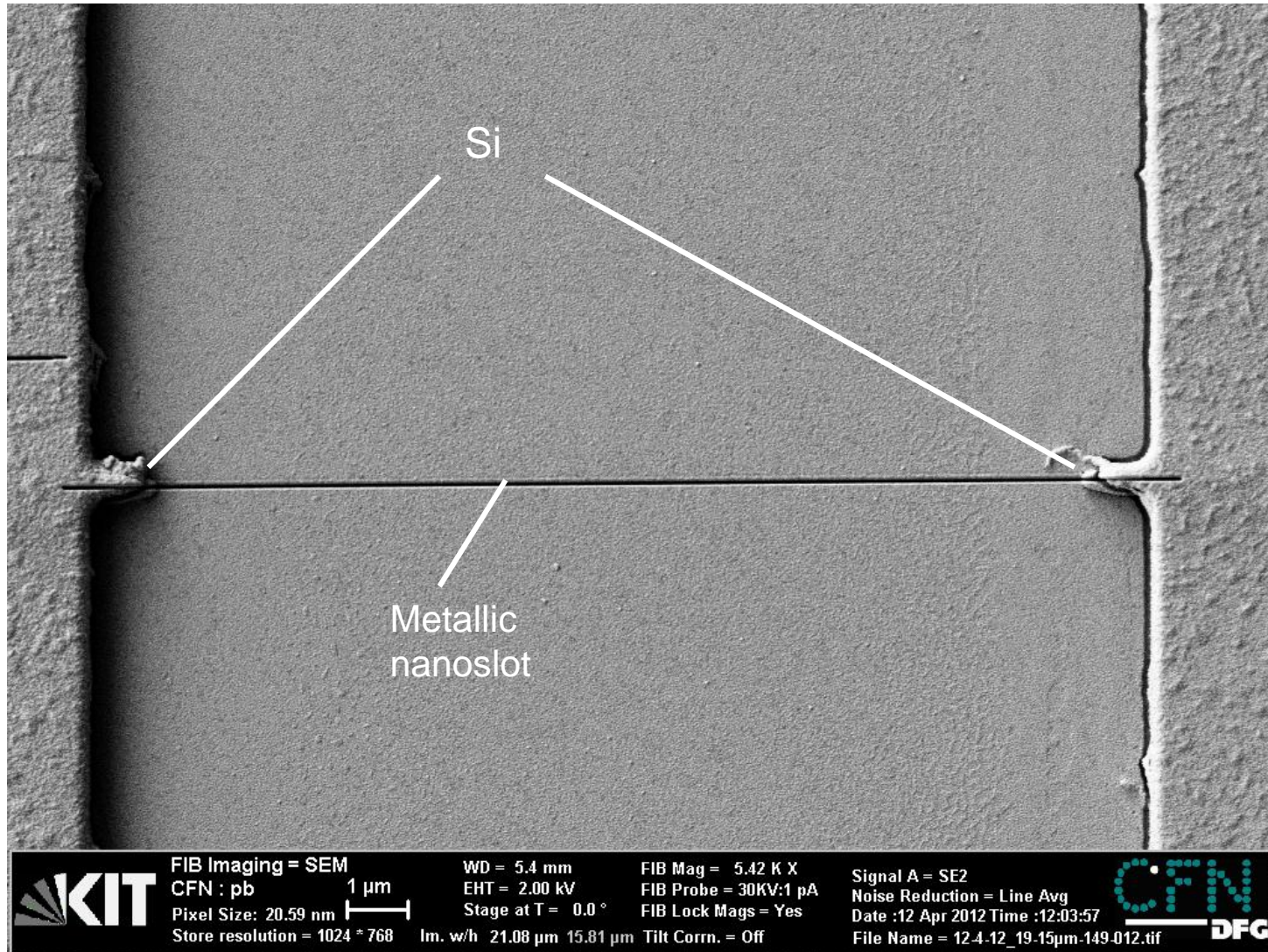


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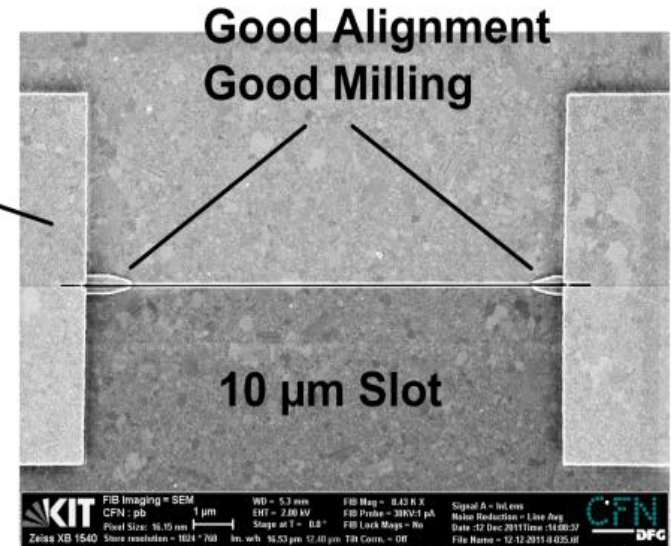
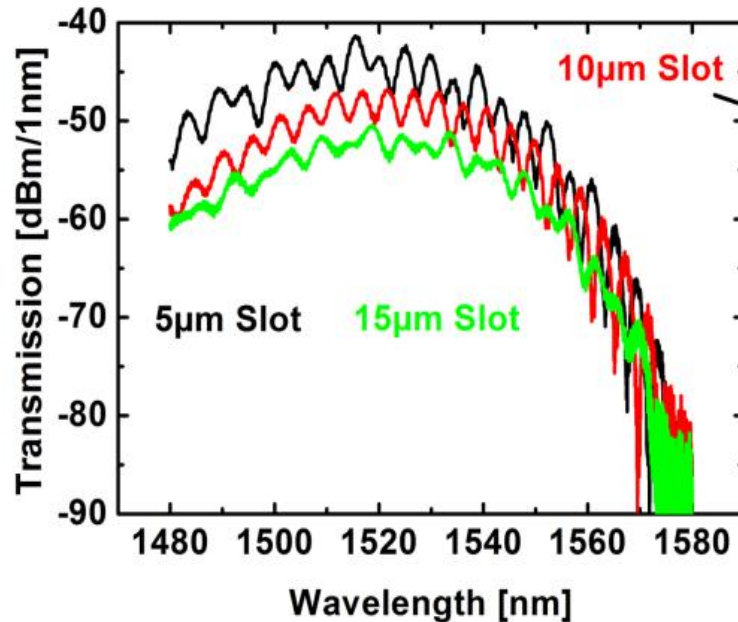
Institute of Photonics and Quantum Electronics (IPQ), Karlsruhe, Germany
Institute of Microstructural Technology, Karlsruhe, Germany



Device Fabrication



Device Transmission and Poling



@1550nm:

5µm: - 52.5 dBm (diff = 2.3 dB)

10µm: - 54.8 dBm (diff = 3.1 dB)

15µm: - 57.9 dBm

=> approximately **2.6 dB / 5µm**

Coupling losses

-> 25 dB

Poling at 141°C temperature

Required electric field:

$$E_{\text{stat}} = 10^8 \text{ V/m}$$

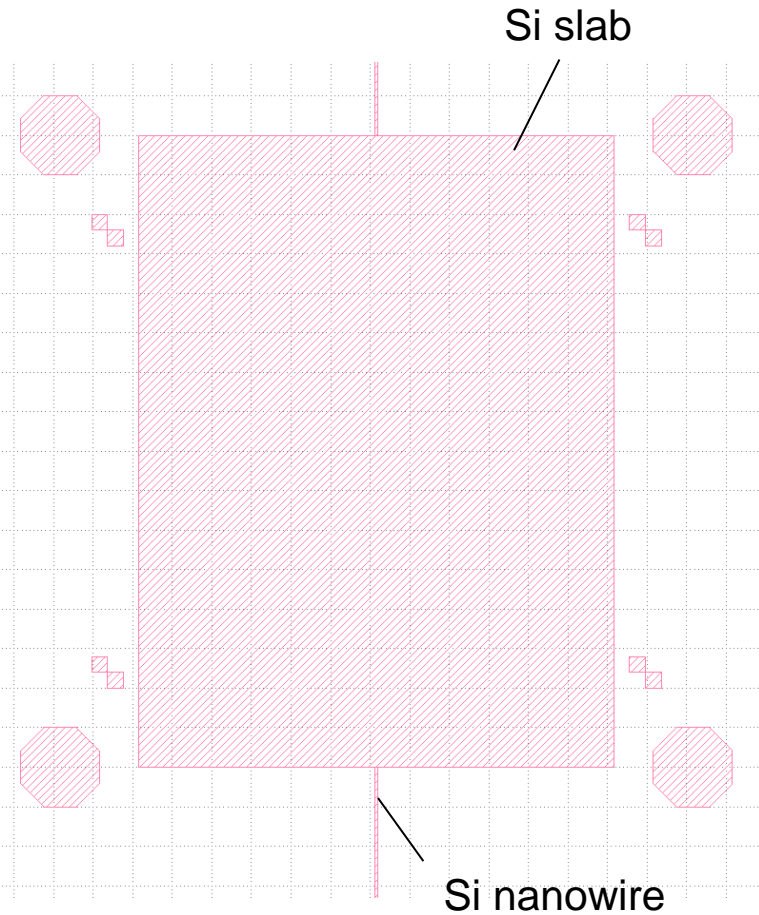
Achievable electric field:

$$E_{\text{stat}} = 10^7 \text{ V/m}$$

$$\Rightarrow r_{33} \sim 2 \text{ pm/V}$$

Current Activities

Design Layout



NAVOLCHI1 at IMEC10 run

