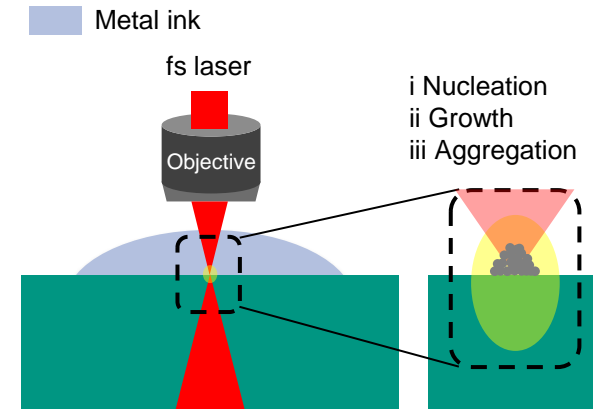
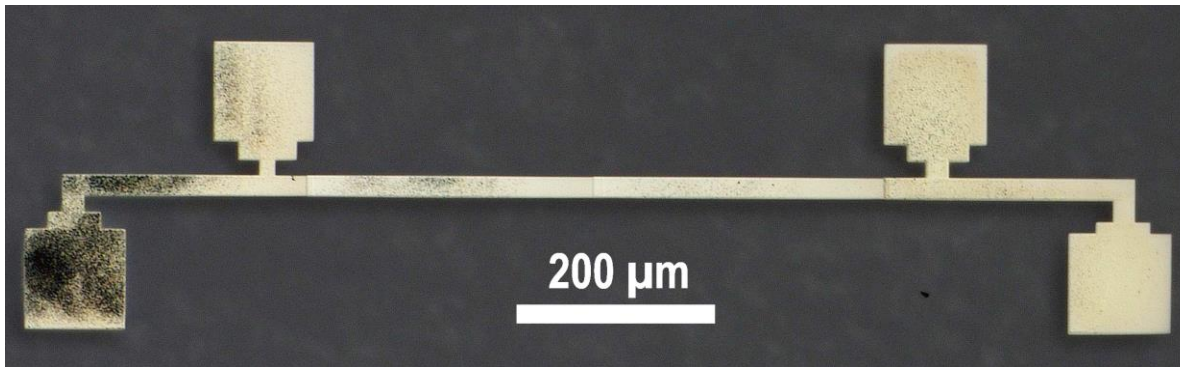


Master Thesis:

Design and fabrication of THz elements using 3D multi-material printing

The capability to generate micrometer-scale metallic structures using lasers presents the opportunity to manufacture laser-printed microelectronics without the necessity for high vacuum metal deposition and masking procedures. Utilizing the multiphoton reduction process in the **3D printing of metallic structures** can facilitate the realization of practical THz components such as **interconnects**, **waveguides**, and **antennas**. First **simulations** using commercially available software will be conducted to design these elements. The subsequent step involves fabricating these elements through a fully 3D printing approach, eliminating the need for masking any high vacuum processes.



Your tasks:

- Numerical simulations
- Laser printing
- Participation in characterization experiments

For detailed information contact:

M. Sc. Sina Foroutan Barenji
Sina.barenji@kit.edu
Tel. +49 721 608 41934

Prof. Dr. Christian Koos
Christian.koos@kit.edu
Tel. 0721-608-42481