

Tape-Out Engineer / PostDoc Position in Circuit Design at NaMLab

Design and Layout of Emerging Circuit Applications in 22nm FDSOI Technology

NaMLab is a research organization and an associated institute of the Technical University of Dresden. NaMLab provides industry-oriented and basic research in material science for future electronic devices. We are seeking a scientist in the field of circuit design with an interest in collaborating on novel, emerging device concepts. The scientist is expected to explore the possibilities of a new emerging technology, the reconfigurable field effect transistor (RFET) [1,2]. Circuit test structures are to be designed and laid out for a realization on Multi-Partner-Project-Wafers (WPW) in industrial 22nm FDSOI technology. The work will also encompass the electrical characterization of devices and circuits. The work will be performed in close collaboration with our scientific and industrial project partners, in the framework of our European project www.sensosteric.eu.

[1] <https://onlinelibrary.wiley.com/doi/full/10.1002/pssa.202300019>

[2] <https://www.nature.com/articles/s41467-022-34533-w>

Your Profile:

- Outstanding Ph.D degree in Electrical Engineering or similar
- Interest in unconventional electronic device physics
- Good technical comprehension, professional English communication, and writing skills
- Ability to work in an international team environment
- Experience with design and layout of circuits in Cadence Virtuoso or a similar environment

The following Skills are a plus:

- Experience with 22FDX technology
- Experience with circuit design in at least one of those fields: circuits for AI, hardware security, analog/mixed signal sensor electronics, cryogenic electronics

We offer:

- Individual supervision, knowledge transfer from experts in the field; contacts to industry
- Contribution to nano-electronic research within a leading-edge technology
- Access to high-end electrical characterization tools
- Possibility to adjust thesis focus according to individual preferences
- Possibility to expand activities into an own research group, if the topic develops well
- The salary is based on German research organization standards

Period:

- Application Deadline: Nov 7
- Planned starting date: as soon as possible
- Duration: 18-24 months (extension possible, if topic develops well)

For further information please contact:

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By sending us your application documents, you agree to the use of your personal data for the purpose of the application procedure.