Technische Universität Braunschweig

HiWi/ Studentarbeit/ Bachelor thesis

Institut für Mikrotechnik

Microchannel fabrication using etching methods with propose of Resistive Sensing of Nanoparticles

Description

Applications of nanoparticles are numerous, from scratch resistance coatings and electronic components to nano-medicine therapies. To ensure the reliability of products and the efficacy and safety of therapies, methods for controlling the quality of nanoparticles are of great importance. In IMT there is a project with the aim of electrically sense and classify the nanoparticle while traveling inside of the microchannel.

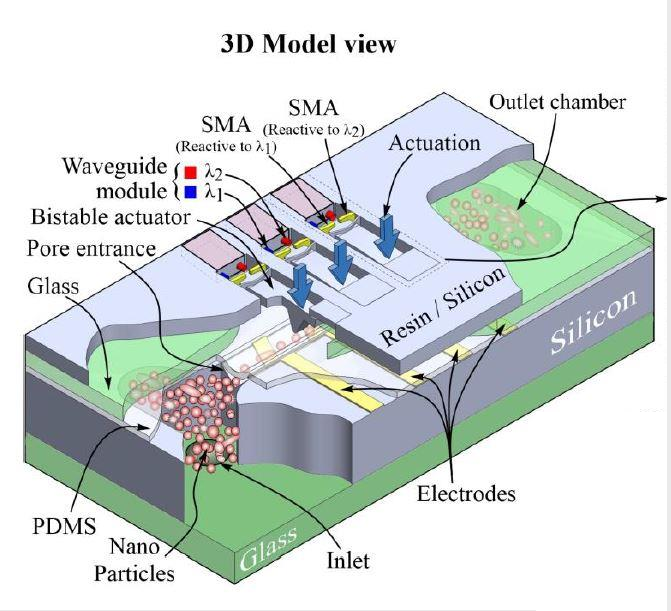
The microchannel is planned to be fabricated on silicon with etching methods. The aim of this project is therefore developing the design and then fabricating the microchannel using etching methods like ICP dry etching and KOH wet etching, and then fabricating the electrodes on top of the channel. If you are interested in microsystem technology, this project will give you a great opportunity to gain experiences in that area.

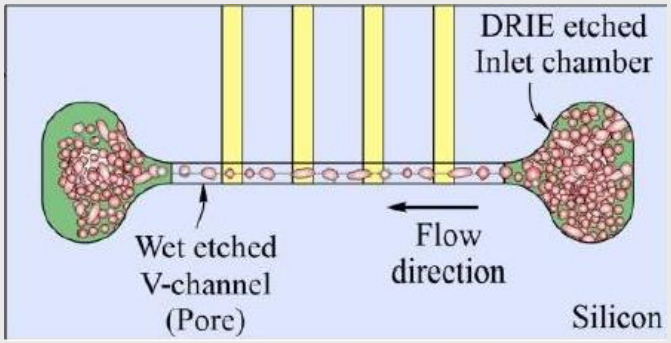
Fields of activity

- Reviewing literature
- Working in cleanroom

Requirements

- Fluent English
- Basic knowledge of silicon etching
- Motivation and enthusiasm to work





Start: By arrangement

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