Microfluidic Analyzation, Testing and Detection methods

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Introduction

- A rather new area of science
- Great impact on research, especially genetic
- Commercially viable products

Detectors

- A variety of technologies
- Optoelectronic with fluorescent labeling
- Electrochemical detection
- Capillary electrophoresis
- Other

Commercial products

- DNA microarrays
- Pathogen detection
- Glucose level measuring for diabetics

Proposition: a lab-on-a-chip for home use

- The need for medical care depends on the type of infection, mainly bacterial vs. viral
- The number of insignificant visits to the doctor could be pushed down with a self-applied preliminary test

Conclusions

- Viable technology
- Countless applications in the future
- Irreplaceable tool for various medical and biochemical research topics