

Microfluidic Introduction



Component
École Nationale
Supérieure
d'Électrotechnique
d'Électronique

In brief

- **plugin.odf-inp:PLUGINS_ODF_COURSE_NBHOURS_TXT:** 12,5
- **Code ELP:** N8EM07A

Presentation

Objectives

Present important and useful concepts to microfluidics focusing on small scale hydrodynamics and the effect of surface forces on Stokes flows.

Description

1. Introduction: MEMS to microfluidics
2. Physics at the micrometric scale
3. Hydrodynamics of microfluidic systems
4. Interfacial hydrodynamics
5. BE: Microfabrication - Applications

Pre-requisites

Meca Fluides 1 et 2