

Az SZTE Kutatóegyetemi Kiválósági Központ tudásbázisának
kiszélesítése és hosszú távú szakmai fenntarthatóságának megalapozása
a kiváló tudományos utánpótlás biztosításával”



Eötvös Loránd Kollégium Egészségügyi Műhely 2012.11.06.

A nanotechnológia orvosi alkalmazásai
Dr. Dékány Imre

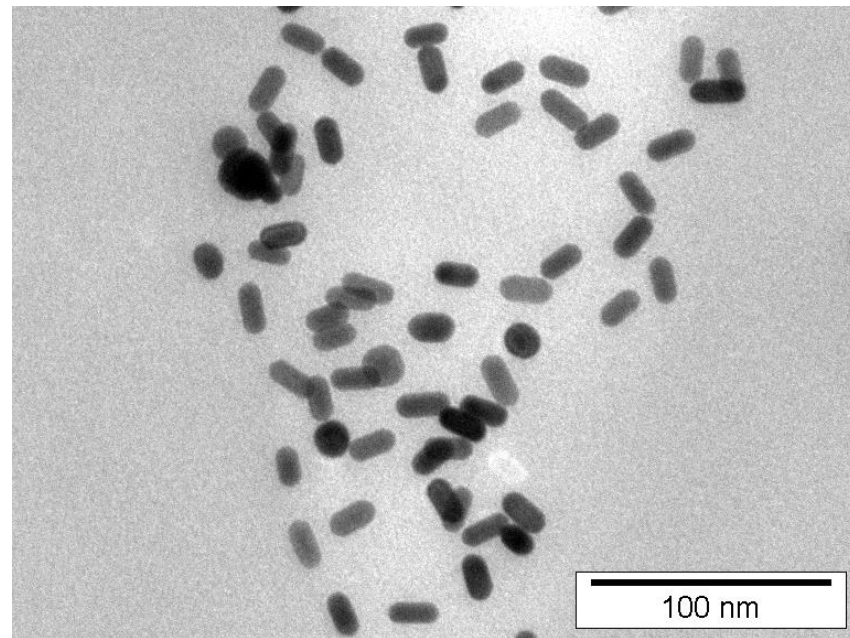
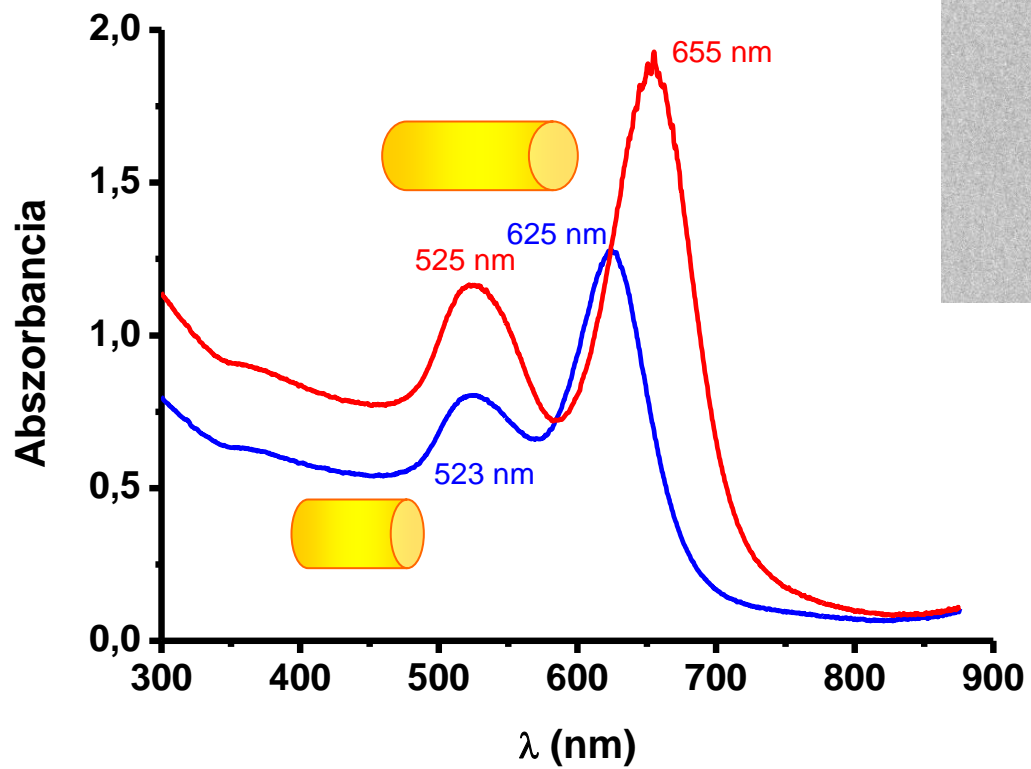
SZTE TTIK Fizikai Kémiai és Anyagtudományi
Tanszék



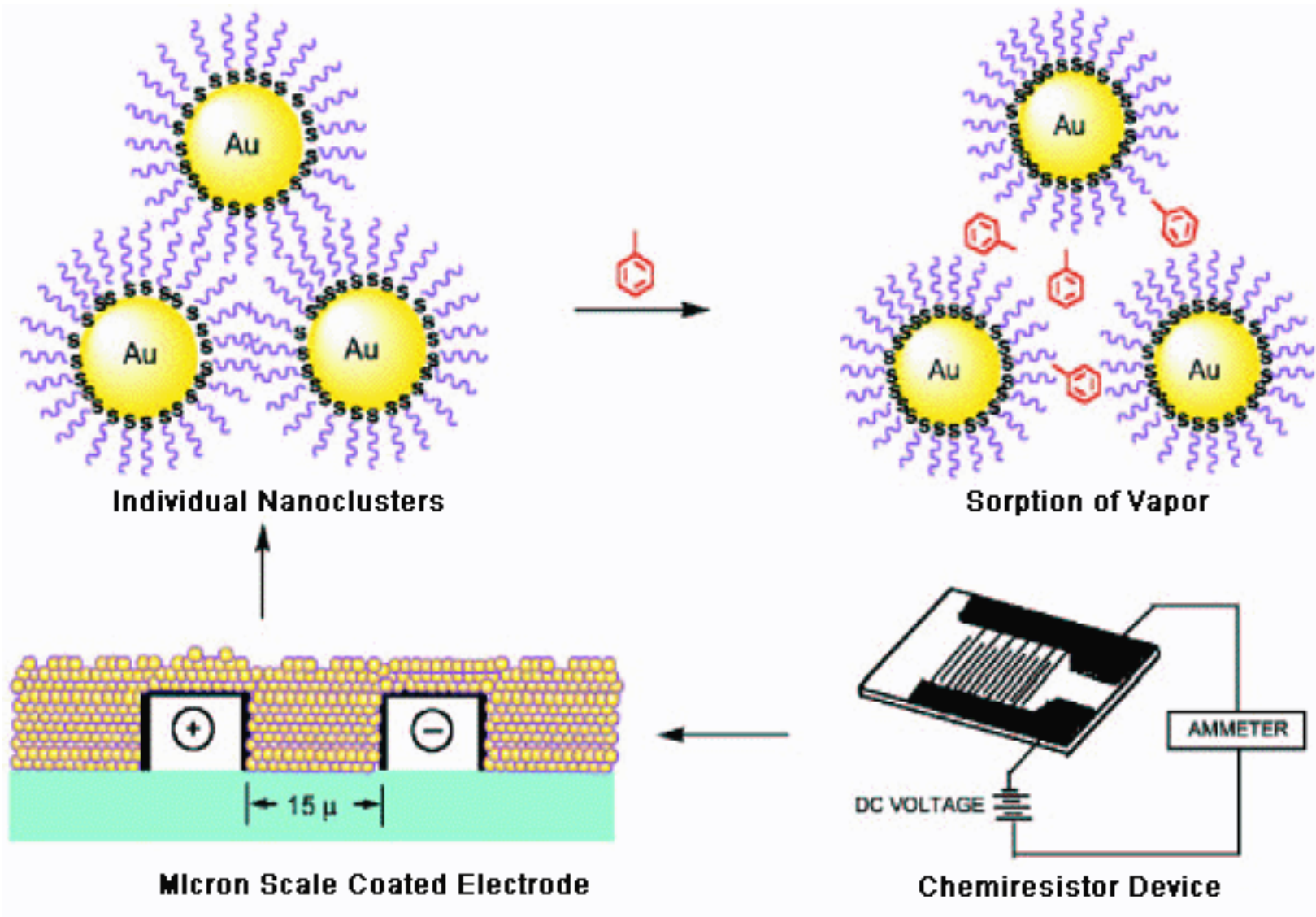
TÁMOP-4.2.2/B-10/1-2010-0012
projekt



Au nanorudak



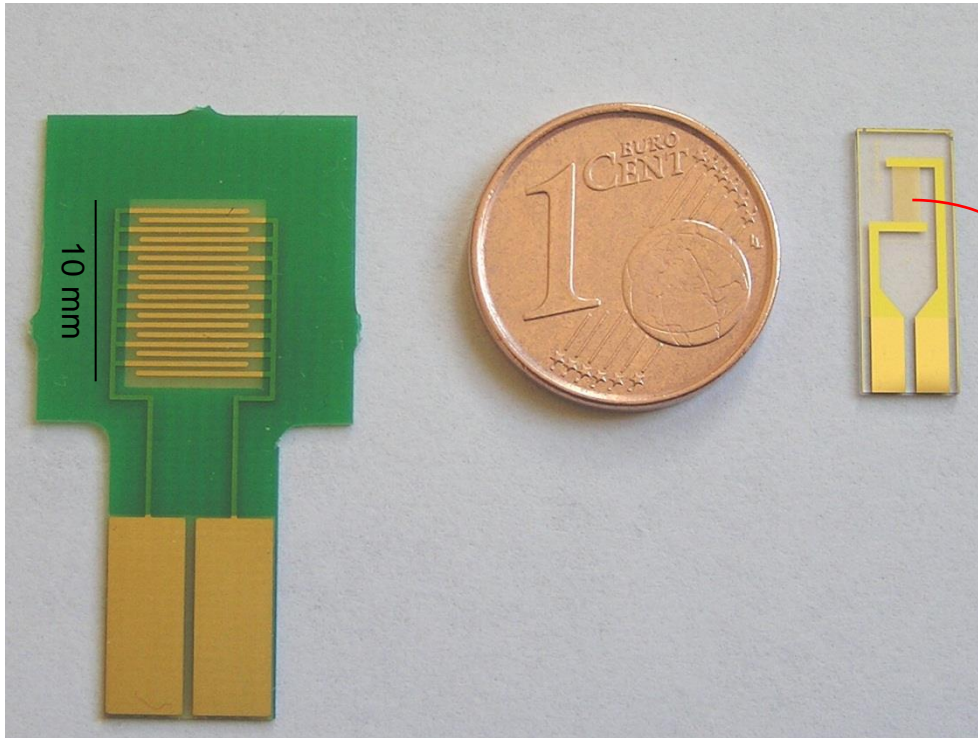
The sensor concept



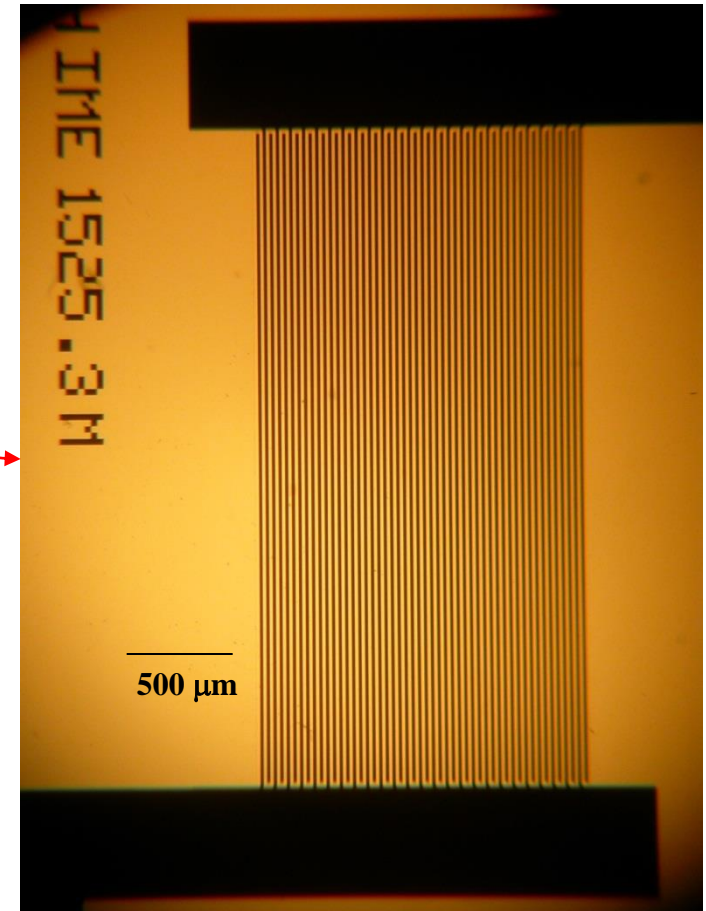
Electrodes

IME 1525.3 M Au electrode

ABTECH Scientific, Inc.

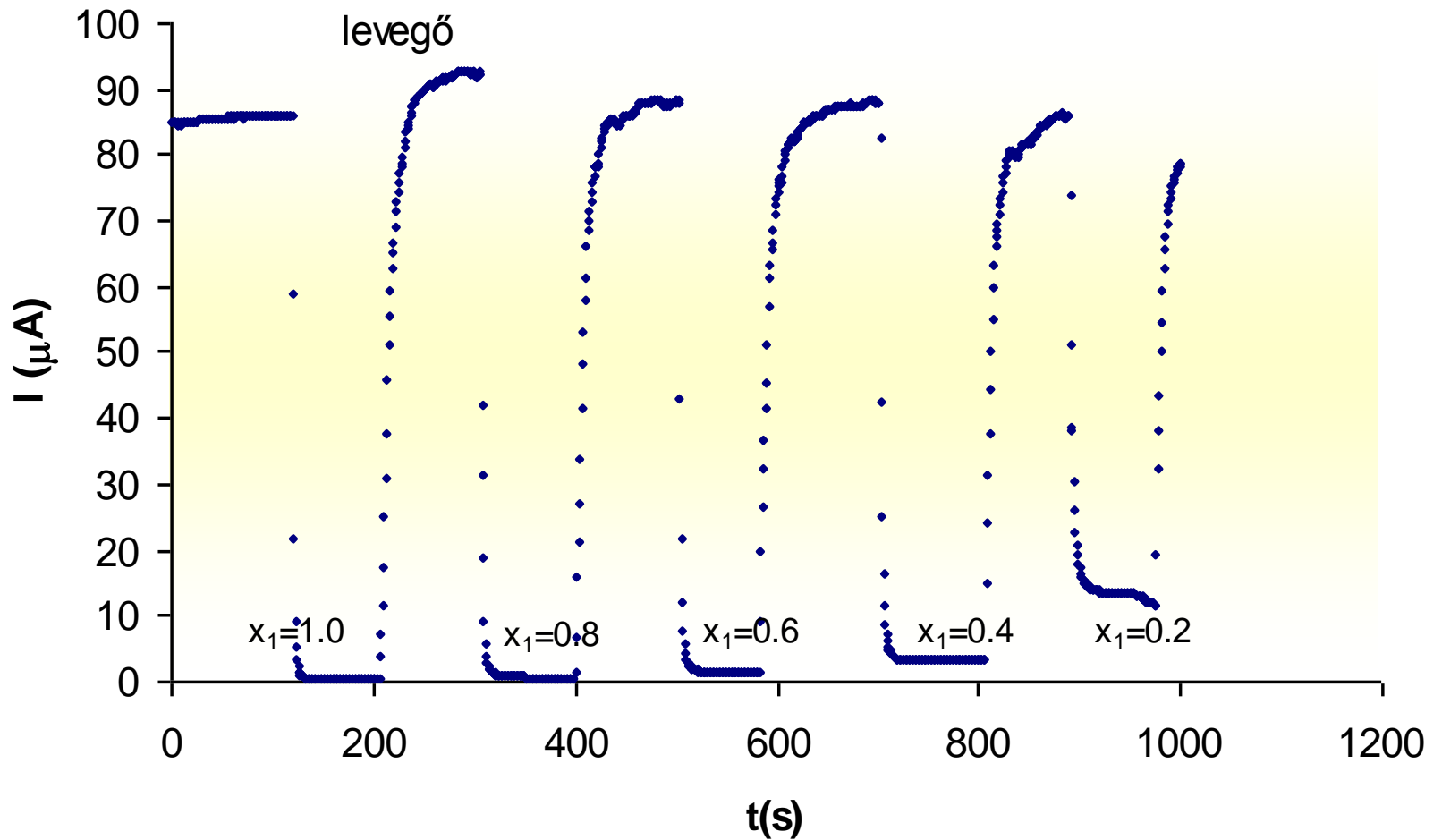


- 18 digits on each bus
- 300 micron line and space



- 50 digits on each bus
- 15 micron line and space

The response of Au:C₈=1:1 sensor to different xylene concentrations



Citrate stabilized **Gold nanoparticles** functionalization by cystein

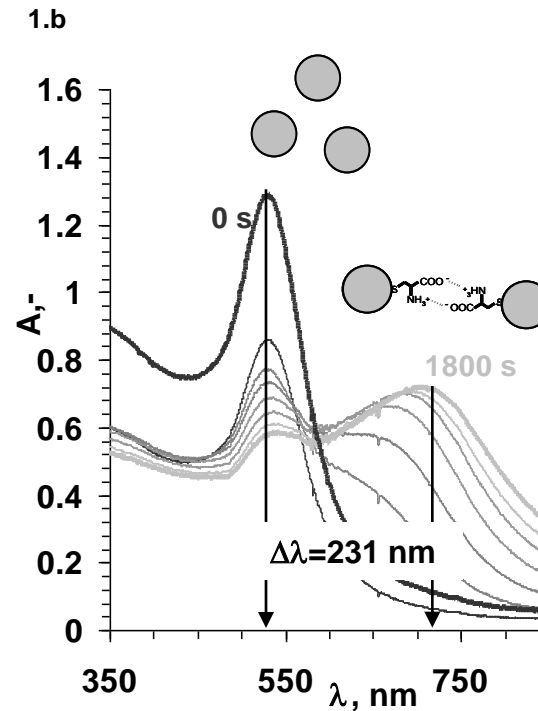
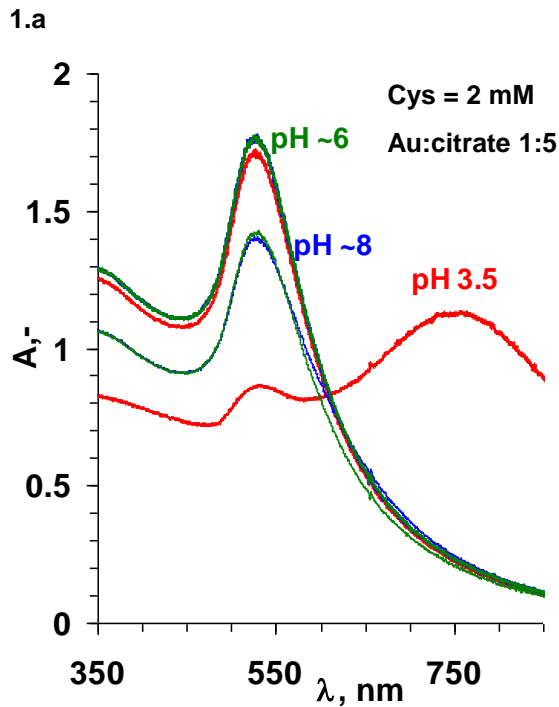


Fig. 1. Spectra of Au: citrate 1:5 sol added $c_{Cys} = 2$ mM at various pH 1.a) and the kinetics of change at pH ~3,5 (1.b), $c_{Au} = 0.4$ mM, particle size: $13.6 \pm 4,7$ nm .

