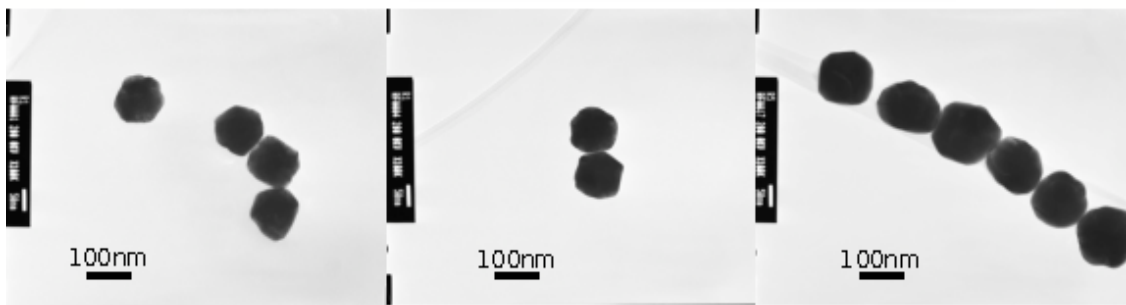
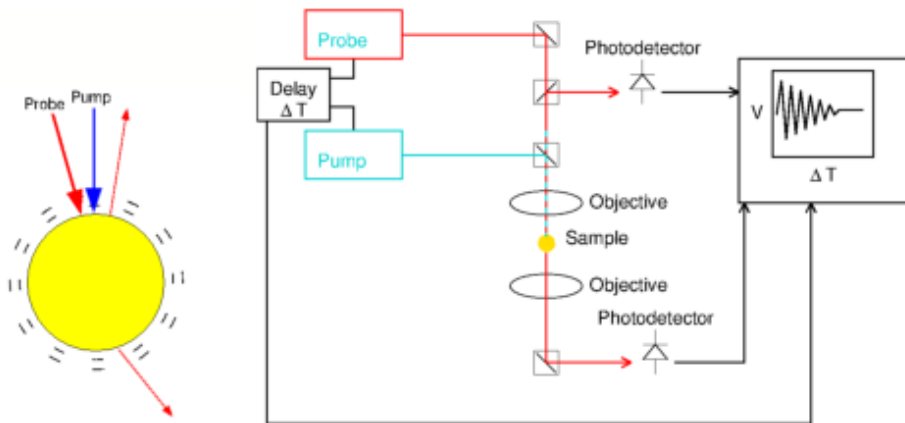




Optics and Photonics Group Lunchtime Seminar

“Metal nanoparticles as nano-sized acoustic transducers: generation and detection of GHz acoustic waves for imaging applications”

Rafael Fuentes



12:00pm Thursday 3rd November 2016
Lecture Theatre 203 Tower Building
All Welcome

http://optics.nottingham.ac.uk/wiki/Talks_2016



Abstract

“Metal nanoparticles as nano-sized acoustic transducers: generation and detection of GHz acoustic waves for imaging applications”

Rafael Fuentes

12:00pm Thursday 3rd November 2016

Lecture Theatre 203 Tower Building

All Welcome

There has been much interest in the vibration properties of nanoparticles and in this talk we explore the use of nanoparticles as very high frequency opto-acoustic transducers. Our interest stems from the ability of such particles to generate and detect high frequency ultrasound when excited by short pulse lasers. This talk presents gold nanospheres that can work as acoustic transducers in the GHz region. We describe the generation and detection mechanism, the modelling and design of the particles and picosecond laser ultrasonic experiments using different size of gold nanospheres.