

**AFM-based bivariate morphological discrimination of apoptosis induced
by photodynamic therapy using photosensitizer-functionalized gold
nanoparticles**

Rasoul Al-Majmaie^{a,b,c}, Eamonn Kennedy^a, Mohamed Al-Rubeai^b, James H. Rice^a, Dominic
Zerulla^{a*}

a School of Physics, University College Dublin, Belfield, Dublin, Ireland

b School of Chemical and Bioprocess Engineering, University College Dublin, Ireland

c Institute of Laser for Postgraduate Studies, University of Baghdad, Iraq

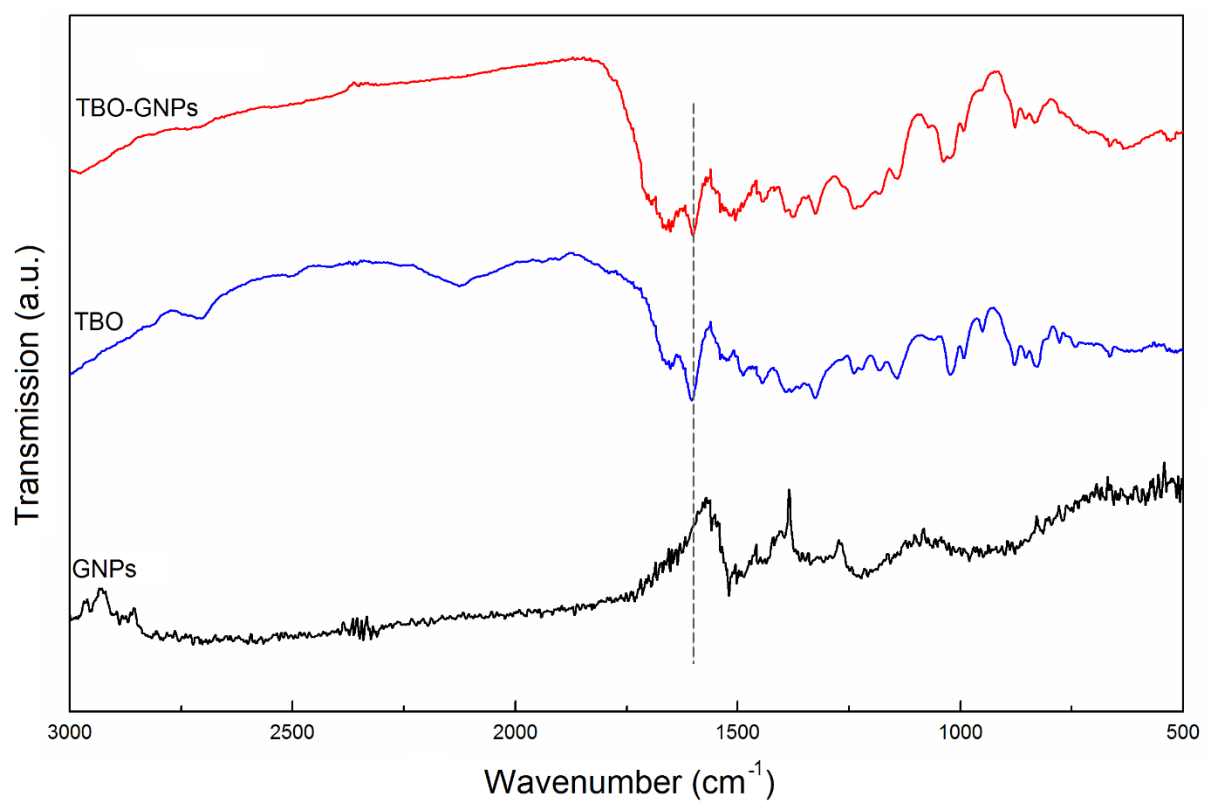


Figure S1: FTIR spectra of GNPs, free TBO, and TBO-GNPs.

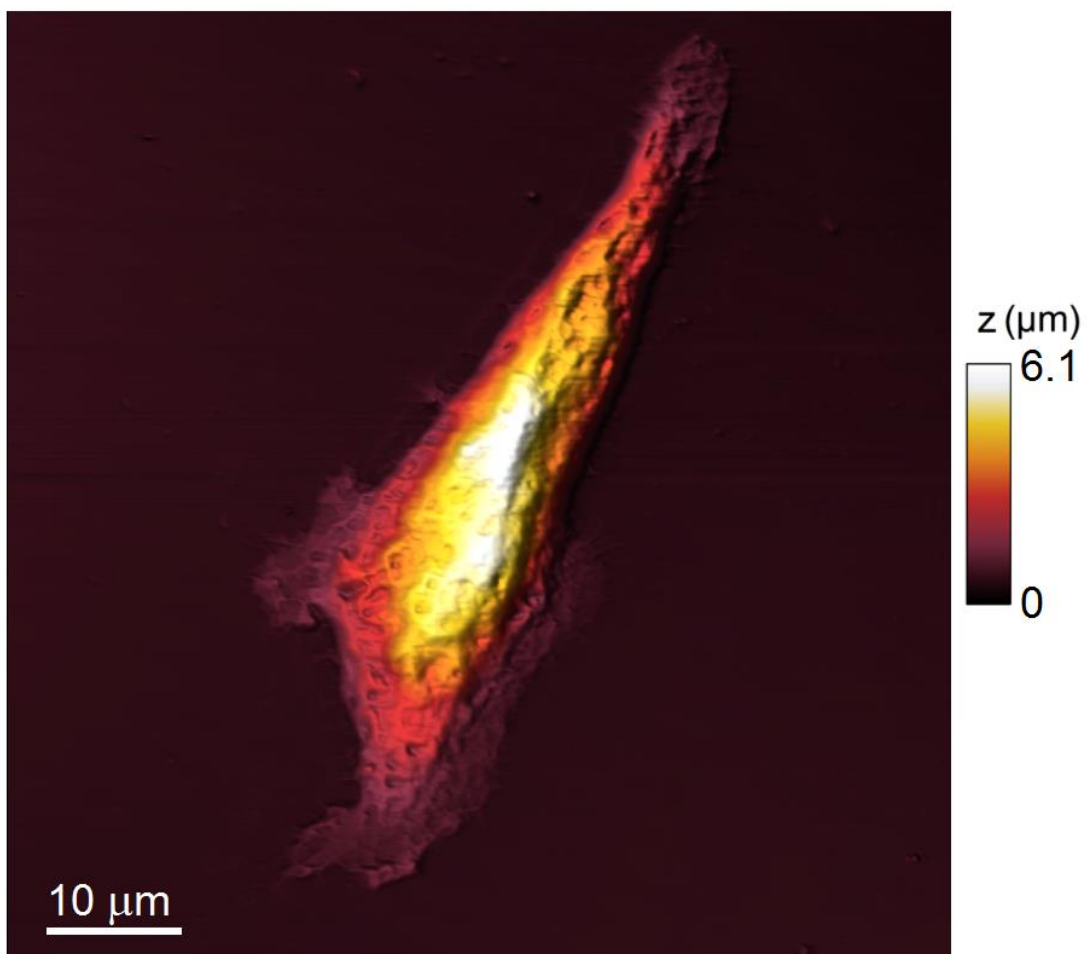


Figure S2: AFM imaging of a typical apoptotic cell.