Exposing biomolecular properties one molecule at a time

Elmalk, A.

Curriculum Vitae

Abdalmohsen Elmalk was born in El Damazin, Sudan. He studied Chemistry and Physics at Sudan University of Science and Technology (Khartoum, Sudan), and received his Diploma in Chemistry in 1998 and the BSc Degree in Physics in 1999. In the same year he started working in the Department of Physics at Al Neelain University (Khartoum, Sudan) as teaching assistant.

While working there he earned his Master's Degree in Physics at Sudan University of Science and Technology (2003). His Masters dissertation focused on the Frequency Stabilization of a Helium-Neon Laser.

In 2006 he joined the group of Prof. Dr. T. J. Aartsma at the University of Leiden, The Netherlands to continue with his doctoral studies. The results of his research are described in the present thesis. He is currently employed at ASML, Veldhoven.

List of Publications:

Liu L-N, Elmalk AT, Aartsma TJ, Thomas J-C, Lamers GEM, Zhiu B-C, Zhang Y-Z (2008) Light-Induced Energetic Decoupling as a Mechanism for Phycobilisome-Related Energy Dissipation in Red Algae: A Single Molecule Study. PLoS ONE 3(9): e3134. doi:10.1371/journal.pone.0003134

Tabares LC, Kostrz D, Elmalk A, Andreoni A, Dennison C, Aartsma TJ, Canters GW (2011) Fluorescence Lifetime Analysis of Nitrite Reductase from Alcaligenes xylosoxidans at the Single-Molecule Level Reveals the Enzyme Mechanism. Chemistry-A European Journal 17:12015-12019

Elmalk AT, Salverda JM, Tabares LC, Canters GW, Aartsma TJ (2012) Probing redox proteins on a gold surface by single molecule fluorescence spectroscopy. Journal of Chemical Physics 136: 235101

Elmalk AT, Tabares LC, Salverda JM, Gaiduk A, Orrit M, Canters GW, Aartsma TJ (2012) Single-Molecule Activity of Oxido-Reductases Attached to Gold Nanoparticles. Submitted for publication.