Education

Degree Physics (with honours), University of Messina (27/07/1995)

Ph.D. Physics, University of Messina, 01/02/1999

Professional experience

1999-2006 Research contracts, Università degli Studi di Reggio Calabria

2008 (January) - Researcher of the Italian National Research Council, CNR. Affiliation: Istituto per i Processi Chimico-Fisici, Messina

Reasearch Activity

Dr. Donato is a permanent staff researcher of the Istituto per i Processi Chimico Fisici (IPCF) of the Italian National Research Council (CNR). She is currently involved in optical trapping and manipulation, Raman spectroscopy and photoluminescence of micro- and nanoscopic samples. In particular, she is interested in both calculation from theoretical models and direct measurements of optical forces and torques, aiming at clarifying the role of particle size, shape and composition in the light-matter interaction. To this aim, she has been involved in the design and realization of several optical trapping setups, using different laser sources and detection configurations. In the past years, she has studied some molecular systems and their aggregation properties by means of steady-state and time-resolved fluorescence and fluorescence anisotropy. Moreover, she has been also interested in Raman spectroscopy and photoluminescence of both amorphous and crystalline samples (CVD diamond, carbon nanotubes, amorphous or porous silicon, glasses) aiming to the improvement of their production process.

Dr. Donato is coauthor of more than 50 publications on international journals.