

Lunedì 29 Gennaio 2024
alle ore 11.30

presso AULA 2 Fermi dell'Edificio F
Area della Ricerca CNR di Firenze
Via madonna del piano 10, Sesto Fiorentino (FI)

il Dr. Giorgio Divitini
Istituto Italiano di Tecnologia (IIT)
Genova, Italia

terrà il seguente seminario:

"Electron microscopy of nanocrystals and nanomaterials for energy applications"

Si invitano tutti gli interessati a partecipare.

Dr. Beatrice Muzzi
Assegnista CNR

Dr. Claudio Sangregorio
Direttore ICCOM

Short Abstract:

In the Electron Spectroscopy and Nanoscopy research unit at IIT we apply a variety of EM-based techniques to study nanomaterials. We will present work on semiconductor nanocrystals for optoelectronic applications, including structural and compositional studies. We also will report on analyses of 2D materials and thin films, including electron energy-loss spectroscopy for both bandgap measurements and plasmon mapping.

Biographic sketch:

Dr. Giorgio Divitini received a Bachelor's and a Master's degree in Physics from the Università degli Studi di Milano in Milan, and a PhD in Materials Science at the University of Cambridge (UK). He was a post-doctoral researcher in the Department of Materials Science and Metallurgy for four years before taking on a position as Advanced TEM Officer in the same institution, working in the largest electron microscopy facility for physical sciences in Cambridge. In the summer of 2021 he moved to IIT to start a group dedicated to the advancement of electron microscopy and its applications.

Giorgio is passionate about pushing the boundaries of characterisation at the nanoscale, employing new detectors, new acquisition protocols and new data analysis approaches for electron microscopy and related techniques. His past work includes a variety of analytical techniques, including electron tomography, EDX and EEL spectroscopy, cryo-EM and in situ characterisation. Applications-wise, he has mostly worked on materials and devices relevant for energy, such as solar cells, LEDs and battery materials.