

Francesco Rossella graduated in Physics (2002) and obtained his PhD in Condensed Matter Physics (2007) at Università di Pavia (UniPV), Italy. As graduate student, he worked on oxide single crystals for optical/electro-optical applications. His first postdoc (1.5 yr) focused on solid oxide fuel cells (TU München, Germany and UniPV). His second postdoc (1 yr) focused on thin films for transparent spintronics (UniPV). Since then, his research interests migrated towards nanostructures, low-dimensional materials and device physics. From 2009 to 2012, as post doctoral fellow at UniPV, he experimentally investigated aspects of the quantum Hall physics in semiconductor heterostructures and graphene and explored novel functionalities of carbon-based nanostructured materials, with transport and luminescence/light scattering spectroscopy experiments. He won several visiting research grants within EU and national programs, to work in the characterization of low dimensional structures, nanofabrication, surface science. From 2012 to 2016 he was post doctoral fellow at the NEST Laboratory of the Scuola Normale Superiore, Pisa, Italy. There he worked in nanofabrication/characterization of semiconductor nanowire platforms for thermoelectrics, single-electron devices and sensing. Since November 2013, he is Unit Coordinator of the “Futuro in Ricerca 2013” project “Ultrafast thermodynamics at the nanoscale” granted by the Italian Ministry of Research (250k€), leading the team in charge for sample preparation via surface nanopatterning/e-beam lithography. Since November 2016 he is Research Fellow at Scuola Normale Superiore. Francesco Rossella co-authored more than 45 publications in peer reviewed journals (including 1 Nature Nanotechnology, 1 Advanced Materials, 5 Nano Letters, 1 ACS Nano, 1 Nanomedicine, 2 Nano Research, 1 Nanoscale, 1 Carbon) and more than 45 contributions to international and national conferences, workshops, schools and seminars. He is author of more than 20 oral presentations (including invited). He has supervised postdocs and co-directed MSc and BSc students. He was lecturer, laboratory assistant, examination board member and tutor for several disciplines including Physics (General, Condensed Matter and Experimental), Optics, Physical Technologies and Cultural Heritage. He speaks English, Spanish, French and Italian. He collaborates with several groups hosted in top-rank research institutions, e.g. Nanophononics group at Basel University, Hitachi Cambridge Lab at Cambridge UK, Key Lab of Optical Physics at Institute of Physics of the Chinese Academy of Science, European Magnetic Field Laboratory, Electronic Kinetics Lab at Moscow Institute for Physics and Engineering.