

Carbonaro Carlo Maria is Associate Professor on Experimental Physics with the Department of Physics of the University of Cagliari since 2016, previously appointed as Full-Time Researcher since 2002. He is also qualified as full professor since 2017. He has many years of teaching experience in service courses General Physics and in the last years he oversees the exams of laboratories (I or II) for the degree in Physics.

He has performed training experiences in national and international laboratories (DESY, Deutschen Elektronen Synchrotron (Hamburg, Germany), 10/1996, 10/2003, 11/2004, 05/2006, 10/2009; laboratory of the Material Science Department of University of Milano-Bicocca, 02/2007; Laboratoire Hubert Curien, Université Jean Monnet (Saint-Etienne, France), 09/2012; Ashmolean Museum (Oxford, UK), 2014).

His research activity is focused on the structural and optical characterization (by means optical absorption, steady state and time resolved photoluminescence in the vis-UV-VUV range, Raman) of materials for photonic applications. Starting from raw and doped bulk SiO<sub>2</sub> (silica), in the last years the interest was aimed to porous silica because of its technological applications, both as raw material or as a matrix host for molecules of specific interest (non-conventional doping). Lately, the study was dedicated to carbon based new materials for photonics, such as g-C<sub>3</sub>N<sub>4</sub> and Carbon Dots. The skills in optical spectroscopy were also applied in the field of cultural heritage and food analysis, concerning mainly regional identity purposes. The research activity led to the publications of more than 95 works in international journals with referees, two contributions on books, more than 1200 citations, h index of 19, the participation to international and national congresses and numerous national and international collaborations.