

## CV Gabriele Di Carlo

Gabriele Di Carlo graduated in 2006 in pharmaceutical chemistry and technology at the University of Milan. In 2009 he got the PhD in Science Chemistry (XXII cycle) at the same university under supervision of Dott. Marcella Chiari and Prof. Stefano Maiorana.

After completion the PhD Gabriele Di Carlo got a Postdoctoral Fellowship at the “Istituto di Chimica del Riconoscimento Molecolare” (ICRM-CNR) 2009, financed by “Spintronic Biosensors for Medicine” (SpinBioMed), CARIPLO foundation 2008 with a project concerning the selective modification of gold and silicon oxide surfaces. Since 2010 he got some postdoctoral fellowships at the Department of Chemistry – University of Milan. The postdoctoral activities mainly concerned the synthesis of porphyrin-based dyes for photovoltaic and optoelectronic applications. On 2017 he was a visiting postdoctoral fellow with Prof. Tobin Marks in the Department of Chemistry at Northwestern University. Since May 2018 he has been fixed-time researcher (RTD-A) at the Department of Chemistry of the University of Milan and in August 2018 he got the scientific habilitation as an Associate Professor in general and inorganic chemistry (SSD CHIM/03) from the Italian education, university and research ministry. Since February 2021 he has been fixed-time researcher (RTD-B) at the Department of Chemistry of the University of Milan.

## Research activity

Gabriele Di Carlo attended several national and international schools and symposia. He is author or co-author of 41 publications in ISI international journals with high impact factor (*h*-index 16, total citations 692 from Scopus Database) and of a chapter in a scientific book.

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The main research interests involve the design and synthesis of novel chromophores and photosensitizers for application in optoelectronics, photonics and photovoltaics. In particular porphyrin-based dyes as photosensitizers in third generation solar cells, water splitting application, CO<sub>2</sub>-reduction and Non Linear Optics (NLO) as well as studies of their photophysical, electrochemical and photo electrochemical properties.

Other interests involve:

- the synthesis and characterization of hybrid organic-inorganic self-assembled nano-dielectrics (SANDs) for Organic Field Effect Transistors (OFET)
- design and development of air-stable n-dopants based on benzimidazoline derivatives to improve the efficiency of organic semiconductors for energy storage technology.