

16th International Conference on Surfaces, Coatings and Nanostructured Materials www.nanosmat.org/special.html

SHORT BIO:

Dr. Gianluca Landi graduated cum lode in Chemical Engineering at the University of Naples Federico II in 1999. He obtained his PhD in Chemical Engineering at the same university. He spent one year at the Institut de Recherches sur la Catalyse (today, Institut de Recherches sur la Catalyse et l'Environment) in Lyon (FRANCE) within the framework of the Marie Curie Fellowship program (2000). He was contract professor at the University of Naples (2021-2023), teaching "Safety of Solid and Liquid Materials and Laboratory Activities". Since 2008 he worked as Researcher at the Research Institute on Combustion – CNR (since 2020 the Institute changed name and mission becoming the Institute of Science and Technology for Sustainable Energy and Mobility – CNR).

His research interests are related to the conceptualization, design and development of catalytic materials for sustainable fuels production (including hydrogen), pollutants abatement, valorization of fuels and wastes. In particular, the objective of his studies is the full understanding of the relationships among the chemical compositions, the chemical-physical features, and the catalytic activity with the final aim of design more active, selective, and durable catalytic materials but also improvement of the performance of a catalyzed reaction by the proper choice of both operating conditions and reactor configuration.

During his research activities he has matured great experience in the development of 3D structured catalytic reactors of wide interest for chemical processes requiring low pressure drops, good mechanical properties of catalyst and good heat/mass transfer. His research activity is focused on designing, preparing and testing multi-functional and "hybrid" structured monoliths. He has been involved in several research projects, with the role of principal investigator, responsible of research unit or work package. He co-authored more than 70 papers in international scientific journals, chapter books, a patent, and more than 150 contributions to national and international congresses, including plenary and keynote speeches. He is a member of the Editorial Board of "Frontiers in Chemistry" (Inorganic Chemistry section) and "Oxygen". He was guest Editor of special issues on "Catalysts" and "Energies".

He carries out training activities to both pre-graduate and post-graduate students. He actively participates in PhD schools (Polytechnic University of Turin, University of Naples Federico II, University of Udine, University of Bologna), by evaluating PhD thesis as external referee.

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