

CV of Liberato Manna

Short Bio: Liberato Manna (born December 1971) received his Ph.D. in Chemistry in 2001 from the University of Bari (Italy) and worked at U.C. Berkeley (USA) as a visiting student and then at the Lawrence Berkeley National Laboratory (USA) as a Postdoc until 2003. He was then scientist at the National Nanotechnology Lab in Lecce (Italy), and then moved to the Istituto Italiano di Tecnologia (IIT), Genova (Italy), in 2009 as head of the Nanochemistry Department. From 2010 to 2021 he was also part-time Professor at TU Delft (The Netherlands). Currently, he is also Associate Director of IIT for the Materials and Nanotechnologies Domain and Associate Editor of Nano Letters (American Chemical Society). His research interests include the synthesis and assembly of colloidal nanocrystals, the study of structural, chemical, and surface transformations in nanoscale materials, and their applications in energy, photonics, and electronics.

Professional Preparation

Ph.D. in Chemistry, University of Bari, Italy, 2001

M.S. in Chemistry, with Honours, University of Bari, Italy, 1996

Research interests

Synthesis and assembly of nanoscale materials, study of structural, chemical and surface transformations in nanoscale materials, modelling and related applications in energy-related areas, photonics and electronics.

Areas of Expertise

Functional Inorganic Materials and Devices, Functional Nanostructured Materials, Surfaces, Interfaces, and Applications

Web of science: <https://www.webofscience.com/wos/author/record/924071>

Orcid: <https://orcid.org/0000-0003-4386-7985>

Google Scholar: <https://scholar.google.it/citations?user=hWWqp5MAAAAJ&hl=it>

Appointments

Feb 2022-current: Associated Editor – Nano Letters (American Chemical Society)

June 2018-Jan 2022: Associated Editor – Nanoscale and Nanoscale Advances

2016-2023: Professor of Theoretical Chemistry, University of Genova (Italy), part-time, unpaid position

2015-2022: Associate Director for the Materials and Nanotechnologies Research Domain, the Italian Institute of Technology in Genova (Italy)

2010-2021: Professor of Quantum Nanoscience, Kavli Institute of Nanoscience, Delft University of Technology (The Netherlands), part-time, unpaid position

2009-current: Head of the Nanochemistry Department at the Italian Institute of Technology in Genova (Italy)

2003- 2009: Head of the Chemistry Group at the National Nanotechnology Lab in Lecce (Italy)

2003: Visiting Scientist at the Center for Nanoscience, Munich (Germany)

2001-2003: Postdoctoral Fellow, University of California, Berkeley

1999-2000: Visiting student, University of California, Berkeley

Other scientific output and impact

Conferences:

- More than 100 keynote, plenary talks and invited talks in the last 10 years (~ 200 in the whole career to date).
- Chairman of the International Conference series "Applied Nanotechnology and Nanoscience (ANNIC)" in the years 2017, 2019 and 2021. Chairman of the "Quantum Dots 2014" conference, Pisa, May 2014, Chairman of the International Conference 'Nanoscience with Nanocrystals' (NANAX3), Lecce, Italy, May 2008. Organizer of a series of symposia at MRS, E-MRS, EuChemS & Faraday events and of the upcoming Beilstein symposium on nanocrystals defects (2023), Local chairman of the Seventh International Conference on Multifunctional, Hybrid and Nanomaterials, Genova, October 2022.

Scientific Publications & Patents:

- Co-author of ~480 publications in peer-reviewed journals, ~61,800 citations, h-index 116 (Google Scholar, July 2023).
- 27 Highly Cited papers, 1 Hot Paper (WoS), 3 Science, 4 Nature Materials, 3 Nature Nanotechnol., 2 Nature, 1 Nature Energy, 7 Nature Comm., 45 Nano Letters, 37 ACS Nano, 35 JACS, 36 Chemistry of Materials, 24 ACS Energy Letters, etc.
- Co-inventor of more than 40 patents

Commissions of trust:

- Associate Editor for Nano Letters (American Chemical Society)
- Member of Editorial Advisory Board: Chemistry of Materials, Accounts of Chemical Research, Advanced Materials, Nanoscale Horizons
- Member of evaluation panels: ERC Consolidator Grant 2021, FCT Portugal (2015, 2017), Italian PRIN, FIRB (multiple years), ERC Synergy Grant (cannot disclose year)
- Member of the panel in charge of selecting the Director of the Department of Physical Sciences and Technologies of Matter, Italian National Research Council (2019)
- Advisory Board Member, PhoenixD Cluster of Excellence, Hannover (since 2019)
- Advisory Board Member: Quantum Solutions (UK, since 2018) Glass to Power (Italy, since 2020)
- Member of the panel in charge of selecting the Director of the Institute for Basic Science, Seoul, Korea (2014)

ERC projects:

- ERC Starting grant (NANO-ARCH, contract n. 240111, 2009-2013)
- ERC Consolidator grant (TRANS-NANO, contract. n. 614897, 2014-2019)
- ERC Advanced grant (NEHA, contract n. 101095974, 2023-2028)
- ERC Proof of Concept grant (HyCat, contract n. 899412)

Teaching Expertise

2016-2023: Theoretical Chemistry (master course, Univ. of Genoa)

Since 2015: Electronic Structure of Solids (graduate course, Univ. of Genoa)

2014-15: Fundamentals of Crystallography (grad. course, Univ. of Genoa)

2006: Physical Chemistry of interfaces (undergrad. course, Univ. of Lecce)

2004: Polymer Science (undergrad. course, Univ. of Lecce)

Awards, recognitions & research highlights:

2022: Highly cited researcher (Clarivate Analytics)

2021: Nanoscale Horizons Outstanding Peer Reviewer Award

2021: Highly cited researcher (Clarivate Analytics)

2020: Highly cited researcher (Clarivate Analytics)

2020: Ufficiale dell'Ordine al Merito della Repubblica Italiana (bestowed by the President of the Italian Republic)

2019: Highly cited researcher (Clarivate Analytics)

2019: Sacconi Medal in Inorganic Chemistry (Italian Chemical Society)
2019: The Inaugural MEM-C Annual Lecture (University of Washington, Seattle)
2019: The Thirty Second Waite Philip Fishel Memorial Lecture in Chemistry (Vanderbilt University)
2018: Highly cited researcher (Clarivate Analytics, <https://hcr.clarivate.com/>)
2018: "Chimici Eccellenze a Livello Internazionale" Award (Italian National Federation of Chemists)
2018: Chemistry of Materials Outstanding Reviewer Award
2017: Fellow of the Royal Society of Chemistry
2017: Chemistry of Materials Outstanding Reviewer Award
2013: American Chemical Society Early Career Award in Experimental Physical Chemistry
2011: Ranked #24 among the top 100 Chemists of the 2000-2010 decade by Thomson Reuters
2011: Journal of Materials Chemistry Lectureship Award (Royal Society of Chemistry)
2011: Emerging Investigator in Chemical Sciences (ChemComm, RSC)
2010: Emerging Investigator in Materials Chemistry (Journal of Materials Chemistry, RSC)
2009: R&D 100 Award recipient for 'Cost Competitive Solar Cells'
2007: "Campisano" Young Investigator Award in Materials Science (Italian Nat. Inst. Physics of Matter)
2002: Berkeley Lab Technology Transfer Award
2001: Semerano Award (Italian Chemical Society), best PhD thesis in Physical Chemistry in Italy

