

Curriculum Vitae Valentina De Renzi

Valentina De Renzi (Milano, 21st of July 1967) is associate professor (02/B1) at the Dipartimento di Scienze Fisiche, Informatiche e Matematiche (FIM), Università di Modena e Reggio Emilia since November 2014 and is associate research fellow of the Istituto Nanoscienze of CNR.

MAIN RESEARCH INTERESTS

Her research activity is in the field of experimental nanoscience and is mainly devoted to the study of the electronic, vibrational and magnetic properties of low-dimensional materials and hybrid organic/inorganic interfaces. Recently, her main interest has focused on graphene-based systems and nanostructures and extended to 2D materials.

BIBLIOMETRIC INDEXES

Data from Scopus/Scholar, as of 9 July 2024. Total peer-reviewed articles: 86
Total Citations: 2939 (GSch) 2358 (Scopus) h-index = 31 (GSch), 27 (Scopus)

EMPLOYMENT and EDUCATION

- Since 2014 Associate professor (02/B1 experimental physics of matter) at the FIM Department, Unimore
- 2002-2014 Researcher at the Physics Department of the University of Modena and Reggio Emilia
- 1997-2002 Post doc at the Physics Department of the University of Modena and Reggio Emilia, and INFN unit Modena 1996 Post Doc at the Fritz Haber Institut der MPG, Berlin in the group of Prof. G Ertl and Dr H. Over (Abteilung Physikalische Chemie)
- 1993-1995 PhD at the TASC National INFN Laboratory, in Trieste - thesis: "Ordered structures and disordering processes on metallic surfaces", tutor Prof. F. Tommasini
- 1992 Degree in physics cum laude at the University of Modena - thesis: "Bi/GaAs(110) growth: electronic structure and dielectric properties" Tutor Prof. C. Mariani

EXPERTISE

- Vibrational, electronic and magnetic properties of surfaces and low- dimension materials.
- Electron spectroscopies and microscopies, as in particular HREELS and XPS/(AR)UPS, STM, SEM
- Synchrotron radiation- based techniques, as in particular XAS, XMCD, RESPES, X-ray Diffraction,
- Fabrication of 1D and 2D nanostructures, by means of on-surface synthesis, self-assembling and epitaxy.

APPOINTMENTS and MEMBERSHIP

- 2015-2024 Member Review Evaluation Panel C –surfaces and Catalyses - Elettra 2015-2022
Member Review Evaluation Panel Ceric- Eric Project
- 2015-2022 Evaluator for NFFA Project
- 2019 Evaluator for Rita Levi-Montalcini program - MIUR
- 2016-2024 Associate researcher of CNR- Nano Institute - Modena
- 2020-2024 Member of the Department Board and Head of the Department TM Committee
- 2015-2018 Member of the Department Board
- 2014-2018 Head of the Department Outreach Committee

2014-2015 Member of the Department Joint Evaluation Committee
2009-2018 Member of the Phd School "Physics and nanoscience" Council
2005-2008 Member of the Phd School "Nanoscience and Nanotechnology" Council
2015-2022 Head of the Laboratorio di Ricerca Industriale della Regione Emilia-Romagna "L.03
Analisi fisico-chimiche di superfici e interfacce" - CNR-Nano

FELLOWSHIPS AWARDS GRANTS

2016 Italian National Qualification to Full Professorship 02/B1 – Experimental Physics of Matter-
ASN 2016

2012 Italian National Qualification to Associate Professorship 02/B1 – Experimental Physics of
Matter- ASN 2012

July 2007 Visiting Scientist at Institut del Ciència de Materials de Barcelona; CNR short term
mobility program

RESEARCH GRANT

PR- FESR 2021-2027 HF2.0: Metodi innovativi per la modifica delle proprietà idrofobiche di Hollow
Fibers in polipropilene: dai nano-additivi ai nano- coatings LOCAL
COORDINATOR

PRIN 2022 TUNing the Electronic Structure of graphene from low to high electron doping
(TUNES) LOCAL COORDINATOR

PRIN 2017 Excitonic insulator in two-dimensional long-range interacting systems (EX-
INS) PARTICIPANT

2015 Progetto Fondazione Cassa di Risparmio di Modena "PerSolar" PRINCIPAL
INVESTIGATOR

PRIN 2010 GRAF. Frontiere della ricerca sul grafene: comprensione e controllo di
funzionalità avanzate" PARTICIPANT

PRIN 2007 Improving nanomechanical performances and surface functionalization of
cantilevers for a novel class of chemical-specific mass sensors " LOCAL
COORDINATOR

OUTREACH:

Valentina De Renzi is strongly engaged in the outreach activities of the FIM Department and in the pre-service and in-service training of secondary school teachers. In collaboration with CNR-INF and the Italian Quantum Weeks project, she devised and organized the exhibit "Dire l'Indicibile", aiming to explain the key concepts of quantum physics and quantum technologies to the general public. She coordinates the nanolab project (www.nanolab.unimore.it), aiming at bringing nanoscience and nanotechnology topics to schools. She co-authored V. De Renzi, G. Goldoni, A. Lisotti " Alla scoperta delle Nanotecnologie – La fisica alla nanoscala" p. 1-124, Zanichelli Bologna, ISBN: 9788808160294

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