
PERSONAL DATA

Name Assoc. Prof. Dr. Anna Maria Coclite
Nationality Italian
Date of Birth 28.01.1983
Place of Birth Bari /Italy
Correspondence Institute of Solid State Physics
Graz University of Technology
Petersgasse 16, 8010 Graz, Austria
phone: +43 316 8738970
e-mail: anna.coclite@tugraz.at
Website <http://www.annacoclite.com>
ORCID 0000 – 0001 – 5562 – 9744



Main Research Area

The research activities focus on material science and advanced methods for thin film growth. Current research interests include thin films technologies, nanomaterials, and surface chemistry. Deep expertise in the deposition of polymers and inorganic thin films by Chemical Vapor Deposition.

Career History

2024 -	UNIVERSITY of BARI <i>Full professor</i>	BARI, ITALY
2018 –2024	GRAZ UNIVERSITY OF TECHNOLOGY <i>Associate Professor</i>	GRAZ, AUSTRIA
2013 –2018	GRAZ UNIVERSITY OF TECHNOLOGY <i>Assistant Professor</i>	GRAZ, AUSTRIA
Dec 2017	Habilitation Venia Docenti (Applied Physics) Title: Structure and functionality of CVD polymers as thin films and multilayers	
2010 – 2013	MASSACHUSETTS INSTITUTE OF TECHNOLOGY <i>Postdoc associate, Supervisor: Karen Gleason</i>	BOSTON, USA
Feb. – May. 2010	ITALIAN NATIONAL RESEARCH COUNCIL (CNR) <i>Post-doctorate, Supervisor: F. Palumbo</i>	BARI, ITALY

Education

Jan. 07 –Mar. 10	UNIVERSITY OF BARI PhD in Chemical Science, Supervisor: R. d'Agostino Title: Deposition and Characterization of thin organosilicon films for a variety of technological applications: as low-dielectric constant, vapor barriers and metal protective coatings	BARI, ITALY
Oct. 04– Oct. 06	UNIVERSITY OF BARI Master in Chemical Science and Technology. Graduate Magna (110/110) cum laude. Supervisors: R. d'Agostino (UNIBA), F. Arefi-Khonsari (ENSCP, Paris) Title: Plasma deposition of thin films: experimental optimization and modeling	BARI, ITALY
Oct. 01 – Oct. 04	UNIVERSITY OF BARI Bachelor Degree in Chemistry. Graduate Magna (110/110) cum laude.	BARI, ITALY

Scientific Track Record: <https://orcid.org/0000-0001-5562-9744>

- ◆ >100 publications, five more submitted
 - ◆ 16 of those as first author
 - ◆ H- Index: 24/22 (Google Scholar/Scopus)
 - ◆ Number of Publications with more than 200 citations: 2
 - ◆ 1901/1538 citations (Google Scholar/Scopus)
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Fellowships, Research Prizes/Awards

May 2023	ERC Proof of Concept Grant (HEU -) Smart Skin
Nov. 2016-2022	ERC Starting Grant (H2020 - 715403) Smart Core
May. 14 – Apr.16	International Incoming fellowship (Marie Curie Action-FP7-PEOPLE-2013-IIF)
Nov. 2019	AVS Shop Note Price
Apr. 18	Start-up Idea Award from Science Park Graz
Aug. 16	Scientist Medal from The <i>International Association of Advanced Materials</i>
Jun. 15	Scholarship for young scientists to participate to the Lindau Nobel Laureate meeting 2015
Feb. 08	Excellence PhD award from Puglia region 2008.
2006	European Scholarship for Exchange Students.

Selected funded research projects

Jan. 2021 - Dec. 2025	Innovative Training Network (H2020-MSCA-ITN-2020) "Smart surface design for efficient ice protection and control" (SURFICE). Role = WP leader, (<i>Project budget: 3.5 M€. Share: 264 k€</i>)
Sept. 2020 - Aug. 2024	FET-Open "Functional & Dynamic 3D Nano-MicroDevices by Direct Multi-Photon Lithography" (5D Nanoprinting) Role: WP leader, (<i>Project budget: 3.5 M€. Share: 283 k€</i>)
Dec. 16 – Dec. 21	ERC Starting Grant "Smart Core/shell nanorods arrays for artificial skin", Acronym: Smart Core, Role: PI (~ 1,5 mi€)
Nov. 14 – Feb.18	FWF- Austrian Science Fund- Stand Alone Project "Proton conductive polymers deposited by initiated-CVD" (Acronym: Pro-CVD, Number : P 26993-N19) (~ 200 k€)

Additional Scientific Information

- Leader of the Field of Expertise (TU Graz) "Advanced Material Science" since 2020.
- Guest editor for several special issues in Thin Solid Films (Elsevier), Nanoscience and Nanotechnology Letters, Frontiers in Biotechnology, Polymers (MDPI)
- Austrian representative of the THIN FILM Division in the International Union for Vacuum Science, Technique and Applications (IUVSTA) from 2016
- Co-organizers of three Symposia at the European Material Research Society Spring Meeting 2018, 2022 and 2024 + a symposium at the EuroMat conference 2021.
- 21 invitational lectures at international conferences, 14 invited seminars in renowned universities
- Ongoing collaboration with scientific groups from MIT, GeorgiaTech, Drexel University, Sabanci University, University College Dublin.
- Participation in several committees for new tenure-track position selection, tenure promotion, PhD and Master exams.
- Speaker at TEDx events (TEDxGraz in 2016 and TEDxVienna in 2022)

Teaching Experience

- Teaching at Bachelor and Master level for the Physics Curricula, TU Graz.
- Supervision of >10 Bachelor Students, >20 Master students, 10 PhD students of which 5 ongoing, 2 postdoctoral researchers.
- Supervision and hosting of several visiting students and scholars

List of ten most important Publications

1. Icephobic gradient polymer coatings deposited via iCVD: A novel approach for icing control and mitigation
G. Hernandez, M. Fratscho, L. Stendardo, C. Antonini, R. Resel, **A.M. Coclite**, *ACS Applied Materials and Interfaces*, **2024**, DOI: <http://doi.org/10.1021/acsami.3c18630>
2. Enhancement of the Sensing Performance of Devices based on Multistimuli-Responsive Hybrid Materials
T. Abu Ali, M. Anzengruber, K. Unger, B. Stadlober, **A. M. Coclite**, *ACS Applied Materials & Interfaces*, **2023**, DOI: <https://doi.org/10.1021/acsami.3c08376>
3. Glucose-Responsive Boronic Acid Hydrogel Thin Films Obtained via Initiated Chemical Vapor Deposition
K. Unger, **A.M. Coclite**, *Biomacromol.*, **2022**, 23, 10, 4289–4295, DOI: 10.1021/acs.biomac.2c00762
4. Shedding light on the initial growth of ZnO during plasma-enhanced atomic layer deposition on vapor-deposited polymer thin films
L. Demelius, M. Blatnik, K. Unger, P. Parlanti, M. Gemmi, **A. M. Coclite**, *Appl. Surf. Science*, **2022**, 604, DOI: 10.1016/j.apsusc.2022.154619
5. Smart Core-Shell Nanostructures for Force, Humidity and Temperature Multi-Stimuli Responsiveness
T. Abu Ali, P. Schäffner, M. Beleggratis, G. Schider, B. Stadlober, **A. M. Coclite**, *Adv. Mater. Technol.*, **2022**, 7, 2200246, DOI: 10.1002/admt.202200246. **with Cover image**
6. Temporary Tattoo pH Sensor with pH Responsive Hydrogel via Initiated Chemical Vapor Deposition
K. Unger, F. Greco., **A. M. Coclite**, *Adv. Mater. Technol.* **2021**, 2100717, DOI: 10.1002/admt.202100717
7. Applicability of Vapor-deposited Thermo-responsive Hydrogel Thin Films in Ultrafast Humidity Sensors/Actuators
F. Muralter, F. Greco., **A. M. Coclite**, *ACS Applied Polymer Materials*, **2020**, 2, 3, 1160–1168, DOI: 10.1021/acsapm.9b00957
This paper was selected as Editor Choice and was in the journal Cover Front image.
8. Controlling Indomethacin Release through Vapor-Phase Deposited Hydrogel Films by Adjusting the Cross-linker Density
P. Christian, S. Tumphart, H. M. A. Ehmann, H. Riegler, **A. M. Coclite**, O. Werzer, *Scientific Reports*, **2018**, 8, 7134, DOI : 10.1038/s41598-018-24238-w.
9. 25th anniversary: CVD Polymers: A new paradigm for surface modification and device fabrication
A. M. Coclite, R. M. Howden, D. Borrelli, C. D. Petruczok, R. Yang, J. L. Yagüe, A. Ugur, N. Chen, S. Lee, W. J. Jo, A. Liu, X. Wang, and K. K Gleason
Advanced Materials, **2013**, 25, 5392. DOI: 10.1002/adma.201301878
10. Controlling the degree and preferred orientation of crystallinity in poly-perfluorodecylacrylate thin films by initiated Chemical Vapor Deposition
A. M. Coclite, Y. J. Shi, and K. K. Gleason
Advanced Functional Materials, **2012**, 22, 2167. DOI: 10.1002/adfm.201103035