

## PERSONAL INFORMATION

Rosario Miceli

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Sex male | Date of birth [REDACTED] | Nationality Italian

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input checked="" type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

## WORK EXPERIENCE

- Full professor at the University of Palermo since 2017
- Associate professor at the University of Palermo from 2003 to 2016
- Assistant professor at the University of Palermo from 1992 to 2002

**Director of the Sustainable Development and Energy Saving Laboratory (SDESLab), University of Palermo, ITALY**

**Direction of the following Research projects:**

- CNMS-MOST Sustainable Mobility Center, D.D. 3175 del 18/12/2021, Code CN00000023
- Prin 2022 "Enhanced Energy-Saving Powertrains for Freight E-Transportation" - ESPFET
- FP7-ICT-2007-2: Building Energy WATCHer (BEYWATCH)
- POR FERS Sicilia 2007 – 2013, "ESEDRA" (Elaborazione Sistema Eolico a Due Rotori Accoppiati).

**Participation to the following Research projects:**

- PON03PE\_00214\_1/F7 "TECLA" (Nanotecnologie e nanomateriali per i beni culturali).
- PON R&I 2015-2020 "PROSIB" (Propulsione e Sistemi Ibridi per velivoli ad ala fissa e rotante).
- ARS01\_00459-PRJ-0052 "ADAS+" (Sviluppo di tecnologie e sistemi avanzati per la sicurezza dell'auto mediante piattaforme ADAS).
- H2020-ECSEL-2017-1-IA-two-stage "REACTION" (first and european sic eightinches pilot line).
- Prin 2017 "Advanced power-trains and -systems for full electric aircrafts".
- Horizon2020 GaN for Advanced Power Applications "GaN4AP"
- "Sicilian MicronanoTech Research And Innovation Center –SAMOTHRACE", finanziato nell'ambito del Piano Nazionale di Ripresa e Resilienza (PNRR),

**Main International and National Collaborations:**

## EDUCATION AND TRAINING

From Jan 2010 to March 2012

From Oct 1999 to Jul 2008

- University of Ouro Preto, Brazil (design, simulation and testing of single-phase induction motor drives)
- University of Maryland, USA (development of electric micromotors)
- University of L'Aquila (Development of power converters for automotive applications)
- University of La Sapienza, Rome (Development of wireless battery charging)
- University of Federico II, Naples (Design of electric machines for automotive applications)
- University of Cassino (Development of new methods for winding arrangement of electric machines)
- Politecnico di Milano (Sustainability in the automotive sector)

**Ph.D. in Electrical Engineering, University of Palermo, ITALY**

**Master degree in Electrical Engineering, University of Palermo, ITALY**

## PERSONAL SKILLS

Mother tongue(s)	Italian
Other language(s)	English
Digital skills	Use and knowledge of Matlab/Simulink, Autocad, LabView, FEMM, L-Edit, C660
Other skills	Organization or participation to more than 30 International Conferences

## ADDITIONAL INFORMATION

Publications	<p>Over 400 publications are indexed in the Scopus database, with 5600 citations and 36 of h-index. Some notable publications are listed below:</p> <ol style="list-style-type: none"> <li>1. Scaglione, G., Nevoloso, C., Schettino, G., Tommaso, A.O.D., Miceli, R., "A Novel Multiobjective Finite Control Set Model Predictive Control for IPMSM Drive Fed by a Five-Level Cascaded H-Bridge Inverter", (2024) IEEE Journal of Emerging and Selected Topics in Power Electronics, 12 (2), pp. 1959-1973.</li> <li>2. Campagna, N., Caruso, M., Tommaso, A.O.D., Miceli, R., "A Comprehensive Generalized Theory and Classification of Multiphase Systems for Rotating and Linear Electric Machines", (2024) IEEE Transactions on Energy Conversion, pp. 1-12.</li> <li>3. Caruso, M., Tommaso, A.O.D., Miceli, R., "A Novel, Simple, and Flexible Fault-Tolerant Control Algorithm for Multiphase Electrical Machine Operation Under Open Circuit Faults", (2024) IEEE Access, 12, pp. 19330-19343.</li> <li>4. Ala, G., Colak, I., Di Filippo, G., Miceli, R., Romano, P., Silva, C., Valtchev, S., Viola, F., "Electric mobility in portugal: Current situation and forecasts for fuel cell vehicles", (2021) Energies, 14 (23), art. no. 7945, DOI: 10.3390/en14237945.</li> <li>5. Castiglia, V., Campagna, N., Miceli, R., Viola, F., Blaabjerg, F., "A quasi-Z-source-based inductive power transfer system for constant current/constant voltage charging applications", (2021) Electronics (Switzerland), 10 (23), art. no. 2900, DOI: 10.3390/electronics10232900.</li> <li>6. Pellitteri, F., Campagna, N., Castiglia, V., Damiano, A., Miceli, R., "Design, implementation and experimental results of an inductive power transfer system for electric bicycle wireless charging", (2020) IET Renewable Power Generation, 14 (15), pp. 2908-2915, DOI: 10.1049/iet-rpg.2020.0056.</li> <li>7. Ala, G., di Filippo, G., Viola, F., Giglia, G., Imburgia, A., Romano, P., Castiglia, V., Pellitteri, F., Schettino, G., Miceli, R., "Different scenarios of electric mobility: Current situation and possible future developments of fuel cell vehicles in Italy", (2020) Sustainability (Switzerland), 12 (2), art. no. 564, DOI: 10.3390/su12020564.</li> <li>8. Di Noia, L.P., Genduso, F., Miceli, R., Rizzo, R., "Optimal integration of hybrid supercapacitor and IPT system for a free-catenary tramway", (2019) IEEE Transactions on Industry Applications, 55 (1), art. no. 8469028, pp. 794-801, DOI: 10.1109/TIA.2018.2871438.</li> <li>9. Buccella, C., Cimatori, M.G., Cecati, C., Tommaso, A.O.D., Miceli, R., Nevoloso, C., Schettino, G., "Recursive Selective Harmonic Elimination for Multilevel Inverters: Mathematical Formulation and Experimental Validation", (2023) IEEE Journal of Emerging and Selected Topics in Power Electronics, 11 (2), pp. 2178-2189.</li> <li>10. Schettino, G., Di Tommaso, A.O., Miceli, R., Nevoloso, C., Scaglione, G., Viola, F., "Dead-Time Impact on the Harmonic Distortion and Conversion Efficiency in a Three-Phase Five-Level Cascaded H-Bridge Inverter: Mathematical Formulation and Experimental Analysis", (2023) IEEE Access, 11, pp. 32399-32426.</li> </ol>
Honors and Awards	<p><b>Excellent Paper Award</b> for the manuscript entitled "Experimental Prototyping of a Microgrid with Mechanical Point of Common Coupling" (Authors: M. Caruso, A.O. Di Tommaso, R. Miceli, C. Nevoloso, F. Pellitteri, C. Puccio, G. Schettino) presented at the <i>8th International Conference on Smart grid – ICSG 2020</i>.</p> <p><b>Best Poster Award</b> for the manuscript entitled "Low-cost Smart Energy Management based on ATmega 328P-PU Microcontroller" (Authors: M. Caruso, V. Castiglia, A. Del Pizzo, R. Miceli, M. Salles, G. Schettino, V. Traversa, F. Viola) presented at the <i>ICRERA 2017, International Conference on Renewable Energy Research and Applications, San Diego, CA (USA)</i>.</p> <p><b>Best Poster Award</b> for the manuscript entitled "Physiological compatibility of wireless chargers for electric bicycles" (Authors: F. Pellitteri, G. Ala, M. Caruso, S. Ganci, R. Miceli) presented at the <i>ICRERA 2015, International Conference on Renewable Energy Research and Applications, Palermo, ITALY</i>.</p> <p><b>Associate Editor</b> from 2016 of the <i>International Journal of Renewable Energy Research-IJERER</i> (website: <a href="http://www.ijrer.org/ijrer/index.php/ijrer">http://www.ijrer.org/ijrer/index.php/ijrer</a>).</p> <p><b>Associate Editor</b> from 2019 of the <i>International Journal on Smart Grid -ijSmartGrid</i> (website: <a href="http://www.ijsmartgrid.org">www.ijsmartgrid.org</a>).</p> <p><b>Guest Editor</b> of the Special Issue entitled <i>Recent Advances in Electrical Machines and Drives</i> at the MDPI Energies Journal (ISSN 1996-1073).</p> <p><b>Guest Editor</b> of the Special Issue entitled <i>Green Energies</i> at the MDPI Energies Journal (ISSN 1996-1073).</p>