

PERSONAL INFORMATION

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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 side 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:

- 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)

EDUCATION AND TRAINING

From Jan 2010 to March 2012

From Oct 1999 to Jul 2008

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"> 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. 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. 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. 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. 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. 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. 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. 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. 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. 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.
Honors and Awards	<p>Excellent Paper Award 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>Best Poster Award 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>Best Poster Award 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>Associate Editor from 2016 of the <i>International Journal of Renewable Energy Research-IJERER</i> (website: http://www.ijrer.org/ijrer/index.php/ijrer).</p> <p>Associate Editor from 2019 of the <i>International Journal on Smart Grid -ijSmartGrid</i> (website: www.ijsmartgrid.org).</p> <p>Guest Editor of the Special Issue entitled <i>Recent Advances in Electrical Machines and Drives</i> at the MDPI Energies Journal (ISSN 1996-1073).</p> <p>Guest Editor of the Special Issue entitled <i>Green Energies</i> at the MDPI Energies Journal (ISSN 1996-1073).</p>