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Gender: Female **Date of birth**: 15/10/1959 **Nationality**: Italian

WORK EXPERIENCE

[1998 – Current]

Associate Professor in Electrical Engineering

University of Florence - Department of Information Engineering

City: Florence | **Country**: Italy

[1990 – 1998]

Researcher in Electrical Engineering

University of Florence - Department of Electronics and Telecommunications

City: Florence | **Country**: Italy

EDUCATION AND TRAINING

[1987]

Master's Degree in Electronic Engineering

University of Florence

City: Florence | **Country**: Italy | **Final grade**: Summa cum laude

PUBLICATIONS

[2023]

Failure prevention in DC-DC converters: theoretical approach and experimental application on a Zeta converter

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Diagnosis in Analog Electronic Circuits, Electrical Power Systems and Smart Grids

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- [2021] **A neural network classifier with multi-valued neurons for analog circuit fault diagnosis**
Reference: Aizenberg I., Belardi R., Bindi M., Grasso F., Manetti S., Luchetta A., Piccirilli M.C. Electronics, 10, 1-18, ISSN:2079-9292.
- [2020] **A Comparison of Power Quality Disturbance Detection and Classification Methods Using CNN, LSTM and CNN-LSTM**
Reference: Garcia C.I., Grasso F., Luchetta A., Piccirilli M.C., Paolucci L., Talluri G. Appl. Sci., 10, ISSN:2076-3417.
- [2020] **Neural Network-Based Fault Diagnosis of Joints in High Voltage Electrical Lines**
Reference: Bindi M., Aizenberg I., Belardi R., Grasso F., Luchetta A., Manetti S., Piccirilli M.C. ASTESJ, 5, 488-498, ISSN:2415-6698.
- [2019] **A symbolic program for parameter identifiability analysis in systems modeled via equivalent linear time-invariant electrical circuits, with application to electromagnetic harvesters**
Reference: Fontana G., Grasso F., Luchetta A., Manetti S., Piccirilli M.C., Reatti A. Int. J. Numer. Model. Electron. Netw. Devices Fields, ISSN:0894-3370.
- [2019] **MLMVNNN for Parameter Fault Detection in PWM DC-DC Converters and Its Applications for Buck and Boost DC-DC Converters**
Reference: Luchetta A., Manetti S., Piccirilli M.C., Reatti A., Corti F., Catelani M., Ciani L., Kazimierczuk M.K. IEEE Trans. Instrum. Meas., 68, 439-449, ISSN:0018-9456.
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IEEE Trans Circuits Syst I Regul Pap IEEE T CIRCUITS-I, 64, 1564-1575, ISSN:1549-8328.
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Analog Integrated Circuits and Signal Processing, vol. 73, pp. 13-20, ISSN:0925-1030
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Reference: Manetti S., Piccirilli M.C.
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Reference: Starzyk J., Pang J., Manetti S., Piccirilli M.C., Fedi G.
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