

## **CURRICULUM VITAE Vittorio Camarchia**

### **Professore Associato**

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### **Dipartimento di Elettronica e Telecomunicazioni (DET)**

Vittorio Camarchia was born in Turin, Italy, in 1972. He received the Laurea degree and Ph.D. degree in Electronic Engineering from the Politecnico di Torino, Turin, Italy, in 2000 and 2003, respectively.

In 2001, 2002, and 2003, he was a Visiting Researcher with the Electrical and Computer Engineering Department, Boston University.

Since 2004 he joined the Department of Electronics and Telecommunications of the Politecnico di Torino firstly as post-doc, then Assistant Professor and since July 2015 as Associate Professor.

His research is focused on design and characterization of RF and microwave modules and systems.

He is Associated Editor of IEEE Access, Senior Member IEEE, Member of the IEEE MTT Chapter-20 subcommittee on Wireless Communications, expert evaluator for the European Commission on H2020 Space topics, reviewer for the major microwave publications, for the ANR (National French Research Council).

In the last three years He has organized several WS and focused sessions at EuMW and IMS on nonlinear measurements, microwave backhaul, 5G and millimeter-wave applications and mm-wave Power amplifier design.

He will be the guest editor of the next special issue of the MTT Transaction on "Broadband Millimeter-wave Power Amplifiers".

Dr. Camarchia is the p.i. of a ESA TRP project on "Single-chip Ka-band Doherty amplifier".

He is author of more than 150 international publications plus some book chapters.

In 2016 he edited the book "Electronics for microwave backhaul" for Artech House.

Prof. Camarchia was the recipient of the 2002 Young Graduated Research Fellowship by the Gallium Arsenide application Symposium (GAAS) Association.

### Relevant publications of the last 5 years:

2017

J.J.M. Rubio, V. Camarchia, M. Pirola, R. Quaglia, Design of a 87% Fractional Bandwidth Doherty Power Amplifier Supported by a Simplified Bandwidth Estimation Method," IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, in press.

V. Camarchia, P. Colantonio, F. Giannini, R. Giofrè, T. Jiang, M. Pirola, R. Quaglia, C. Ramella, A design strategy for AM/PM compensation in GaN Doherty Power Amplifiers," in IEEE ACCESS, vol. PP, no. 99, pp. 1-1.

R. Quaglia, V. Camarchia, J. J. Moreno Rubio, M. Pirola and G. Ghione, A 4-W Doherty Power Amplifier in GaN MMIC Technology for 15-GHz Applications. In: IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, vol. 27 n. 4, pp. 365-367. - ISSN 1531-1309

2016

Moreno Rubio, Jorge Julian; Camarchia, Vittorio; Quaglia, Roberto; Angarita Malaver, Edison Ferney; Pirola, Marco (2016) A 0.6-3.8 GHz GaN Power Amplifier Designed Through a Simple Strategy. In: IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, vol. 26 n. 6, pp. 446-448. - ISSN 1531-1309

Bertazzi, Francesco; Camarchia, Vittorio; Goano, Michele; Pirola, Marco; Ghione, Giovanni (2016) Modeling the Conductor Losses of Thick Multiconductor Coplanar Waveguides and Striplines: A Conformal Mapping Approach. In: IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol. 64 n. 4, pp. 1217-1227. – ISSN 0018-9480

2015

V. Camarchia et al. (2015) The Doherty Power Amplifier: Review of Recent Solutions and Trends. In: IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol. 63 n. 2, pp. 559-571. - ISSN 0018-9480

Vittorio Camarchia et al. (2014) Demonstration of inkjet-printed silver nanoparticle microstrip lines on alumina for RF power modules. In: ORGANIC ELECTRONICS, vol. 15 n. 1, pp. 91-98. - ISSN 1566-1199

2014

Roberto Quaglia; Vittorio Camarchia; Marco Pirola (2014) Dual-Band GaN MMIC Power Amplifier for Microwave Backhaul Applications. In: IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, vol. 24 n. 5, pp. 409-411. - ISSN 1531-1309

Luca Piazzon;Rocco Giofre;Roberto Quaglia;Vittorio Camarchia;Marco Pirola;Paolo Colantonio;Franco Giannini;Giovanni Ghione (2014) Effect of Load Modulation on Phase Distortion in Doherty Power

Amplifiers. In: IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, vol. 24 n. 7, pp. 505-507. - ISSN 1531-1309

R. Quaglia; L. Piazzon; V. Camarchia; R. Giofrè; M. Pirola; P. Colantonio; G. Ghione; F. Giannini (2014)  
Experimental investigation of bias current and load modulation effects in phase distortion of GaN HEMTs.  
In: ELECTRONICS LETTERS, vol. 50 n. 10, pp. 773-775. - ISSN 0013-5194

Roberto Quaglia; Vittorio Camarchia; Tao Jiang; Marco Pirola; Simona Donati Guerrieri; Brian Loran (2014)  
K-Band GaAs MMIC Doherty Power Amplifier for Microwave Radio With Optimized Driver. In: IEEE  
TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol. 62 n. 11, pp. 2518-2525. - ISSN 0018-9480

Roberto Quaglia; Vittorio Camarchia; Marco Pirola; Jorge Julian Moreno Rubio; Giovanni Ghione (2014)  
Linear GaN MMIC Combined Power Amplifiers for 7-GHz Microwave Backhaul. In: IEEE TRANSACTIONS ON  
MICROWAVE THEORY AND TECHNIQUES, vol. 62 n. 11, pp. 2700-2710. - ISSN 0018-9480

Giancarlo Canavese; Stefano Stassi; Carmelo Fallauto; Simone Corbellini; Valentina Cauda; Vittorio  
Camarchia; Marco Pirola; Candido Fabrizio Pirri (2014) Piezoresistive flexible composite for robotic tactile  
applications. In: SENSORS AND ACTUATORS. A, PHYSICAL, vol. 208, pp. 1-9. - ISSN 0924-4247

2013

Vittorio Camarchia et al. (2013) 7 GHz MMIC GaN Doherty Power Amplifier With 47% Efficiency at 7 dB  
Output Back-Off. In: IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, vol. 23 n. 1, pp. 34-36. -  
ISSN 1531-1309

Vittorio Camarchia et al. (2013) High-Efficiency 7 GHz Doherty GaN MMIC Power Amplifiers for Microwave  
Backhaul Radio Links. In: IEEE TRANSACTIONS ON ELECTRON DEVICES, vol. 60 n. 10, pp. 3592-3595. - ISSN  
0018-9383

Jorge Moreno Rubio; Jie Fang; Vittorio Camarchia; Roberto Quaglia; Marco Pirola; Giovanni Ghione (2012)  
3-3.6 GHz Wideband GaN Doherty power amplifier exploiting output compensation stages. In: IEEE  
TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol. 60 n. 8, pp. 2543-2548. - ISSN 0018-9480