



Sergio Martinoia received the Laurea degree in Electronic Engineering from the University of Genova, Italy, in 1989 and the PhD in Bioengineering from the same University in 1993. He was visiting student (1991) and visiting scientist (1997) at Stanford University working with the group of Prof. G. Kovacs at the Center of Integrated Systems (CIS). Since 2000, he is associate professor of Bioengineering at the Dept. of Informatics, Bioengineering, Robotics and System Engineering (DIBRIS) of the University of Genova. From 2007 to 2013, he was collaborating as senior scientist at the Dept. of Neurosciences and Brain technologies (NBT) of the Italian Institute of Technology. From 2013 he is chairman of the PhD program in Bioengineering and Robotics, University of Genova and Italian Institute of Technology.

During the years, he has greatly contributed to the introduction of new enabling technologies in the field of biosensing and in-vitro network electrophysiology and he is one of the leading scientists in the field of MEA-based systems and in-vitro neuro-robotics. He is associate Editor of *Frontiers in Neuroengineering*, *Computational Intelligence in Neuroscience*, *Plos One* and he is in the scientific board of the International congress on Substrate Integrated Micro-Electrode Arrays (MEA meeting). His main research interests are focused on: neuroengineering, network electrophysiology and computational neuroscience

On the above topics he is co-authors of 107 publications on international refereed journals.

#### Main publications

Kanagasabapathi T., Massobrio P., Barone RA., Tedesco M., Martinoia S., Wadman WJ., and Decré MJM, Functional connectivity and dynamics of cortical-thalamic networks co-cultured in a dual-compartment device, *J. Neural Eng.*, 9, 3, doi: 10.1088/1741-2560/9/3/036010 (2012).

Saenz Cogollo JF, Tedesco M, Martinoia S, Raiteri R, A new integrated system combining atomic force microscopy and micro-electrode array for measuring the mechanical properties of living cardiac myocytes, *Biomedical Microdevices*, 3(4):613-21, (2011).

Berdondini L., Imfeld K., Maccione A., Tedesco M., Neukom S., Koudelka-Hep M., and Martinoia S., Active pixel sensor array for high spatio-temporal resolution electrophysiological recordings from single cell to large scale neuronal networks, *Lab on a Chip*, 9, 18, 2644-2651, (2009)