POWER ELECTRONICS AND DRIVES ON SUSTAINABLE TRANSPORTATION

Year after year it has been a significant increase in the number of vehicles used around the world. This has resulted in an increased demand for energy and raised serious concerns over decreasing conventional fossil-fuel-based energy sources, in addition to environmental concerns. These issues have been one of the major driving force toward the electrification of the transportation industry for a sustainable transportation infrastructure. Electric and hybrid solutions are more and more considered for both air, ground and water propulsion. This Session intends to focus on the state-of-the-art research and development, as well as future trends in the modeling, design, control and optimization of advanced power electronics and electric drives for future sustainable transportation systems.

Marco Di Benedetto

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Short Curriculum Vitae

He has been getting the Ph.D. degree in Mechanical and Industrial Engineering from the ROMA TRE University, Italy, from 2014 to 2017. He received the M.Eng. degree in Electronic Engineering from the University of Roma 'TOR VERGATA', Italy, in 2014. He has been working as Research Fellow with the Center for Power Electronics and Drives (C-PED) at Department of Engineering from the ROMA TRE University.
His research interests are mainly focused on novel power converter topologies for application in transportation systems, as well as hardware and FPGA control design for multilevel power converter topologies in high speed generating and UPS applications.

Patrizia Livreri

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Short Curriculum Vitae

Patrizia Livreri PhD, received her "Laurea degree" with honours in 1986. Since 1995, she is Assistant Professor serving the School of Engineering at University of Palermo. She is the scientific director of the "Power electronic Laboratory" at the Engineering Department DEIM. Her research interests are in power electronics and microwave tubes (TWT, Klystron) for radar application