



Design of Sensing and Actuation Systems

Guest Editors:

Dr. Salvatore Ameduri

CIRA, Italian Aerospace Research
Centre, Via Maiorise, 81043
Capua, Italy

Dr. Antonio Concilio

Department of Adaptive
Structures, Centro Italiano
Ricerche Aerospaziali, 81043
Capua, CE, Italy

Deadline for manuscript
submissions:

closed (30 September 2022)

Message from the Guest Editors

Dear Colleagues,

The last several decades have seen the advent and development of innovative materials and systems, whose level of compactness and integration, in conjunction with their high functional performance, contribute to their designation as “smart”. Consequently, research and development projects have been focusing on the development of highly integrated sensing and actuation systems based on “highly embedded and distributed architectures”, targeting growing levels of market and technical competitiveness, while facing increasingly strict environmental requirements.

This Special Issue focuses on the design of integrated actuator and sensor networks, applied to different fields, such as:

- Morphing and deployable systems;
- Electric aircraft and vehicle applications;
- Energy harvesting systems;
- Noise and vibration annoyance;
- Innovative de-icing systems for aeronautics;
- Civil buildings, for health monitoring and seismic attenuation;
- Bio-medical applications, ranging from surgery to wearable systems;
- Any other application concerning the development and use of highly integrated actuation and sensing systems.

