



Smart Dielectric Elastomer Actuator and Sensor Systems

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Message from the Guest Editors

Dear Colleagues,

Dielectric elastomer actuators (DEAs) are among the most promising technologies for the new generation of smart multifunctional systems. Due to their large deformations, inherent compliance, lightweight property, high power density and efficiency, and self-sensing capability, DEAs can excel in tasks which are difficult, if not impossible, to achieve for conventional drives and servo systems.

This Special Issue collects novel contributions in the field of multifunctional systems based on DEAs.

The topics of interest to the Special Issue include, but are not limited to:

- Advanced DEA applications (acoustics, haptics, soft robotics, wearables);
- New DEA system architectures and layout;
- Multi-actuator and cooperative systems;
- Design, fabrication and optimization of novel DEA-driven systems;
- System-level modelling and simulation;
- Innovative driving/sensing electronics;
- Control concepts for DEA systems;
- Self-sensing and sensorless control;
- Condition monitoring and lifetime assessment.

