

ICIRA 2024 Special Session Proposal

Title of the Proposal: Soft Actuators and Sensors

Technical Outline of the Session and Topics:

Outline of the Session: Soft robots have wide applications in the fields of health care and artificial intelligence because of their good flexibility, adaptability and safety. Soft actuators and sensors are the core functional components of soft robots. In order to realize the application of soft robots, it is necessary to develop new electroactive materials, which are used to design soft actuators and sensors, to realize actuating and sensing ability with high flexibility and stability. Therefore, to promote the progress of soft robots, we launch this special section and topics to collect the latest research on soft actuators and sensors and related fields. We are grateful for the contributions from researchers in various fields.

Topics of the Session:

- Development of New Electroactive Materials
- Actuating and Sensing Mechanism
- Actuating and Sensing and Modeling
- Optimized design of Soft Actuators and Sensors
- Fabrication and Characterization of Soft Actuators and Sensors
- Applications of Soft Actuators and Sensors

Contact details of the Session Organizers

- Organizer 1: Yanjie Wang, Hohai University, <u>yjwang@hhu.edu.cn</u>
- Organizer 2: Bo Li, Xi'an Jiaotong University, <u>liboxjtu@xjtu.edu.cn</u>
- Organizer 3: Qingsong He, Nanjing University of Aeronautics and Astronautics, <u>heqingsong@nuaa.edu.cn</u>
- Organizer 4: Zhuangzhi Sun, Northeast Forestry University, <u>sunzhuangzhi@nefu.edu.cn</u>
- Organizer 5: Longfei Chang, Hefei University of Technology, feny.clf@hfut.edu.cn