Call for Papers

Focused Section on Advances in Soft Robotics

Guest Editors

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Soft robotics, inspired by biological organisms including octopuses, worms, starfish, and elephants, offers promising and innovative solutions for safe and adaptive interactions in unstructured environments and with humans. The development of soft robots presents a number of challenges in material synthesis, mathematical modeling, mechanism design, and control, and has attracted increasing attention from researchers in recent years. For instance, a soft robot comprised of sensors, actuators, and structures, all with soft, deformable, and compliant characteristics, requires advances in material development and manufacturing technology. Also, it is crucial to have distributed, effective control architecture that requires minimal computing power. Additionally, it is of great importance to develop computationally-efficient modeling tools for soft and deformable materials and structures. The goal of this focused section is to highlight some of the key advances made in the field of soft robotics. Topics of interest for the focused section include but are not limited to:

- Electronic skin
- Soft material sensors and actuators
- Distributed sensing, actuation, and control strategies
- Mechanism design and dynamics for soft robots
- Modeling and simulation tools for soft robotics
- Enabling tools for prototyping soft robots
- Prototypes and applications

Manuscript preparation

Papers must contain original contributions and be prepared in accordance with the journal standards. Instructions for authors are available online at: http://www.springer.com/41315.

Manuscript submission

Manuscripts should be submitted online at: https://www.editorialmanager.com/jira/default.aspx. The cover letter should report the following statement: “This paper is submitted for possible publication in the focused section on Advances in Soft Robotics. All manuscripts will be subjected to the peer review process. If you have any questions relating to this focused section, please email one of the Guest Editors.

Important dates

Paper submission: September 1, 2016
- Completion of first review: October 15, 2016
- Submission of revised papers: December 1, 2016
- Completion of final review: January 1, 2017
- Submission of final manuscripts and copyright forms: February 15, 2017
- Publication: May 2017