

## ***Special Issue on Embodied Haptic Technology for Human Augmentation***

Co-Editors:      Prof. Kinya Fujita (Tokyo University of Agriculture and Technology, Japan)  
                     Prof. Yoshihiro Kuroda (University of Tsukuba, Japan)  
                     Prof. Domenico Prattichizzo (University of Siena, Italy)  
                     Prof. Ki-Uk Kyung (Korea Advanced Institute of Science & Technology Korea)  
                     Assoc. Prof. Yoshihiro Tanaka (Nagoya Institute of Technology, Japan)

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Haptics is the interdisciplinary area involving the sense of touch: perception, technologies and applications. Traditional haptic studies have been carried on basic perception property of humans, devices to provide tactile or proprioceptive sensation, and their applications such as teleoperation and virtual reality. On the other hand, haptic phenomena and technologies are recently investigated not only for improving realism of touch and performance of operation, but also for enhancing, augmenting, or manipulating human cognition, emotion, and behavior through haptic interaction. For enabling such novel applications, technologies and design concepts are also to be shifted to more human-harmonized and/or embodied ones, e.g. new haptic devices, such as wearable, flexible, and soft sensors or displays, and novel rendering and control algorithms as well as interaction methodologies based on human perception and recognition properties. Thus, this special issue aims to explore recent trends on haptics in terms of technologies, concepts and their applications, and furthermore, promote the exchange among researchers in the fields of robotics, virtual reality, and perception. The interest topics of the special issue include, but are not limited to

- Wearable/Flexible/Soft/Non-contact haptic sensor and display devices
- Control and rendering for human-harmonized haptic interaction
- Human perception and its utilization to smart haptic devices
- Haptic sharing and communication
- Augmentation and behavioral effect of haptic technologies
- Frontier applications of haptic technologies

Submission:      The full-length manuscript (either PDF file or MS word file) should be sent by **June 30, 2020** to the office of Advanced Robotics, the Robotics Society of Japan through the on-line submission system of the journal (<https://www.rsj.or.jp/AR/submission>). Sample manuscript templates and detailed instructions for authors are available at the website of the journal.