

CALL FOR PAPERS

Journal of Robotics and Mechatronics

Special Issue on “High-Speed Vision and its Applications”

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Focus: As the calculation speed of computers has increased, input and output devices such as cameras and displays have become faster, and the delays (latency) inherent in conventional systems have been approaching elimination. As a result, general-purpose system design principles based on high-speed image processing technology, including high-speed robotics, visual feedback, high-speed tracking, markerless tracking, dynamic projection mapping (DPM), low-latency video processing technologies, and others, have been created. These have enabled us to achieve not only high-speed (1,000 fps), but also sophisticated algorithms for handling rich information contents, and these algorithms have contributed to a more comfortable information environment. In particular, it is expected that a new dimension of information environment systems with millisecond-order motion characteristics in cross-cutting fields such as multimedia, robotics, human-robot interaction, sports science, and others, will be realized. In this special issue, we focus on high-speed vision and its applications for next-generation information environment systems. We welcome papers pertaining to, but not limited to, the following topics:

- High-speed vision
- High-speed image processing algorithms
- High-speed tracking
- High-speed adaptive optics
- High-speed robotics
- Hardware for high-speed robotics
- Sensor fusion
- Dynamic manipulation
- Human-machine cooperation
- Visual feedback
- Micro-visual feedback
- Intelligent systems
- Sensor networks
- Active vision
- 3D shape recognition
- Gesture recognition
- High-speed projectors
- Realistic displays
- Dynamic projection mapping
- Dynamic interaction
- Factory automation and inspection
- Security
- Bio-medical applications
- Multi-media applications
- Sports science
- Human interface

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Important Dates:

Submission deadline

Notification of acceptance/rejection

Final manuscript submission

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October 20, 2022



Index in: ESCI,
Scopus, Compendex

Submission/Contact to:

JRM Editorial Office, Fuji Technology Press, Japan: robot@fujipress.jp

- ◆ Papers should be submitted in Microsoft Word or PDF format. Details on submission and the journal are available at the following link: <https://www.fujipress.jp/jrm/rb/>
- ◆ Submissions can be either Japanese or English. Submissions in Japanese will be translated by the publisher and used after being proofread by the author.
- ◆ Papers submitted to this special issue will undergo our usual review process. Paper may be published in general issues based on review results.

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