

Call for Papers

The Third Edition of Focused Section on TMECH/AIM Emerging Topics

Submissions are called for the Third Edition of Focused Section (FS) on TMECH/AIM Emerging Topics. This Focused Section is intended to expedite publication of novel and significant research results, technology and/or conceptual breakthrough of emerging topics within the scopes of TMECH (www.ieee-asme-mechatronics.org). It also provides the rapid access to the state-of-the-art of TMECH publications within the mechatronics community.

The submitted paper must not exceed 8 TMECH published manuscript pages, excluding photos and bios of authors, and will be subject to a peer review process in the standard of TMECH. All final accepted papers from submissions to the Focused Section will be published in August Issue of TMECH in 2022 and will be presented in the 2022 IEEE/ASME International Conference on AIM (AIM 2021, aim2022.org). The rejected papers from submissions will be transferred to the Program Committee of AIM 2022 for further review and consideration as contributed conference papers.

The review process for submissions to this Focused Section will be conducted in up to two rounds with one Major/Minor Revision allowed, and the final decision falls into one of the following two categories:

1. Accept for publication in Focused Section. In this case, the paper will be accepted by AIM 2022 concurrently for presentation only with full information of the paper to be included in the preprinted proceeding of AIM 2022. The final publication in TMECH, however, will be subject to the completion of presentation in AIM 2022 with paid full registration fee.
2. Reject for publication in Focused Section (after the first or second round). In this case, the paper, as well as all review comments, will be forwarded to the Program Committee of AIM 2022 for further consideration. A final Accept/Reject decision will then be made by the Committee as a contributed conference paper for AIM 2022.

Manuscript preparation

Papers must contain original contributions and be prepared in accordance with the journal standards. Instructions for authors are available online on the TMECH website.

Manuscript submission

Manuscripts should be submitted to TMECH online at: mc.manuscriptcentral.com/tmech-ieee, selecting the track 'TMECH/AIM Emerging Topics'. The cover letter should include the following statement: This paper is submitted to the Third Edition of Focused Section on TMECH/AIM Emerging Topics. The full information of the paper should be uploaded concurrently to AIM 2022 online at: ras.papercept.net/conferences/scripts/start.pl, noted with the given TMECH manuscript number in the designated area.

Submission/Review/Decision Timeline:

Opening Date of TMECH/AIM FS Submission Site (first submission):	November 1, 2021
Closing Date of TMECH/AIM FS Submission Site (first submission):	January 5, 2022
Full Information of TMECH/AIM FS Paper Submitted to AIM Site:	January 5, 2022
First Decision for TMECH/AIM FS Submission:	March 1, 2022
Revised TMECH/AIM FS Submission Due by:	March 26, 2022
Final Decision for TMECH/AIM FS Submission:	May 2, 2022
Final Version of TMECH/AIM FS Submission Due by:	May 15, 2022
Publication of Focused Section in TMECH:	August 2022

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Areas: grasp and manipulation, mobile robot, robotic perception and learning

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Areas: unmanned aerial vehicle, autonomous flight, cooperative control, intelligent path planning

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Areas: automotive control systems, mechatronics, autonomous systems, energy systems

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Areas: modelling and design, motion control, actuators and sensors, vibration and noise control, micro devices and opto-electronic systems, robotics

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Areas: actuators and sensors, motion control, robotics

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Areas: robotics, modeling and design, actuator and sensor, rehabilitation robotics and human-robot interaction.

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Areas: manipulation, motion control, actuation, tactile sensing, kinematics, dynamics, haptics

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Areas: sensors and actuator networks, transportation systems, cyber physical systems, system identification, distributed and cloud robotics, localization, mapping and planning, mobility and locomotion, unmanned autonomous systems, AI and machine

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Areas: autonomous assistance systems, human-robot interaction and collaboration, robot motion and manipulation in dynamic environments, psychosocial aspects of robotics

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Areas: autonomous robotic systems, mechatronics, dynamic systems and controls, automation science and engineering, with applications to biomedical, transportation, and civil infrastructure systems

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Areas: compliant actuators, force control, rehabilitation robots, human-robot interaction

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Areas: automotive control, motion control, energy systems, control of mechatronic systems.