

Call for Papers

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

Submissions are called for the Second Edition of Focused Section (FS) on TMECH/AIM Emerging Topics (renamed from previous TMECH/AIM Concurrent Submission). 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 normal peer review process in the standard of TMECH. All accepted papers from submissions to the Focused Section will be published in August Issue of TMECH in 2021 and will be presented in the 2021 IEEE/ASME International Conference on AIM (AIM 2021, aim2021.org). The rejected papers from submissions will be transferred to the Program Committee of AIM 2021 to be further reviewed and considered as contributed conference papers.

The review process for submissions to the Focused Section will be conducted with one round of 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 2021 concurrently for presentation only with full information of the paper to be included in the preprinted proceeding of AIM 2021. The final publication in TMECH, however, will be subject to the completion of presentation in AIM 2021 with paid full registration fee.
2. Reject for publication in Focused Section (in the first and second round). In this case, the paper, as well as all review comments, will be forwarded to the Program Committee of AIM 2021 for further consideration. A final Accept/Reject decision will then be made by the Committee as a contributed conference paper for AIM 2021.

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 Second Edition of Focused Section on TMECH/AIM Emerging Topics. The full information of the paper should be submitted concurrently to AIM 2021 online at: ras.papercept.net/conferences/scripts/start.pl, noted with the given TMECH manuscript number.

Submission/Review/Decision Timeline:

Opening Date of TMECH/AIM FS Submission Site (first submission):	November 1, 2020
Closing Date of TMECH/AIM FS Submission Site (first submission):	December 5, 2020
Full Information of TMECH/AIM FS Paper Submitted to AIM Site:	December 5, 2020
First Decision for TMECH/AIM FS Submission:	March 1, 2021
Revised TMECH/AIM FS Submission Due by:	March 26, 2021
Final Decision for TMECH/AIM FS Submission:	May 1, 2021
Final Version of TMECH/AIM FS Submission Due by:	May 15, 2021
Publication of Focused Section in TMECH:	August 2021

Contacts: For any questions related to this Call for Paper, please contact:

Xiang Chen, xchen@uwindsor.ca, Senior Editor of TMECH,
Bram Vanderborght, Bram.Vanderborght@vub.be, Program co-Chair of AIM 2021.

Editorial Board

**Lead Guest Editors: Xiang Chen, University of Windsor, Canada, xchen@uwindsor.ca
Bram Vanderborght, Vrije Universiteit Brussel, Belgium, Bram.Vanderborght@vub.be**

Raffaella Carloni, University of Groningen, The Netherlands, r.carloni@rug.nl
Areas: Soft/compliant actuators, modeling and control of soft/compliant actuators, Design/control lower-limb prostheses

Xinkai Chen, Shibaura Institute of Technology, Japan, chen@sic.shibaura-it.ac.jp
Areas: motion control, actuators and sensors, vibration and noise control, intelligent control

Zhen Chen, Zhejiang University, China, zheng_chen@zju.edu.cn
Areas: precision engineering and control, estimation and adaptive control, linear & nonlinear control, human-robot interaction, haptics & teleoperation, pneumatics and hydraulics.

Jong Eun Choi, Yonsei University, Republic of Korea, jongunchoi@yonsei.ac.kr
Areas: gain-scheduling controller, model predictive control, Gaussian processes, machine learning, deep learning, reinforcement learning, inverse optimal control problems, inverse reinforcement learning.

Garrett Clayton, Villanova University, USA, garrett.clayton@villanova.edu
Areas: motion control, actuators and sensors, intelligent control, micro devices and opto-electronic systems, robotics

Cédric Clévy, FEMTO-ST Institute, France, cclevy@femto-st.fr
Areas: grasping and manipulation, precision engineering and control, micro/nano technology, field robotics

Markus Grebenstein, DLR German Aerospace Center, Germany, markus.grebenstein@dlr.de
Areas: grasping and manipulation Mechanisms, design, modeling & control applications (robotics), biomimetic & bio-inspired robotics, biomimetic actuators and sensors, mobility & locomotion, aerospace systems and applications, rapid prototyping, design methodology for mechatronics.

Mathieu Grossard, CEA LIST- Nano-Innov, France, mathieu.grossard@cea.fr
Areas: grasping and manipulation, optimal mechanical design, compliant structures, actuators and sensors.

Kazuaki Ito, Gifu University, Japan, kazu_it@gifu-u.ac.jp
Areas: precision machine control, mechanisms, design, modeling & control, system identification, precision engineering and control, vibration isolation and control, estimation and adaptive control, factory automation, industry applications

Soo Jeon, University of Waterloo, Canada, soojeon@uwaterloo.ca
Areas: motion control, estimation, stochastic systems, robotic manipulation, power assistive devices, sensors and sensing systems.

Chao-Chieh Lan, National Cheng Kung University, Taiwan, cclan@mail.ncku.edu.tw
Areas: robotics, vibration control, actuators and sensors, modeling and design

Huaping Liu, Tsinghua University, China, hp-liu@mail.tsinghua.edu.cn
Areas: grasp and manipulation, mobile robot, robotic perception and learning

Hugh H. Liu, University of Toronto, Canada, liu@utias.utoronto.ca
Areas: unmanned aerial vehicle, autonomous flight, cooperative control, intelligent path planning

Chris Manzie, University of Melbourne, Australia, manziec@unimelb.edu.au

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

Kenn Oldham, University of Michigan, USA, oldham@umich.edu

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

Dawei Shi, Beijing Institute of Technology, China, daweshi@bit.edu.cn

Areas: modeling and design, intelligent control, motion control, robotics, actuators and sensors, medical devices

Tomoyuki Shimono, Yokohama National University, Japan, shimono-tomoyuki-hc@ynu.ac.jp

Areas: actuators and sensors, motion control, robotics

Mahdi Tavakoli, University of Alberta, Canada, mahdi.tavakoli@ualberta.ca

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

Jun Ueda, Georgia Institute of Technology, USA, jun.ueda@me.gatech.edu

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

Yan Wan, University of Texas at Arlington, USA, yan.wan@uta.edu

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

Dirk Wollherr, Technical University of Munich, Germany, dw@tum.de

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

Jingang Yi, Rutgers University, USA, jgyi@rutgers.edu

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

Haoyong Yu, National University of Singapore, Singapore, biehy@nus.edu.sg

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

George G. Zhu, Michigan State University, USA, zhug@egr.msu.edu

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