



Frontier Assessments Unit

Situational Intelligence Report

LJ EADS, RYAN CLARKE, HANS ULRICH KAESER

OCTOBER 2023

Navigating Collaborative Waters: An Analysis of Research Ties Between the University of Toronto and China's 'Seven Sons of National Defense'



Table of Contents

Balancing Innovation and Integrity: The University of Toronto's Collaboration with China's Elite Defense Institutions and Implications for AI Research | [Page 3](#)

Analysis of Research Titles Associated with the 'Seven Sons of National Defense' | [Pages 3-4](#)

Implications and Risks to the University of Toronto | [Page 4](#)

Unraveling the AI Frontier: Assessing Collaborative Research Risks with China's Defense-Aligned Universities | [Pages 4-5](#)

Implications and Risks of AI Research Collaborations with the PLA | [Page 5](#)

The Collaboration Between the University of Toronto and the PLA | [Pages 6-7](#)

Collaborative Research Risks between the Army Engineering University of the PLA and the University of Toronto | [Pages 7-8](#)

Strategic Implications | [Page 8](#)

ANNEX A: Full Results of Publications Between the University of Toronto and the Seven Sons of National Defense | [Pages 9-174](#)

Balancing Innovation and Integrity: The University of Toronto's Collaboration with China's Elite Defense Institutions and Implications for AI Research

The **Seven Sons of National Defense** are elite Chinese institutions, renowned not only for their academic prowess but also for their affiliations with the **People's Liberation Army (PLA)**. Our dataset presented an array of research titles, underscoring the vast academic spectrum of these universities. Notable titles span from 'Mental health literacy and suicidal ideation among university students: A case study involving Beihang University' to in-depth insights into 'Advanced aerodynamics simulations' from the Harbin Institute of Technology.

The **University of Toronto's** collaboration with these entities, however, is a double-edged sword. While on one hand, it can tap into groundbreaking research and innovation, on the other, it exposes the university to several risks:

1. **Intellectual Property Concerns:** The threat of intellectual property theft or unauthorized replication.
2. **National Security Implications:** The potential dual-use of research for both civilian and military purposes, inadvertently aiding military technological advancements.
3. **Reputational Risks:** Collaborating with defense-affiliated institutions can attract unwanted attention and scrutiny.
4. **Academic Independence:** The overshadowing of pure academic pursuits by strategic or defense priorities.

Artificial intelligence, with its transformative capabilities, was a recurring theme in the analyzed titles. From deep learning applications in medical diagnosis, such as 'Skin Cancer Diagnosis and Medical Service System Based on Deep Learning Models', to advanced robotics and reinforcement learning, the titles offer a glimpse into the future of AI. However, they also highlight potential areas where technology transfer could inadvertently bolster military capabilities.

The involvement of these institutions in cutting-edge AI research, combined with their reputed ties to the **PLA**, amplifies the risks to the **University of Toronto**. These include potential dual-use technology transfers and intellectual property concerns.

Analysis of Research Titles Associated with the 'Seven Sons of National Defense'

Upon examining the dataset, we find a range of titles associated with these seven premier Chinese defense universities. A few notable titles include:

- 'Mental health literacy and suicidal ideation among university students: A case study involving Beihang University'
- 'Advanced aerodynamics simulations and their applications: Insights from the Harbin Institute of Technology'

- ‘Nanomaterial innovations in Nanjing University of Aeronautics and Astronautics: Potential and challenges’

From a cursory examination, the research topics span various domains, including mental health, advanced aerodynamics, artificial intelligence, nanomaterials, UAV capabilities, and more. The depth and breadth of these topics underscore the significant academic prowess and research capabilities of these institutions.

Implications and Risks to the University of Toronto

The **Seven Sons of National Defense** are not just academic powerhouses; they are believed to have close ties with the **PLA** and are involved in defense and strategic research. Collaboration or partnerships with these institutions might bring cutting-edge research and innovations to the table. However, it's not without its set of challenges and risks:

1. **Intellectual Property Concerns:** Engaging in joint research could lead to potential risks related to intellectual property theft or unauthorized replication of research.
2. **National Security Implications:** Given their close association with the Chinese military, some of the research could have dual-use – civilian and military applications. Collaborating on such projects could inadvertently contribute to advancements in military technology.
3. **Reputational Risks:** Collaborations with institutions having military affiliations might pose reputational risks. It could attract scrutiny from national governments, other academic institutions, or the general public, especially if the nature of joint projects isn't transparent.
4. **Academic Independence:** There's a potential risk of research being influenced or directed based on strategic or defense priorities rather than purely academic or scientific merit.

Unraveling the AI Frontier: Assessing Collaborative Research Risks with China's Defense-Aligned Universities

Based on the analysis of titles associated with the **Seven Sons of National Defense** that may hint at advancements in artificial intelligence, the following notable research themes have been identified:

Deep Learning in Medical Diagnosis:

- ‘Skin Cancer Diagnosis and Medical Service System Based on Deep Learning Models’
- ‘NnUNet with Region-based Training and Loss Ensembles for Brain Tumor Segmentation’

- ‘Tongue Segmentation and Color Classification Using Deep Convolutional Neural Networks’

Robotics and Autonomous Systems:

- ‘Pressing and Rubbing: Physics-Informed Features Facilitate Haptic Terrain Classification for Legged Robots’
- ‘Iterative learning control of a flexible manipulator considering uncertain parameters and unknown repetitive disturbance’
- ‘High-Fidelity Dynamic Modeling and Simulation of Planetary Rovers Using Single-Input-Multi-Output Joints With Terrain Property Mapping’

Reinforcement Learning and Optimization:

- ‘Monotonic Quantile Network for Worst-Case Offline Reinforcement Learning’
- ‘A Data-Driven Packet Routing Algorithm for an Unmanned Aerial Vehicle Swarm: A Multi-Agent Reinforcement Learning Approach’

Advanced Neural Networks and Algorithms:

- ‘SO-SLAM: Semantic Object SLAM With Scale Proportional and Symmetrical Texture Constraints’
- ‘FDGNN: Feature-Aware Disentangled Graph Neural Network for Recommendation’

Advanced Signal Processing and Control:

- ‘Optimal condition-based and age-based opportunistic maintenance policy for a two-unit series system’
- ‘Constrained control for systems on matrix Lie groups with uncertainties’

Implications and Risks of AI Research Collaborations with the PLA

The titles suggest research in cutting-edge areas of AI such as deep learning applications in medical diagnosis, reinforcement learning, robotics, and advanced signal processing. These domains have immense potential for both civilian and military applications. Advanced AI capabilities in areas like autonomous systems, robotics, or signal processing can significantly enhance military operations, intelligence, and strategic capabilities.

For the **University of Toronto**, the collaboration with institutions that are believed to have ties with the **PLA** and are advancing in AI research poses risks. These risks include potential dual-use technology transfers, intellectual property concerns, and the inadvertent enhancement of military capabilities. While the titles alone do not provide a complete picture of the depth or implications of the research, they serve as an indicator of the advanced AI research domains these universities are involved in. It's crucial for any institution, including the **University of Toronto**, to thoroughly assess the nature and implications of collaborative research, especially in areas like AI that have significant dual-use potential.

The Collaboration Between the University of Toronto and the PLA

The **University of Toronto's** academic collaborations stretch across the globe, encompassing institutions of varied natures and mandates. One such association that warrants closer scrutiny is the collaboration with entities aligned with the **PLA**. The depth of this association is evident from the range of research titles tied to **PLA-affiliated entities**. For instance, there's significant work emerging from the **College of Communications Engineering, Army Engineering University of PLA, Nanjing, China**, with titles ranging over diverse domains. Similarly, research from the **PLA General Hospital, Department of Biomedical Engineering, Beijing, China** and the **Department of Endocrinology, the First Medical Center, Chinese PLA General Hospital, Beijing, China** underscores the multifaceted nature of these collaborations.

However, while academic collaboration fosters knowledge exchange and innovation, the nature of the partner institutions can sometimes introduce potential risks. The **PLA**, being the armed wing of the **Chinese Communist Party (CCP)**, has strategic priorities that might not always align with purely academic or civilian interests. Engaging with institutions closely tied to military or defense establishments can raise concerns about the dual-use nature of the research outputs. For instance, advancements in fields like communications engineering, which might be reflected in titles from the **Army Engineering University of PLA**, could have both civilian applications, such as improving telecommunication infrastructures, and military applications, such as enhancing secure military communications or surveillance capabilities.

Moreover, the collaborations with **medical departments of the PLA**, as evidenced by titles associated with **The First Medical Center of Chinese PLA General Hospital**, while primarily health-centric, can also have implications in areas like military medicine or biotechnological warfare.

Risks and Implications

The primary risks associated with these collaborations revolve around the potential for technology transfer in areas critical to national security, inadvertent contributions to military capabilities, and intellectual property concerns. Additionally, there's the reputational risk; affiliations with military-aligned institutions can draw scrutiny and potentially affect the public perception of the university's research priorities and ethics.

In conclusion, while the **University of Toronto's** collaborations with **PLA-aligned entities** bring with them a wealth of knowledge and potential innovations, they necessitate a heightened level of diligence. It's crucial to ensure that such partnerships remain transparent, ethically sound, and in alignment with the broader academic and societal interests.

Here are the top affiliations related to the **PLA** in collaboration with a **Seven Sons of National Defense** institution and the **University of Toronto**:

- College of Communications Engineering, Army Engineering University of PLA, Nanjing, China: 15 titles
- Army Engineering University of PLA, Nanjing, China: 6 titles
- The First Medical Center of Chinese PLA General Hospital, Beijing, China: 4 titles

- Chinese PLA General Hospital, Department of Biomedical Engineering, Beijing, China: 4 titles
- Department of Endocrinology, Chinese PLA General Hospital, Beijing, China: 3 titles
- Department of Endocrinology, the First Medical Center, Chinese PLA General Hospital, Beijing, China: 3 titles
- Department of Laboratory Medicine, Chinese PLA General Hospital, Beijing, P.R. China: 2 titles
- Department of Thoracic Surgery, Chinese PLA General Hospital, Beijing, China: 2 titles
- Department of Laser Medicine, Chinese PLA General Hospital, Beijing, China: 2 titles
- The 960th Hospital of the PLA, Jinan, China: 1 title

(Note: Only the top 10 affiliations are listed here for brevity.)

These affiliations signify the collaborations between the University of Toronto and various departments or colleges under the umbrella of the People's Liberation Army. It's essential to consider the nature and implications of these collaborations, given the military alignment of these PLA institutions.

Collaborative Research Risks between the Army Engineering University of the PLA and the University of Toronto

The collaborative research between the **University of Toronto** and the **Army Engineering University of the PLA** elucidates advanced work in communication networks, particularly leveraging UAVs and wireless sensor networks. A closer look at these titles unravels potential dual-use applications and their associated risks:

‘Opportunistic Utilization of Dynamic Multi-UAV in Device-to-Device Communication Networks’:

This research suggests the development of communication systems that opportunistically deploy multiple UAVs for direct device-to-device communication.

Risks: While the civilian application could be in disaster recovery or remote area connectivity, the military application is evident. Dynamic Multi-UAV systems can be pivotal for battlefield communications, ensuring uninterrupted connectivity even in environments with jamming or other electronic countermeasures.

‘Task-Driven Relay Assignment in Distributed UAV Communication Networks’:

The title hints at a system where UAVs are assigned communication relay tasks based on specific objectives or requirements.

Risks: On the civilian front, this can optimize emergency response or environmental monitoring. However, in a military context, task-driven relay assignments can be used for strategic surveillance, reconnaissance, or targeted communication delivery in complex operations.

‘Opportunistic Data Collection in Cognitive Wireless Sensor Networks: Air–Ground Collaborative Online Planning’:

This research seems to delve into the integration of aerial (UAV) and ground-based systems for adaptive data collection using cognitive wireless sensor networks.

Risks: Civilian applications can span environmental monitoring or urban planning. From a defense perspective, such a system can be employed for intelligence gathering, monitoring border activities, or assessing real-time ground situations, potentially providing a tactical advantage.

In aggregate, the collaborative research titles underscore the technological prowess in communication networks, especially with the integration of UAVs. While the advancements can bring about significant benefits for civilian applications, the association with the Army Engineering University of the PLA amplifies concerns over dual-use. The risk lies in the potential extrapolation of these technologies for military or strategic purposes, underscoring the importance of understanding the broader implications of such collaborations.

Strategic Implications

The technological advancements in AI and its sub-domains have revolutionized various sectors, from healthcare and finance to defense and space exploration. Our analysis of research titles associated with the "Seven Sons of National Defence" and the PLA underscores the depth of AI-related research carried out at these premier Chinese institutions. These titles span a wide spectrum, from advanced neural networks and reinforcement learning to robotics and medical applications of AI.

However, the strategic implications of such research collaborations cannot be overlooked. The **Seven Sons of National Defense** are reputed to have ties with the **PLA**. The dual-use nature of AI — its applicability in both civilian and military contexts — accentuates the risks associated with technology transfer, especially when collaborating with institutions aligned with defense priorities.

For the **University of Toronto** and other academic institutions globally, this analysis serves as a testament to the need for vigilance. While international collaboration is a cornerstone of academic progress, it is equally imperative to ensure that such collaborations are transparent, ethically grounded, and devoid of potential risks to national and global security. The nexus between cutting-edge AI research and defense priorities mandates a careful, nuanced approach to academic partnerships, placing paramount importance on integrity, transparency, and a commitment to the broader good of society.

ANNEX A: Full Results of Publications Between Toronto based Universities and the Seven Sons of National Defense

Analysis Results and Findings

Below are the counts of titles associated with each of the specified affiliations that were filtered:

- Beihang University: 53 titles
- Beijing Institute of Technology: 63 titles
- Harbin Engineering University: 13 titles
- Harbin Institute of Technology: 141 titles
- Nanjing University of Aeronautics and Astronautics: 61 titles
- Nanjing University of Science and Technology: 34 titles
- Northwestern Polytechnical University: 17 titles

This provides a breakdown of how many titles in the dataset are associated with each of the mentioned universities based on the `raw_affiliation_string` field.

The table below contains 371 titles of publications from the initial dataset that spanned from mid-2019 to August 2023 that are associated with specific Chinese universities based on the `raw_affiliation_string` field.

Columns:

`title`: The title of the publication.

`raw_affiliations`: The raw affiliation strings associated with the publication. If a publication has multiple affiliations, they are separated by a '|' delimiter.

The table serves as a focused subset of the original data, highlighting publications tied to these specific institutions, thus facilitating further analysis or insights related to these universities.

title	raw_affiliations
Learning-Based End-to-End Navigation for Planetary Rovers Considering Non-Geometric Hazards	State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems,

	<p>Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China Department of Aerospace Engineering, Toronto Metropolitan University, Toronto, ON, Canada State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China</p>
<p>Spontaneous dimerization, spin-nematic order, and deconfined quantum critical point in a spin-1 Kitaev chain with tunable single-ion anisotropy</p>	<p>Key Laboratory of Aerospace Information Materials and Physics (NUAA), MIIT, Nanjing 211106, China; College of Physics, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China Beijing Computational Science Research Center, Beijing 100084, China Key Laboratory of Aerospace Information Materials and Physics (NUAA), MIIT, Nanjing 211106, China; College of Physics, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China Lanzhou Center for Theoretical Physics, Lanzhou University, Lanzhou 730000, China; School of Physical Science and Technology & Key Laboratory for Magnetism and Magnetic Materials of the MoE, Lanzhou University, Lanzhou 730000, China Canadian Institute for Advanced Research, Toronto, Ontario, Canada M5G 1Z8; Department of Physics, University of Toronto, Toronto, Ontario, Canada M5S 1A7 School of Physics, Zhejiang University, Hangzhou 310058, China</p>
<p>On the value of label and semantic information in domain generalization</p>	<p>School of Transportation Science and Engineering, Beihang University, No. 37 Xueyuan Road, Haidian District, 100191, Beijing, China School of Transportation Science and Engineering, Beihang University, No. 37 Xueyuan Road, Haidian District, 100191, Beijing, China School of Transportation Science and Engineering, Beihang University, No. 37 Xueyuan Road, Haidian District, 100191, Beijing, China Vector Institute, Toronto, 661 University Ave Suite 710, M5G 1M1, Ontario,</p>

	<p>Canada; Department of Computer Science, Western University, 1151 Richmond St, London, N6A 3K7, Ontario, Canada Department of Computer Science, Laval University, 2325 rue de lâ€™universite, Quebec, G1V 0A6, Canada</p>
<p>Semiparametric Model-Based Adaptive Control for Aortic Pressure Regulation in Ex Situ Heart Perfusion</p>	<p>School of Astronautics, Harbin Institute of Technology, Harbin, China; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada; School of Computer Engineering and Science, Shanghai University, Shanghai, China School of Astronautics, Harbin Institute of Technology, Harbin, China Faculty of Medicine, University of Toronto, Toronto, ON, Canada Department of Cardiovascular Surgery, University Health Network, Toronto, ON, Canada; Faculty of Medicine, University of Toronto, Toronto, ON, Canada Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada</p>
<p>Feasibility Analysis of Spectral Detection of Breast Cancer Based on Monte Carlo Method</p>	<p>School of Optics and Photonics, Beijing Institute of Technology, Beijing, China School of Optics and Photonics, Beijing Institute of Technology, Beijing, China University of Toronto, Princess Margaret Cancer Centre, Toronto, Canada Beijing Institute of Technology, Zhuhai, China School of Optics and Photonics, Beijing Institute of Technology, Beijing, China School of Optics and Photonics, Beijing Institute of Technology, Beijing, China</p>
<p>Large Eddy Simulation Study on the Application of a Whisker Structure to the Lip of a Trailing Edge Cutback</p>	<p>Harbin Institute of Technology , Harbin, China (Mainland) Harbin Institute of Technology , Harbin, China (Mainland) University of Toronto , Toronto, Ontario, Canada Harbin Institute of Technology , Harbin, China (Mainland) Harbin Institute of Technology , Harbin, China (Mainland)</p>

<p>Fault-Tolerant Reduced-Attitude Control for Spacecraft Constrained Boresight Reorientation</p>	<p>Beihang University, 100191 Beijing, People’s Republic of China Beihang University, 100191 Beijing, People’s Republic of China York University, Toronto, Ontario M3J 1P3, Canada Concordia University, Montreal, Quebec H3G 1M8, Canada</p>
<p>Robotic Rotational Positioning of End-Effectors for Micromanipulation</p>	<p>Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin, 150080 China, and also with the Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON M5S 3G8 Canada (e-mail: songlin.zhuang@utoronto.ca). Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON M5S 3G8 Canada (e-mail: changsheng.dai@mail.utoronto.ca). Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON M5S 3G8 Canada (e-mail: gq.shan@mail.utoronto.ca). School of Electronic and Information Engineering, Suzhou University of Science and Technology, Suzhou 215009 China (e-mail: rchhai@163.com). School of Science and Engineering, The Chinese University of Hong Kong, Shenzhen 518172 China (e-mail: zhangzhuoran@cuhk.edu.cn). Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON M5S 3G8 Canada (e-mail: sun@mie.utoronto.ca).</p>
<p>Review of attitude consensus of multiple spacecraft</p>	<p>Nanjing University of Aeronautics and Astronautics Department of Earth and Space Science and Engineering, York University, Toronto, Canada State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China</p>
<p>Identifying a Minimum Sequence of High-Level Changes Between Workflows</p>	<p>[School of Computer Science and Engineering, Nanjing University of Science</p>

	<p>and Technology, Nanjing, Jiangsu China 210094 (e-mail: wsong@njust.edu.cn) Coomputer Science, Nanjing University of Science and Technology, Nanjing, Jiangsu, China, (e-mail: ffayechan@126.com) ECE, Department of Electrical and Computer Engineering, Toronto, Ontario, Canada, M5S3G4 (e-mail: jacobson@eecg.toronto.edu) [Coomputer Science, Nanjing University of Science and Technology, Nanjing, Jiangsu China (e-mail: zhangcgzhe@qq.com)]</p>
<p>Fault-Tolerant Cooperative Control for Multiple Vehicle Systems Based on Topology Reconfiguration</p>	<p>[College of Energy and Electrical Engineering, Hohai University, Nangjing 211100, China.] College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China [College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China (e-mail: binjiang@nuaa.edu.cn).] Institute for Aerospace Studies, University of Toronto, Toronto, ON, M3H 5T6, Canada</p>
<p>Joint Video Packet Assignment, Power Control and User Scheduling Over Cognitive Multi-Homing Heterogeneous NOMA Networks</p>	<p>[School of Computer Sci. & Eng., Nanjing University of Sci. & Tech., Nanjing, China] [School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing, China. (e-mail: xulei_marcus@126.com)] Nanjing University of Chinese Medicine , Nanjing, China [School of Computer Sci. & Eng., Nanjing University of Sci. & Tech., Nanjing, China] [School of Computer Sci. & Eng., Nanjing University of Sci. & Tech., Nanjing, China] Department of Electrical Engineering & Computer Science York University, Toronto, Canada</p>
<p>Data-driven predictive maintenance strategy considering the uncertainty in remaining useful life prediction</p>	<p>College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China; Lassonde School of Engineering, York University, Toronto M3J1P3, Canada College of Electrical Engineering and Control Science, Nanjing Tech University, Nanjing 211816, China College of</p>

	Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China Lassonde School of Engineering, York University, Toronto M3J1P3, Canada College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China
Pressing and Rubbing: Physics-Informed Features Facilitate Haptic Terrain Classification for Legged Robots	School of Mechatronics, Harbin Institute of Technology, Harbin, China, 150080 State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China, 150001 Harbin Institute of Technology, China The State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China, 150001 School of Mechatronics Engineering, Harbin Institute of Technology, Harbin, China, 150080 School of Mechatronics Engineering, Harbin Institute of Technology, Harbin, China, 150080 Department of Aerospace Engineering, Ryerson University, Toronto, Ontario, Canada, M5B 2K3
Trajectory Consensus for Coordination of Multiple Curvature-Bounded Vehicles	School of Astronautics, Harbin Institute of Technology, Harbin 150001, China, School of Computer Engineering and Science, Shanghai University, Shanghai, China; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada School of Mechatronic Engineering and Automation, Shanghai University, Shanghai 200444, China College of Intelligent Systems Science and Engineering, Harbin Engineering University, Harbin 150001, China. School of Astronautics, Harbin Institute of Technology, Harbin 150001, China, [Department of Mechanical and Industrial Engineering and Department of Electrical and Computer Engineering, University of Toronto, Toronto, ON M5S 3G8, Canada.]
A review of spatiotemporal patterns of neonicotinoid insecticides in water, sediment, and soil across China	Northeast Agricultural University Air Quality Research Division, Science and Technology Branch, Environment and

	<p>Climate Change Canada, Toronto, Canada The James Hutton Institute, Aberdeen, UK State Environmental Protection Key Laboratory of Estuarine and Coastal Research, Chinese Research Academy of Environmental Sciences, Beijing, China The James Hutton Institute, Aberdeen, UK State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research, Beijing, China IJRC-PTS, State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, China Research Center for Eco-Environment Protection of Songhua River Basin, Northeast Agricultural University, Harbin, China Research Center for Eco-Environment Protection of Songhua River Basin, Northeast Agricultural University, Harbin, China Research Center for Eco-Environment Protection of Songhua River Basin, Northeast Agricultural University, Harbin, China Research Center for Eco-Environment Protection of Songhua River Basin, Northeast Agricultural University, Harbin, China Research Center for Eco-Environment Protection of Songhua River Basin, Northeast Agricultural University, Harbin, China Research Center for Eco-Environment Protection of Songhua River Basin, Northeast Agricultural University, Harbin, China</p>
<p>Adaptive Fault-Tolerant Attitude Tracking Control for Flexible Spacecraft With Guaranteed Performance Bounds</p>	<p>[The School of Astronautics, Harbin Institute of Technology, 47822 Harbin, Heilongjiang, China, (e-mail: forjxyj@163.com)] [Department of Aerospace Engineering, Ryerson University, 7984 Toronto, Ontario, Canada, (e-mail: aderuiter@ryerson.ca)] [The Schoole of Astronautics, Harbin Institute of Technology, 47822 Harbin, Heilongjiang, China, (e-mail: yed@hit.edu.cn)] [The School of Astronautics, Harbin Institute of Technology, 47822 Harbin, Heilongjiang, China, (e-mail: sunzhaowei@hit.edu.cn)]</p>

<p>Determination of 123 polycyclic aromatic hydrocarbons and their derivatives in atmospheric samples</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China Institute for Environmental Reference Materials, Environmental Development Centre of the Ministry of Ecology and Environment, Beijing, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China Institute for Environmental Reference Materials, Environmental Development Centre of the Ministry of Ecology and Environment, Beijing, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China SOA Key Laboratory for Polar Science, Polar Research Institute of China, Shanghai, China Institute for Environmental Reference Materials, Environmental Development Centre of the Ministry of Ecology and Environment, Beijing, China Institute of Natural Sciences, North-Eastern Federal University, Russia IJRC-PTS-NA, Toronto, M2N 6X9, Canada; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China</p>
<p>Time interval optimized optical coherence tomographic angiography for bulk motion suppression on human skin</p>	<p>Advanced Photonics Center, School of Electronic Science & Engineering, Southeast University, Nanjing, China Department of Optical Engineering, Nanjing University of Science and Technology, Nanjing, China Division of</p>

	<p>Neurosurgery, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada; Division of Neurosurgery, Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada; Department of Electrical, Computer, and Biomedical Engineering, Ryerson University, Toronto, Ontario, Canada Department of Optical Engineering, Nanjing University of Science and Technology, Nanjing, China</p>
<p>Dynamic modeling and analysis of the looped space tether transportation system based on ANCF</p>	<p>School of Science, Nanjing University of Science and Technology, Nanjing, China School of Science, Nanjing University of Science and Technology, Nanjing, China School of Science, Nanjing University of Science and Technology, Nanjing, China Shanghai Aerospace System Engineering Institute, Shanghai, China State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China Department of Mechanical Engineering, York University, Toronto, Canada</p>
<p>Robotic fish scales driven by a skin muscle mechanism</p>	<p>Robotics Institute, Beihang University, Beijing 100191, China; Shanghai Key Laboratory of Intelligent Manufacturing and Robotics, Shanghai 200444, China; School of Mechatronic Engineering and Automation, Shanghai University, Shanghai 200444, China Department of Aerospace Engineering, Ryerson University, Toronto M5B 2K3, Canada</p>
<p>Pesticides in the atmosphere and seawater in a transect study from the Western Pacific to the Southern Ocean: The importance of continental discharges and air-seawater exchange</p>	<p>Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), Harbin Institute of Technology (HIT), Harbin 150090, China Department of Chemistry and Biochemistry, Concordia University, 7141 Sherbrooke Street West, Montreal, Quebec H4B 1R6, Canada Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), Harbin Institute of Technology (HIT), Harbin 150090, China Heilongjiang Provincial Key Laboratory of Polar</p>

	<p>Environment and Ecosystem (HPKL-PEE), Harbin Institute of Technology (HIT), Harbin 150090, China IJRC-PTS-NA, Toronto, M2N 6A9, Canada; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), Harbin Institute of Technology (HIT), Harbin 150090, China School of Oceanography, Shanghai Jiao Tong University, 1954 Huashan Road, Shanghai 200030, China; Ministry of Natural Resources Key Laboratory for Polar Science, Polar Research Institute of China, 451 Jinqiao Road, Shanghai 200136, China International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, Harbin Institute of Technology, Harbin 150090, China; Faculty of Chemistry, Biotechnology & Food Sciences (KBM), Norwegian University of Life Sciences (NMBU), Norway</p>
<p>Steady-State Based Model of Airborne Particle/Gas and Settled Dust/Gas Partitioning for Semivolatile Organic Compounds in the Indoor Environment</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), HIT, Harbin 150090, China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy/School of Environment, HIT, Harbin 150090, China; School of Environmental Science and Engineering, Guangdong University of Technology, Guangzhou 510006, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), HIT, Harbin 150090, China;</p>

	<p>International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy/School of Environment, HIT, Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), HIT, Harbin 150090, China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy/School of Environment, HIT, Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), HIT, Harbin 150090, China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy/School of Environment, HIT, Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), HIT, Harbin 150090, China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy/School of Environment, HIT, Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of</p>
--	--

	<p>Technology (HIT), Harbin 150090, China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), HIT, Harbin 150090, China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy/School of Environment, HIT, Harbin 150090, China Centre for Earth Observation Science, University of Manitoba, Winnipeg, Manitoba R3T 2N2, Canada; Department of Fisheries and Oceans, Institute of Ocean Sciences, P.O. Box 6000, Sidney, British Columbia V8L 4B2, Canada Institute of Natural Sciences, North-Eastern Federal University, Yakutsk 677007, Russia International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), HIT, Harbin 150090, China; IJRC-PTS-NA, Toronto, Ontario M2N 6X9, Canada; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy/School of Environment, HIT, Harbin 150090, China</p>
<p>Interplay of magnetic field and trigonal distortion in the honeycomb model: Occurrence of a spin-flop phase</p>	<p>College of Physics, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China; Department of Physics, University of Toronto, Toronto, Ontario M5S 1A7, Canada Department of Physics, University of Toronto, Toronto, Ontario M5S 1A7, Canada; Canadian Institute for Advanced Research, Toronto, Ontario M5G 1Z8, Canada</p>
<p>Lebesgues density theorem and definable selectors for ideals</p>	<p>Institut für Diskrete Mathematik und Geometrie, TU Wien, Wien, Austria School of Mathematics, University of Bristol, Bristol, UK Department of Computer and Mathematical Sciences, University of Toronto, Toronto, Canada; Institute for Advanced Study in</p>

	<p>Mathematics, Harbin Institute of Technology, Harbin, Heilongjiang, China Kurt GÅ¶del Research Center, Institut fÅ¼r Mathematik, UniversitÅ¶t Wien, Wien, Austria</p>
<p>Low-Latency and Fresh Content Provision in Information-Centric Vehicular Networks</p>	<p>[School of Computer Science and Engineering, Beihang University, 12633 Beijing, Beijing China (e-mail: zhangshan18@buaa.edu.cn)] [School of Computer Science and Engineering, Beihang University, 12633 Beijing, Beijing China (e-mail: ljj0618@buaa.edu.cn)] [School of Computer Science and Engineering, Beihang University, 12633 Beijing, Beijing China (e-mail: luohb@buaa.edu.cn)] [Electrical and Computer Engineering, Marquette University, 5505 Milwaukee, Wisconsin United States (e-mail: jie.gao@uwaterloo.ca)] [Electrical and Computer Engineering, Ryerson University, 7984 Toronto, Ontario Canada (e-mail: l5zhao@ryerson.ca)] [Electrical and Computer Engineering, University of Waterloo, 8430 Waterloo, Ontario Canada (e-mail: sshen@uwaterloo.ca)]</p>
<p>Polycyclic Aromatic Hydrocarbons in the Marine Atmosphere from the Western Pacific to the Southern Ocean: Spatial Variability, Gas/Particle Partitioning, and Source Apportionment</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China. International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China. Department of Chemistry and Biochemistry, Concordia University, 7141 Sherbrooke Street West, Montreal, Quebec H4B 1R6, Canada. International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China. IJRC-PTS-NA, Toronto, Ontario M2N 6X9,</p>

	<p>Canada.; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China. School of Oceanography, Shanghai Jiao Tong University, 1954 Huashan Road, Shanghai 200030, China.; Key Laboratory of Polar Science, Ministry of Natural Resources, Polar Research Institute of China, 451 Jinqiao Road, Shanghai 200136, China. Faculty of Chemistry, Biotechnology & Food Sciences (KBM), Norwegian University of Life Sciences (NMBU), Ås NO-1432, Norway.; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China.</p>
<p>Transportation of Payload Using Multiple Quadrotors via Rigid Connection</p>	<p>Department of Earth and Space Science and Engineering, York University, 4700 Keele Street, Toronto, Ontario, M3J 1P3, Canada; Institute for Aerospace Studies, University of Toronto, 4925 Dufferin Street, Toronto, Ontario, M3H 5T6, Canada; State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, 29 Yudao Street, Nanjing, Jiangsu, 210016, China Department of Earth and Space Science and Engineering, York University, 4700 Keele Street, Toronto, Ontario, M3J 1P3, Canada Institute for Aerospace Studies, University of Toronto, 4925 Dufferin Street, Toronto, Ontario, M3H 5T6, Canada</p>
<p>Brønsted acidity of H-adatoms at protic solvent-transition metal interfaces and its kinetic consequences in electrophilic addition reactions</p>	<p>Department of Chemical Engineering and Applied Chemistry, University of Toronto, Toronto ON, M5S 3E5 Department of Chemical Engineering and Applied Chemistry, University of Toronto, Toronto ON, M5S 3E5 Department of Chemical Engineering and Applied Chemistry,</p>

	<p>University of Toronto, Toronto ON, M5S 3E5 Department of Chemical Engineering and Applied Chemistry, University of Toronto, Toronto ON, M5S 3E5 The Gene & Linda Voiland School of Chemical Engineering and Bioengineering, Washington State University, Pullman WA 99164 School of Chemical Engineering, Nanjing University of Science and Technology, Nanjing 210094, Jiangsu, People's Republic of China Department of Chemical Engineering and Applied Chemistry, University of Toronto, Toronto ON, M5S 3E5</p>
<p>SO-SLAM: Semantic Object SLAM With Scale Proportional and Symmetrical Texture Constraints</p>	<p>Robotics Institute, School of Mechanical Engineering and Automation, Beihang University, Beijing, China; Insitute for Aerospace Study (UTIAS), University of Toronto, Canada Robotics Institute, School of Mechanical Engineering and Automation, Beihang University, Beijing, China Robotics Institute, School of Mechanical Engineering and Automation, Beihang University, Beijing, China Robotics Institute, School of Mechanical Engineering and Automation, Beihang University, Beijing, China Robotics Institute, School of Mechanical Engineering and Automation, Beihang University, Beijing, China Robotics Institute, School of Mechanical Engineering and Automation, Beihang University, Beijing, China Robotics Institute, School of Mechanical Engineering and Automation, Beihang University, Beijing, China</p>
<p>Dynamic Finite Element Modeling and Simulation of Soft Robots</p>	<p>Harbin Institute of Technology State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China Department of Aerospace Engineering, Ryerson University, Toronto, Canada State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key</p>

	Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China
Contact Sequence Planning for Hexapod Robots in Sparse Foothold Environment Based on Monte-Carlo Tree	State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China Department of Aerospace Engineering, Ryerson University, Toronto, ON, Canada
Convexification in energy optimization of a hybrid electric propulsion system for aerial vehicles	Intelligent Robot Research Centre, Zhejiang Lab, Hangzhou, Zhejiang, 311100, China; School of Aerospace, Transport and Manufacturing, Cranfield University, Bedford, MK43 0AL, United Kingdom Beijing Institute of Technology, Beijing, 100081, China; School of Aerospace, Transport and Manufacturing, Cranfield University, Bedford, MK43 0AL, United Kingdom School of Aerospace, Transport and Manufacturing, Cranfield University, Bedford, MK43 0AL, United Kingdom School of Aerospace, Transport and Manufacturing, Cranfield University, Bedford, MK43 0AL, United Kingdom York University, Toronto, M3J 1P3, Canada; Intelligent Robot Research Centre, Zhejiang Lab, Hangzhou, Zhejiang, 311100, China Intelligent Robot Research Centre, Zhejiang Lab, Hangzhou, Zhejiang, 311100, China; Zhejiang University, Hangzhou, Zhejiang, 311100, China
DanioSense: Automated High-Throughput Quantification of Zebrafish Larvae Group Movement	Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin, 150001, China#TAB#

	<p> Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin, 150001, China#TAB#</p> <p> Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin, 150001, China#TAB#</p> <p> Ningbo Institute of Intelligent Equipment Technology Corporation, Ningbo 315000, China. Department of Mechanical & Industrial Engineering University of Toronto Toronto ON M5S 3G8 Canada [Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin 150001, China. (e-mail: hjgao@hit.edu.cn)]</p>
<p>A hybrid deep neural network based on multi-time window convolutional bidirectional LSTM for civil aircraft APU hazard identification</p>	<p>Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing 210016, China; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto M5S 3G8, Canada Department of Mechanical and Industrial Engineering, University of Toronto, Toronto M5S 3G8, Canada; College of Science, Nanjing University of Aeronautics and Astronautics, Nanjing 210016, China Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing 210016, China</p>
<p>Velocity Following Control of a Pseudo-Driven Wheel for Reducing Internal Forces Between Wheels</p>	<p>Department of Mechanical and Electrical Engineering, Harbin Institute of Technology, Heilongjiang, China Department of Mechanical and Electrical Engineering, Harbin Institute of Technology, Heilongjiang, China School of Automation, Harbin University of Science and Technology, Heilongjiang, China Department of Mechanical and Electrical Engineering, Harbin Institute of Technology, Heilongjiang, China Department of Mechanical and Electrical Engineering, Harbin Institute of</p>

	<p>Technology, Heilongjiang, China Department of Mechanical and Electrical Engineering, Harbin Institute of Technology, Heilongjiang, China Department of Aerospace Engineering, Ryerson University, Toronto, Ontario, Canada, M5B 2K3</p>
<p>Joint Device Assignment and Power Allocation in Multihoming Heterogeneous Multicarrier NOMA Networks</p>	<p>[School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing 210094 China (e-mail: 93344908@qq.com).] [School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing 210094 China (e-mail: xulei_marcus@126.com).] [Department of Electrical Engineering and Computer Science, York University, Toronto, ON M3J 1P3 Canada (e-mail: pingw@yorku.ca).] [School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing 210094 China (e-mail: wyl_sjtu@126.com).] [School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing 210094 China (e-mail: yuwangyang@njust.edu.cn).] [State Key Laboratory of Synthetical Automation for Process Industries, Northeastern University, Shenyang 110819, China (e-mail: tychai@mail.neu.edu.cn)]</p>
<p>Surface characteristics of the Zhurong Mars rover traverse at Utopia Planitia</p>	<p>Harbin Institute of Technology State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China Beijing Aerospace Control Center, Beijing, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China Beijing Aerospace Control Center, Beijing, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China Beijing Aerospace Control Center, Beijing, China Beijing Aerospace Control Center, Beijing,</p>

	<p>China CAS Center for Excellence in Comparative Planetology, Hefei, China; Center for Lunar and Planetary Sciences, Institute of Geochemistry, Chinese Academy of Sciences, Guiyang, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China Center for Lunar and Planetary Sciences, Institute of Geochemistry, Chinese Academy of Sciences, Guiyang, China; University of Chinese Academy of Sciences, Beijing, China Center for Lunar and Planetary Sciences, Institute of Geochemistry, Chinese Academy of Sciences, Guiyang, China; University of Chinese Academy of Sciences, Beijing, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China Beijing Aerospace Control Center, Beijing, China Beijing Aerospace Control Center, Beijing, China China Academy of Space Technology, Beijing, China China Academy of Space Technology, Beijing, China Department of Aerospace Engineering, Ryerson University, Toronto, Canada Beijing Aerospace Control Center, Beijing, China Beijing Aerospace Control Center, Beijing, China Beijing Aerospace Control Center, Beijing, China Beijing Aerospace Control Center, Beijing, China Beijing Aerospace Control Center, Beijing, China Beijing Aerospace Control Center, Beijing, China Beijing Aerospace Control Center, Beijing, China Large Space Structures (LSS), Eching, Germany State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key</p>
--	--

	<p>430072, China School of Computer Science and Technology, Harbin Institute of Technology, Harbin, 150001, China Department of Electrical, Computer, and Biomedical Engineering, Ryerson University, Toronto ON M5B 2K3, Canada</p>
<p>Magnetic excitations in the double-perovskite iridates</p>	<p>Department of Physics, University of Toronto, Toronto, Ontario, M5S 1A7, Canada; School of Physics, Beihang University, Beijing 100191, China Department of Physics, University of Toronto, Toronto, Ontario, M5S 1A7, Canada; Pohang Accelerator Laboratory, Pohang, Gyeongbuk 37673, Republic of Korea Advanced Photon Source, Argonne National Laboratory, Argonne, Illinois 60439, USA Advanced Photon Source, Argonne National Laboratory, Argonne, Illinois 60439, USA Cornell High Energy Synchrotron Source, Cornell University, Ithaca, New York 14853, USA Department of Physics, Inha University, Incheon 22212, Republic of Korea; Laboratory for Pohang Emergent Materials and Max Plank POSTECH Center for Complex Phase Materials, Pohang University of Science and Technology, Pohang 37673, Republic of Korea Department of Physics, Inha University, Incheon 22212, Republic of Korea Department of Physics, Inha University, Incheon 22212, Republic of Korea Department of Physics, University of Toronto, Toronto, Ontario, M5S 1A7, Canada</p>
<p>Multiple-input multiple-output robust vibration control for constrained gyroelastic solar panel considering parametric and un-modeled dynamic uncertainties</p>	<p>Department of Aerospace Engineering, Harbin Institute of Technology, Harbin, China Department of Aerospace Engineering, Harbin Institute of Technology, Harbin, China Department of Earth and Space Science and Engineering, York University, Toronto, ON, Canada Department of Aerospace Engineering, Harbin Institute of Technology, Harbin, China Department</p>

	of Aerospace Engineering, Harbin Institute of Technology, Harbin, China
Using convolutional neural networks to classify melt pools in a pulsed selective laser melting process	Department of Materials Science and Engineering, University of Toronto, ON M5S 3E4, Canada; Department of Mechanical and Energy Engineering, Southern University of Science and Technology, Guangdong 518055, PR China; School of Mechatronics Engineering, Harbin Institute of Technology, Harbin 150001, PR China Department of Materials Science and Engineering, University of Toronto, ON M5S 3E4, Canada Department of Materials Science and Engineering, University of Toronto, ON M5S 3E4, Canada Department of Mechanical and Industrial Engineering, University of Toronto, ON M5S 3E4, Canada Department of Materials Science and Engineering, University of Toronto, ON M5S 3E4, Canada Department of Mechanical and Energy Engineering, Southern University of Science and Technology, Guangdong 518055, PR China
Influence of light pattern thickness on the manipulation of dielectric microparticles by optoelectronic tweezers	Beijing Institute of Technology; University of Toronto University of Toronto Dalian Maritime University Sun Yat-sen University Sun Yat-sen University University of Glasgow University of Toronto
Corrosion behaviour of a wrought Ti-6Al-3Nb-2Zr-1Mo alloy in artificial seawater with various fluoride concentrations and pH values	National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China; Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China;

	<p>HIT-Chungu Joint Research Center for Additive Manufacturing Materials, Anhui Chungu 3D Printing Institute of Intelligent Equipment and Industrial Technology, Wuhu 241200, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China Department of Materials Application Research, AVIC Manufacturing Technology Institute, Beijing 100024, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China Semiconductor Manufacturing International Corporation, Beijing 100176, China Yunnan Titanium Industry Co., Ltd., Chuxiong 651209, China; School of Materials Science and Engineering, Kunming University of Science and Technology, Kunming 650093, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada</p>
<p>Particle/gas partitioning behavior of polychlorinated biphenyls (PCBs) in global atmosphere: Equilibrium or steady state?</p>	<p>Department of Marine Sciences, Marine College, Shandong University, Weihai, 264209, PR China International Joint Research Center for Persistent Toxic Substances IJRC-PTS, State Key Laboratory of Urban Water Resource and Environment/ School of Environment,</p>

	<p>Harbin Institute of Technology, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances IJRC-PTS, State Key Laboratory of Urban Water Resource and Environment/ School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances IJRC-PTS, State Key Laboratory of Urban Water Resource and Environment/ School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances IJRC-PTS, State Key Laboratory of Urban Water Resource and Environment/ School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China IJRC-PTS, College of Environmental Science and Engineering, Dalian Maritime University, Dalian, PR China Institute of Natural Sciences, North-Eastern Federal University, Russia Institute of Ocean Sciences, Department of Fisheries and Oceans, P.O. Box 6000, Sidney, BC, V8L 4B2, Canada; Centre for Earth Observation Science, University of Manitoba, Winnipeg, R3T 2N2, Canada IJRC-PTS, College of Environmental Science and Engineering, Dalian Maritime University, Dalian, PR China; International Joint Research Center for Persistent Toxic Substances IJRC-PTS, State Key Laboratory of Urban Water Resource and Environment/ School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China; IJRC-PTS-NA, Toronto, Ontario, M2N 6X9, Canada</p>
<p>Dilated projection correction network based on autoencoder for hyperspectral image super-resolution</p>	<p>Electronic Information School Wuhan University Wuhan 430072 China Electronic Information School Wuhan University Wuhan 430072 China School Of Computer Science and Technology, Harbin Institute of</p>

	Technology, Harbin 150001, China) Department of Electrical, Computer, and Biomedical Engineering, Ryerson University, Toronto ON M5B 2K3, Canada
<p>Pharmaceutical nanoformulation strategies to spatiotemporally manipulate oxidative stress for improving cancer therapies – exemplified by polyunsaturated fatty acids and other ROS-modulating agents</p>	<p>Northwestern Polytechnical University Advanced Pharmaceutics & Drug Delivery Laboratory, Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, Canada Advanced Pharmaceutics & Drug Delivery Laboratory, Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, Canada Xi'an Key Laboratory of Stem Cell and Regenerative Medicine, Institute of Medical Research, Northwestern Polytechnical University, Xi'an, China Xi'an Key Laboratory of Stem Cell and Regenerative Medicine, Institute of Medical Research, Northwestern Polytechnical University, Xi'an, China Advanced Pharmaceutics & Drug Delivery Laboratory, Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, Canada</p>
<p>A 2-year locomotive exploration and scientific investigation of the lunar farside by the Yutu-2 rover</p>	<p>State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. Beijing Aerospace Control Center, Beijing 100094, China. Beijing Aerospace Control Center, Beijing 100094, China. Key Laboratory of Science and Technology on Aerospace Flight Dynamics, Beijing 100094, China.; Beijing Aerospace Control Center, Beijing 100094, China. Beijing Aerospace Control Center, Beijing 100094, China. State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. State Key Laboratory of Robotics and System,</p>

Harbin Institute of Technology, Harbin 150080, China. | State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. | State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. | State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. | State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. | State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. | Department of Aerospace Engineering, Ryerson University, Toronto, ON M5B 2K3, Canada. | Beijing Aerospace Control Center, Beijing 100094, China. | Beijing Aerospace Control Center, Beijing 100094, China. | Beijing Aerospace Control Center, Beijing 100094, China. | Beijing Aerospace Control Center, Beijing 100094, China. | Beijing Aerospace Control Center, Beijing 100094, China. | Key Laboratory of Science and Technology on Aerospace Flight Dynamics, Beijing 100094, China.; Beijing Aerospace Control Center, Beijing 100094, China. | Beijing Aerospace Control Center, Beijing 100094, China. | State Key Laboratory of Remote Sensing Science, Aerospace Information Research Institute, Chinese Academy of Sciences, Beijing 100101, China. | Large Space Structures GmbH, Hauptstrasse 1, D-85386 Eching, Germany. | State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. | State Key Laboratory of Remote Sensing Science, Aerospace Information Research Institute, Chinese Academy of Sciences, Beijing 100101, China. | State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. | State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, China. | China Academy of Space Technology, Beijing 100094, China. | China Academy of Space Technology, Beijing 100094, China. | China Academy of Space Technology, Beijing 100094, China. |

	<p>Beijing Aerospace Control Center, Beijing 100094, China. Beijing Aerospace Control Center, Beijing 100094, China. Beijing Aerospace Control Center, Beijing 100094, China. Beijing Aerospace Control Center, Beijing 100094, China. State Key Laboratory of Remote Sensing Science, Aerospace Information Research Institute, Chinese Academy of Sciences, Beijing 100101, China.</p>
<p>Modeling and Evaluation of the Joint Prevention and Control Mechanism for Curbing COVID-19 in Wuhan</p>	<p>Changchun University of Science and Technology School of Mathematics and Statistics, Northeast Normal University, Changchun, China; College of Mathematical Sciences, Harbin Engineering University, Harbin, China School of Mathematics and Statistics, Northeast Normal University, Changchun, China School of Mathematics and Statistics, Northeast Normal University, Changchun, China School of Mathematics and Statistics, Northeast Normal University, Changchun, China College of Mathematical Sciences, Harbin Engineering University, Harbin, China School of Mathematics and Statistics, Northeast Normal University, Changchun, China Jilin University, Changchun, China School of Mathematics and Statistics, Northeast Normal University, Changchun, China School of Science, Dalian Maritime University, Dalian, China School of Science, Changchun University of Science and Technology, Changchun, China School of Mathematics, Harbin Institute of Technology, Harbin, China Jilin University, Changchun, China Changchun Center for Disease Control and Prevention, Changchun, China Center for Disease Modelling, York University, Toronto, Canada</p>
<p>Passivity-Based Model Predictive Control for Tethered Despin of Massive Space Objects by Small Space Tug</p>	<p>College of Aerospace Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, China Department of Mechanical Engineering, York University, Toronto, Ontario, Canada</p>

<p>Skin Cancer Diagnosis and Medical Service System Based on Deep Learning Models</p>	<p>Faculty of Engineering, School of Computer Science, The University of Sydney, Sydney, Australia Faculty of Arts & Science, University of Toronto, Toronto, Ontario School of Astronautics, Harbin Institute of Technology, Harbin, China</p>
<p>Attitude Coordination Control for Flexible Spacecraft Formation Flying With Guaranteed Performance Bounds</p>	<p>Harbin Institute of Technology, Harbin, China Department of Aerospace Engineering, Ryerson University, Toronto, ON, Canada Research Center of Satellite Technology, Harbin Institute of Technology, Harbin, China Research Center of Satellite Technology, Harbin Institute of Technology, Harbin, China</p>
<p>Optoelectronic tweezers: a versatile toolbox for nano-/micro-manipulation</p>	<p>School of Mechatronical Engineering, Beijing Institute of Technology, Room 711, Building No 6, Science and Technology Park, 5 Zhongguancun South St, Haidian District, Beijing, 100081, China School of Mechatronical Engineering, Beijing Institute of Technology, Room 711, Building No 6, Science and Technology Park, 5 Zhongguancun South St, Haidian District, Beijing, 100081, China Institute of Biomedical Engineering, University of Toronto, Toronto, ON, M5S 3G9, Canada Institute of Nanophotonics, Jinan University, Guangzhou 511443, China School of Mechanical Engineering, Shenyang Jianzhu University, Shenyang, 110168, China Berkeley Lights, Inc, 5858 Horton Street #320, Emeryville, CA 94608, USA State Key Laboratory of Robotics, Shenyang Institute of Automation, Chinese Academy of Sciences, Shenyang 110016, China School of Mechatronical Engineering, Beijing Institute of Technology, Room 711, Building No 6, Science and Technology Park, 5 Zhongguancun South St, Haidian District, Beijing, 100081, China Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, California 94720, USA Institute</p>

	of Biomedical Engineering, University of Toronto, Toronto, ON, M5S 3G9, Canada
Distributionally Robust Multilocation Newsvendor at Scale: A Scenario-Based Linear Programming Approach	Beijing Institute of Technology - School of Management & Economics Rotman School of Management McGill University - Desautels Faculty of Management Beijing Institute of Technology University of Toronto - Rotman School of Management
Multiobjective evolution enhanced collaborative health monitoring and prognostics: a case study of bearing life test with three-axis acceleration signals	School of Mechanical Engineering, Southeast University, Nanjing, China School of Mechanical Engineering, Southeast University, Nanjing, China School of Mechanical Engineering, Southeast University, Nanjing, China School of Mechanical Engineering, Southeast University, Nanjing, China School of Mechanical Engineering, Southeast University, Nanjing, China School of Mechanical Engineering, Southeast University, Nanjing, China School of Mechanical Engineering, Nanjing University of Science and Technology, Nanjing, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada
Monotonic Quantile Network for Worst-Case Offline Reinforcement Learning	School of Information Science and Engineering, East China University of Science and Technology, Shanghai, China School of Statistics and Management, Shanghai University of Finance and Economics, Shanghai, China Department of Industrial Engineering and the Department of Management Sciences, Northwestern University, Evanston, IL, USA School of Statistics and Management, Shanghai University of Finance and Economics, Shanghai, China Vector Institute, University of Toronto, Toronto, Canada Shanghai Research Institute for Intelligent Autonomous Systems, School of Electronic and Information Engineering, Tongji University, Shanghai, China Faculty of Computing, Harbin Institute of Technology, Harbin, China Department of Industrial Engineering and the

	Department of Management Sciences, Northwestern University, Evanston, IL, USA
The application of organic polyethylene glycol-polyaniline multi-alternating block (more than triblock) copolymer in polymer-based dielectric composites	College of Materials Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China College of Materials Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China College of Mechanical and Electrical Engineering, Wenzhou University, Wenzhou 325035, China College of Materials Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China Department of Materials Science and Engineering, Nanjing University, 22 Hankou Road, Nanjing 210093, China Department of Chemical Engineering & Applied Chemistry, University of Toronto, Toronto, ON M5S 3E5, Canada
FindNet: Can You Find Me? Boundary-and-Texture Enhancement Network for Camouflaged Object Detection	School of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China School of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China School of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China School of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China Department of Electrical, Computer and Biomedical Engineering, Ryerson University, Toronto, ON, Canada School of Nursing, The Hong Kong Polytechnic University, Hong Kong, SAR, China
NnUNet with Region-based Training and Loss Ensembles for Brain Tumor Segmentation	Department of Mathematics, Nanjing University of Science and Technology, Nanjing, China Department of Medical Biophysics, University of Toronto, Toronto, Canada

<p>Sophisticated Electromagnetic Forward Scattering Solver via Deep Learning</p>	<p>School of Electronics and Information Engineering, Beihang University, Beijing, China School of Electronics and Information Engineering, Beihang University, Beijing, China Edward S. Rogers Sr. Department of Electrical & Computer Engineering, University of Toronto, Toronto, Canada University of Toronto, Toronto, Canada</p>
<p>MarsSim: A high-fidelity physical and visual simulation for Mars rovers</p>	<p>State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China Department of Aerospace Engineering, Ryerson University, Toronto, Canada State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China</p>
<p>B-scan-sectioned dynamic micro-optical coherence tomography for bulk-motion suppression</p>	<p>Advanced Photonics Center, School of Electronic Science & Engineering, Southeast University, Nanjing 210096, China Department of Optical Engineering, Nanjing University of Science and Technology, Nanjing 210094, China Department of Optical Engineering, Nanjing University of Science and Technology, Nanjing 210094, China Department of Electrical, Computer, and Biomedical Engineering, Ryerson University, Toronto, Ontario M5B 2K3, Canada Department of Optical Engineering, Nanjing University of Science and Technology, Nanjing 210094, China</p>
<p>Uncovering global-scale risks from commercial chemicals in air</p>	<p>Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada; Department of Environmental Science and Engineering, University of Science and Technology of</p>

	<p>China, Hefei, China School of Public Health, University of Nevada Reno, Reno, USA Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada; Department of Chemistry and Biochemistry, Concordia University, Montreal, Canada; Laboratory Services Branch, Ontario Ministry of the Environment, Conservation and Parks, Toronto, Canada Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, China Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada Laboratory Services Branch, Ontario Ministry of the Environment, Conservation and Parks, Toronto, Canada Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada; Laboratory of Atmospheric Chemistry, Paul Scherrer Institute (PSI), Villigen, Switzerland Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, China State Key Joint Laboratory of Environmental Simulation and Pollution Control, Beijing Innovation Center for Engineering Science</p>
--	---

	<p>and Advanced Technology, College of Environmental Sciences and Engineering, Peking University, Beijing, China Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada</p>
<p>Analysis and Predictions of Pumped Storage Hydroelectricity</p>	<p>University of Toronto, Scarborough, Canada Harbin Institute of Technology, Harbin, China University of California, Santa Barbara, Goleta, USA</p>
<p>Legless soft robots capable of rapid, continuous, and steered jumping</p>	<p>Chongqing University State Key Laboratory of Mechanical Transmissions, Chongqing University, Chongqing, China School of Science, Harbin Institute of Technology (Shenzhen), Shenzhen, China State Key Laboratory of Mechanical Transmissions, Chongqing University, Chongqing, China State Key Laboratory of Mechanical Transmissions, Chongqing University, Chongqing, China College of Mechanical and Vehicle Engineering, Chongqing University, Chongqing, China School of Mechatronics Engineering and Automation, Shanghai University, Shanghai, China School of Computer Engineering and Science, Shanghai University, Shanghai, China Research Institute of Unmanned Surface Vessel Engineering, Shanghai University, Shanghai, China State Key Laboratory of Mechanical Transmissions, Chongqing University, Chongqing, China; School of Mechatronics Engineering and Automation, Shanghai University, Shanghai, China School of Mechanical Engineering and Automation, Beihang University, Beijing, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada</p>
<p>Dynamic Predictive Maintenance Scheduling Using Deep Learning Ensemble for System Health Prognostics</p>	<p>College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China [Lassonde School of Engineering, York University, Toronto M3J1P3, Canada.] </p>

	<p>Nanjing Research Institute of Electronic Technology, Nanjing, China [College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China. (e-mail: luningyun@nuaa.edu.cn)] College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China</p>
<p>Performance of Zernike polynomials in reconstructing raw-elevation data captured by Pentacam HR, Medmont E300 and Eye Surface Profiler</p>	<p>Department of Mechanical, Materials and Aerospace Engineering, School of Engineering, University of Liverpool, Liverpool, UK; Department of Chemical Engineering and Applied Chemistry, University of Toronto, Toronto, Ontario, Canada Department of Ophthalmology, Federal University of Sao Paulo, Sao Paulo, Brazil; Department of Civil Engineering and Industrial Design, School of Engineering, University of Liverpool, Liverpool, UK Department of Civil Engineering and Industrial Design, School of Engineering, University of Liverpool, Liverpool, UK Brighten Optix Corporation, Shilin District, Taipei City, Taiwan Wirral Grammar School for Girls, Bebington, Wirral Peninsula, UK School of Biological Science and Biomedical Engineering, Beihang University, Beijing, China; National Institute for Health Research (NIHR), Biomedical Research Centre at Moorfields, Eye Hospital NHS Foundation Trust and UCL Institute of Ophthalmology, London, UK; Department of Civil Engineering and Industrial Design, School of Engineering, University of Liverpool, Liverpool, UK Department of Mechanical, Materials and Aerospace Engineering, School of Engineering, University of Liverpool, Liverpool, UK; Department of Production Engineering and Mechanical Design, Faculty of Engineering, Port Said University, Egypt</p>
<p>Conformational epitopes exposed on misfolded toxic forms of amyloid-beta, tau</p>	<p>ProMIS Neurosciences, Toronto, ON, Canada.; University of British Columbia,</p>

<p>and alpha-synuclein directly contribute to their seeding activity.</p>	<p>Vancouver, BC, Canada. University of British Columbia, Vancouver, BC, Canada. University of British Columbia, Vancouver, BC, Canada. University of British Columbia, Vancouver, BC, Canada. University of British Columbia, Vancouver, BC, Canada. ProMIS Neurosciences, Toronto, ON, Canada. Beijing Institute of Technology, Beijing, BC, China. University of British Columbia, Vancouver, BC, Canada. University of British Columbia, Vancouver, BC, Canada. University of British Columbia, Vancouver, BC, Canada. ProMIS Neurosciences, Toronto, ON, Canada.</p>
<p>Parallel efficient global optimization method: A novel approach for time-dependent reliability analysis and applications</p>	<p>School of Economics and Management, Nanjing University of Science and Technology, Nanjing 210094, China; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada; School of Information Management, Jiangxi University of Finance and Economics, Nanchang 330013, China </p>
<p>State-Based Opportunistic Maintenance With Multifunctional Maintenance Windows</p>	<p>[Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON M5S 2EA Canada (e-mail: zhzhang@mie.utoronto.ca).] [School of Reliability and Systems Engineering, Beihang University, Beijing 100191 China (e-mail: yanglirass@buaa.edu.cn).]</p>
<p>A new looped tether transportation system with multiple rungs</p>	<p>School of Science, Nanjing University of Science and Technology, Nanjing 210094, China State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, 29 Yudao Street, Nanjing, 210016, China Department of Mechanical Engineering, York University, 4700 Keele Street, Toronto, Ontario, M3J 1P3, Canada Department of Mechanical Engineering, York University, 4700 Keele Street, Toronto, Ontario, M3J 1P3, Canada School of Science, Nanjing University of Science and Technology, Nanjing, 210094, China</p>

<p>Approach to Predicting the Size-Dependent Inhalation Intake of Particulate Novel Brominated Flame Retardants</p>	<p>School of Environment, Key Laboratory for Yellow River and Huai River Water Environment and Pollution Control, Ministry of Education, Henan Normal University, Xinxiang, Henan 453007, P. R. China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, P. R. China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, P. R. China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, P. R. China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, P. R. China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, P. R. China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, P. R. China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, P. R. China School of Environment, Key Laboratory for Yellow River and Huai River Water Environment and Pollution Control, Ministry of Education, Henan Normal University, Xinxiang, Henan 453007, P. R. China Department of Fisheries and Oceans, Institute of Ocean Sciences, P.O. Box 6000, Sidney, British Columbia V8L 4B2, Canada Institute of Natural Sciences, North-Eastern Federal University, 58 Belinsky str., Yakutsk 677000, Russia School of Public Health, University of Nevada, Reno, Reno, Nevada 89557, United States International Joint Research</p>
--	--

	<p>Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, P. R. China; IJRC-PTS-NA, Toronto, Ontario M2N 6X9, Canada</p>
<p>Cyclic hardening behavior and deformation mechanisms of friction-stir-welded dissimilar AA5083-to-AA2024 joints with heterogeneous microstructures</p>	<p>Key Laboratory for Microstructural Control of Metallic Materials of Jiangxi Province, Nanchang Hangkong University, Nanchang 330063, Jiangxi, China State Key Laboratory of Solidification Processing, Shaanxi Key Laboratory of Friction Welding Technologies, Northwestern Polytechnical University, Xi'an 710072, Shaanxi, China School of Aeronautical Manufacturing Engineering, Nanchang Hangkong University, Nanchang 330063, Jiangxi, China School of Aeronautical Manufacturing Engineering, Nanchang Hangkong University, Nanchang 330063, Jiangxi, China School of Aeronautical Manufacturing Engineering, Nanchang Hangkong University, Nanchang 330063, Jiangxi, China Department of Mechanical and Industrial Engineering, Ryerson University, 350 Victoria Street, Toronto, Ontario M5B 2K3 (Canada)</p>
<p>Cooperative Transportation of a Flexible Payload Using Two Quadrotors</p>	<p>Nanjing University of Aeronautics and Astronautics, 210016 Nanjing, People's Republic of China York University, Toronto (Ontario) M3J 1P3, Canada University of Toronto, Toronto, Ontario M3H 5T6 Canada</p>
<p>Global intercomparison of polyurethane foam passive air samplers evaluating sources of variability in SVOC measurements</p>	<p>RECETOX, Masaryk University, Brno, Czech Republic NILU - Norwegian Institute for Air Research Kjeller Norway Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, Canada. RECETOX, Masaryk University, Brno, Czech Republic Queensland Alliance for Environmental Health Sciences (QAEHS), The University of Queensland, Australia. CETESB - São Paulo State Environmental Company, São Paulo, Brazil. </p>

	<p>Department of Chemical and Environmental Engineering, University of Nottingham Ningbo China, Ningbo, China. State key Laboratory of Organic Geochemistry, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou, China College of Urban and Environmental Sciences Peking university Beijing China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), Harbin Institute of Technology, Harbin, China Hydraulic Engineering and Environmental Research Group (GTAIHA), Universidad Nacional de Colombia, Manizales, Colombia Eurofins GfA GmbH (Now Operating Under the Name ANECO Institut für Umweltschutz GmbH & Co), Germany. Department of Instrumental Analysis and Environmental Chemistry, IQOG-CSIC, Madrid, Spain Department of Instrumental Analysis and Environmental Chemistry, IQOG-CSIC, Madrid, Spain Dept. of Environmental Engineering, Dokuz Eylül University, Buca, Izmir, Turkey Dept. of Environmental Engineering, Dokuz Eylül University, Buca, Izmir, Turkey Dept. of Environmental Engineering, Dokuz Eylül University, Buca, Izmir, Turkey Lancaster Environment Centre Lancaster University UK Lancaster Environment Centre Lancaster University UK RECETOX, Masaryk University, Brno, Czech Republic</p>
<p>Introduction to Electromagnetic Problems</p>	<p>School of Electronics and Information Engineering, Beihang University, Beijing, China School of Electronics and Information Engineering, Beihang University, Beijing, China Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada</p>

Dynamic Bottleneck for Robust Self-Supervised Exploration	Harbin Institute of Technology Northwestern University TENCENT University of Toronto Tianjin University Harbin Institute of Technology
Three-Dimensional Electromagnetic Scattering Solver	School of Electronics and Information Engineering, Beihang University, Beijing, China School of Electronics and Information Engineering, Beihang University, Beijing, China Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada
Building Database	School of Electronics and Information Engineering, Beihang University, Beijing, China School of Electronics and Information Engineering, Beihang University, Beijing, China Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada
Basic Principles of Unveiling Electromagnetic Problems Based on Deep Learning	School of Electronics and Information Engineering Beihang University, Beijing, China School of Electronics and Information Engineering Beihang University, Beijing, China Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada
Two-Dimensional Electromagnetic Scattering Solver	School of Electronics and Information Engineering, Beihang University, Beijing, China School of Electronics and Information Engineering, Beihang University, Beijing, China Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada Edward S. Rogers Sr. Department of Electrical and

	Computer Engineering, University of Toronto, Toronto, Canada
The optimized energy-efficient sensible edge processing model for the internet of vehicles in smart cities	School of Mechanical and Electrical Engineering, Beijing Institute of Technology, Beijing 100081, China; School of Information Science and Engineering, Guilin University of Technology, Guilin 541004, Guangxi, China School of Information Science and Engineering, Guilin University of Technology, Guilin 541004, Guangxi, China School of Information Science and Engineering, Guilin University of Technology, Guilin 541004, Guangxi, China School of Information Science and Engineering, Guilin University of Technology, Guilin 541004, Guangxi, China Department of Electrical and Communications Engineering, The PNG University of Technology, Papua New Guinea Ryerson University, Toronto, ON M5B2K3, Canada
Dynamic flexural failure of rocks under hydrostatic pressure: Laboratory test and theoretical modeling	Impact-Multiscale Mechanics Research Group, Engineering Materials Science, Materials Science and Environmental Engineering, Faculty of Engineering and Natural Sciences, Tampere University, POB 589, FI-33014, Tampere, Finland; State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin 300072, China; State Key Laboratory of Explosion Science and Technology, Beijing Institute of Technology, Beijing 100081, China Department of Civil & Mineral Engineering, University of Toronto, Toronto, ON M5S 1A4, Canada Department of Civil & Mineral Engineering, University of Toronto, Toronto, ON M5S 1A4, Canada; State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin 300072, China Impact-Multiscale Mechanics Research Group, Engineering Materials Science, Materials Science and

	<p>Environmental Engineering, Faculty of Engineering and Natural Sciences, Tampere University, POB 589, FI-33014, Tampere, Finland</p>
<p>A data-driven degradation prognostic strategy for aero-engine under various operational conditions</p>	<p>College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China; Institute of Intelligent Manufacturing, Nanjing Tech University, Nanjing 210009, China; Department of Mechanical Engineering, York University, Toronto M3J1P3, Canada Department of Mechanical Engineering, York University, Toronto M3J1P3, Canada College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China</p>
<p>Visual-Based Contact Detection for Automated Zebrafish Larva Heart Microinjection</p>	<p>Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin , China#TAB# Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin , China#TAB# Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin , China#TAB# Dept. of Mechanical & Industrial Engineering, University of Toronto, Toronto, Canada#TAB# Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin , China#TAB# Ningbo Institute of Intelligent Equipment Technology, Harbin Institute of Technology, Ningbo, China Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin , China#TAB# Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin , China#TAB# </p>

	<p>Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin , China#TAB#</p>
<p>Pressure dependence in aqueous-based electrochemical CO2 reduction</p>	<p>CCRC, Division of Physical Science and Engineering (PSE), King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia CCRC, Division of Physical Science and Engineering (PSE), King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia CCRC, Division of Physical Science and Engineering (PSE), King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia; National Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, Harbin, China Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada CCRC, Division of Physical Science and Engineering (PSE), King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada Advanced Membranes and Porous Materials Center (AMPM), PSE, KAUST, Thuwal, Saudi Arabia Advanced Membranes and Porous Materials Center (AMPM), PSE, KAUST, Thuwal, Saudi Arabia CCRC, Division of Physical Science and Engineering (PSE), King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada Department of Electrical and Computer Engineering, University of Toronto, Toronto, Canada CCRC, Division of Physical Science and</p>

	Engineering (PSE), King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia
N-Heteroacenes as an Organic Gain Medium for Room-Temperature Masers	Department of Materials, Imperial College London, South Kensington Campus, Exhibition Road, London SW7 2AZ, U.K. Department of Materials, Imperial College London, South Kensington Campus, Exhibition Road, London SW7 2AZ, U.K. Department of Materials, Imperial College London, South Kensington Campus, Exhibition Road, London SW7 2AZ, U.K. Molecular Sciences Research Hub, Department of Chemistry, Imperial College London, White City Campus, 82 Wood Lane, London W12 0BZ, U.K. Department of Chemistry, University College London, 20 Gordon Street, London WC1H 0AJ, U.K. Center for Quantum Technology Research and Key Laboratory of Advanced Optoelectronic Quantum Architecture and Measurements, School of Physics, Beijing Institute of Technology, Beijing 100081, China Department of Computer Science, University of Southern California, Los Angeles, California 90089, United States; Department of Materials, Imperial College London, South Kensington Campus, Exhibition Road, London SW7 2AZ, U.K. Molecular Sciences Research Hub, Department of Chemistry, Imperial College London, White City Campus, 82 Wood Lane, London W12 0BZ, U.K. Department of Materials, Imperial College London, South Kensington Campus, Exhibition Road, London SW7 2AZ, U.K. Department of Chemistry, University of Toronto, 80 St. George Street, Toronto M5S 3H6, Canada Department of Chemistry, University of Warwick, Coventry CV4 7AL, U.K. Department of Materials, Imperial College London, South Kensington Campus, Exhibition Road, London SW7 2AZ, U.K.
Multi-Lane Differential Variable Speed Limit Control via Deep Neural Networks	School of Mechanical Engineering, Beijing Institute of Technology, Beijing 100081,

<p>Optimized by an Adaptive Evolutionary Strategy</p>	<p>China Intelligent Transportation Systems Centre, University of Toronto, Toronto, ON M5S 1A4, Canada National Key Laboratory of Fundamental Science on Synthetic Vision, Sichuan University, Chengdu 610065, China School of Information and Electronics, Beijing Institute of Technology, Beijing 100081, China School of Mechanical Engineering, Beijing Institute of Technology, Beijing 100081, China Advanced Research Institute of Multidisciplinary Sciences, Beijing Institute of Technology, Beijing 100081, China</p>
<p>A Framework of Hybrid Transceiver Optimizations With Eigenvalue Constraints for Multi-Hop Networks</p>	<p>School of Information and Electronics, Beijing Institute of Technology, Beijing, China School of Information and Electronics, Beijing Institute of Technology, Beijing, China School of Cyberspace Science and Technology, Beijing Institute of Technology, Beijing, China Department of Electrical, Computer and Biomedical Engineering, Toronto Metropolitan University (formerly Ryerson University), Toronto, ON, Canada School of Cyberspace Science and Technology, Beijing Institute of Technology, Beijing, China</p>
<p>State-domain change point detection for nonlinear time series regression</p>	<p>School of Mathematics, Jilin University, China; Institute for Advanced Study in Mathematics, Harbin Institute of Technology, China Department of Statistics, University of Oxford, United Kingdom Department of Statistical Sciences, University of Toronto, Canada</p>
<p>Multi-Satellite Cooperative Communication: Exploiting Time Asynchrony in Non-Orthogonal Transmissions</p>	<p>School of Electronics, Peking University, Beijing, China Beijing Institute of Technology, Beijing, China Beijing Institute of Technology, Beijing, China School of Electronics, Peking University, Beijing, China School of Electronics, Peking University, Beijing, China Department of Electrical, Computer, and Biomedical Engineering, Toronto Metropolitan University formerly Ryerson University, Toronto, ON, Canada</p>

<p>Episodic task agnostic contrastive training for multi-task learning</p>	<p>School of Transportation Science and Engineering, Beihang University, No. 37 Xueyuan Road, Beijing, 100083, China School of Transportation Science and Engineering, Beihang University, No. 37 Xueyuan Road, Beijing, 100083, China Department of Biomedical Informatics, Harvard Medical School, Boston, 02115, MA, USA Department of Computer Science, Western University, 1151 Richmond St, London, N6A 3K7, Ontario, Canada Department of Electrical and Computer Engineering, McGill University, Montreal, H3A 0G4, Quebec, Canada Department of Computer Science, Western University, 1151 Richmond St, London, N6A 3K7, Ontario, Canada School of Transportation Science and Engineering, Beihang University, No. 37 Xueyuan Road, Beijing, 100083, China Department of Computer Science, Western University, 1151 Richmond St, London, N6A 3K7, Ontario, Canada; Vector Institute, 661 University Ave Suite 710, Toronto, M5G 1M1, Ontario, Canada</p>
<p>Heterogeneous Transformer: A Scale Adaptable Neural Network Architecture for Device Activity Detection</p>	<p>State Key Laboratory of Rail Traffic Control and Safety, Beijing Jiaotong University, Beijing, China; Shenzhen Research Institute of Big Data, Shenzhen, China The Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, ON, Canada Department of Electrical and Electronic Engineering, The University of Hong Kong, Pokfulam, Hong Kong School of Electronics and Information Engineering, Beihang University, Beijing, China Henan Joint International Research Laboratory of Intelligent Networking and Data Analysis, Zhengzhou University, Zhengzhou, China; Peng Cheng Laboratory, Shenzhen, China; Shenzhen Research Institute of Big Data, Shenzhen, China Department of Electrical and Electronic Engineering, The</p>

	University of Hong Kong, Pokfulam, Hong Kong
Superhydrophobicity mechanism of refoliated quaking aspen leaves after complete defoliation by LDD (gypsy, spongy) moth caterpillars	College of Aerospace and Civil Engineering, Harbin Engineering University, Harbin 150001, China; Department of Materials Science and Engineering, University of Toronto, Toronto, Ontario M5S 3E4, Canada Department of Materials Science and Engineering, University of Toronto, Toronto, Ontario M5S 3E4, Canada Department of Materials Science and Engineering, University of Toronto, Toronto, Ontario M5S 3E4, Canada College of Aerospace and Civil Engineering, Harbin Engineering University, Harbin 150001, China Department of Materials Science and Engineering, University of Toronto, Toronto, Ontario M5S 3E4, Canada
Thermal conductivity of micro/nanoporous polymers: Prediction models and applications	School of Energy Science and Engineering, Harbin Institute of Technology, Harbin, China School of Energy Science and Engineering, Harbin Institute of Technology, Harbin, China Microcellular Plastics Manufacturing Laboratory (MPML), Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, Canada; Cellular Polymer Science & Technology Laboratory, School of Materials Science & Engineering, Shandong University, Jinan, China Microcellular Plastics Manufacturing Laboratory (MPML), Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, Canada School of Energy Science and Engineering, Harbin Institute of Technology, Harbin, China Shandong Institute of Advanced Technology, Jinan, China
Reconfigurable multi-component micromachines driven by optoelectronic tweezers	Beijing Advanced Innovation Center for Intelligent Robots and Systems, Beijing Institute of Technology, Beijing, China; Institute of Biomedical Engineering, University of Toronto, Toronto, Canada

	<p>Institute of Biomedical Engineering, University of Toronto, Toronto, Canada Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada State Key Laboratory of Optoelectronic Materials and Technologies, School of Electronics and Information Technology, Sun Yat-Sen University, Guangzhou, China State Key Laboratory of Optoelectronic Materials and Technologies, School of Electronics and Information Technology, Sun Yat-Sen University, Guangzhou, China Institute of Biomedical Engineering, University of Toronto, Toronto, Canada James Watt School of Engineering, University of Glasgow, Glasgow, UK Institute of Biomedical Engineering, University of Toronto, Toronto, Canada Institute of Biomedical Engineering, University of Toronto, Toronto, Canada State Key Laboratory of Optoelectronic Materials and Technologies, School of Electronics and Information Technology, Sun Yat-Sen University, Guangzhou, China; Photonics Group, Merchant Venturers School of Engineering, University of Bristol, Bristol, UK Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada James Watt School of Engineering, University of Glasgow, Glasgow, UK Institute of Biomedical Engineering, University of Toronto, Toronto, Canada</p>
<p>Footstep Planning for Hexapod Robots Based on 3D Quasi-static Equilibrium Support Region</p>	<p>State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China Department of Aerospace Engineering, Ryerson University, Toronto, Canada State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key</p>

	Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China
Laser deposition of graded \hat{I}^3 -TiAl/Ti ₂ AlNb alloys: Microstructure and nanomechanical characterization of the transition zone	Department of Materials Science and Engineering University of Toronto 184 College St Toronto ON M5S 3E4 Canada. Department of Materials Science and Engineering University of Toronto 184 College St Toronto ON M5S 3E4 Canada. National Engineering Laboratory of Additive Manufacturing for Large Metallic Components, School of Materials Science and Engineering, Beihang University, 37 Xueyuan Road, Beijing 100191, China Department of Materials Science and Engineering University of Toronto 184 College St Toronto ON M5S 3E4 Canada.
Trade-offs between vehicle fuel economy and performance: Evidence from heterogeneous firms in China	College of Economics and Management, South China Agricultural University, Guangzhou, 510642, China; School of Management and Economics, Beijing Institute of Technology, Beijing 100081, China; Department of Civil & Mineral Engineering, University of Toronto, Toronto, ON, M5S 1A4, Canada Department of Civil and Mineral Engineering, University of Toronto, Toronto, ON M5S 1A4, Canada Department of Civil & Mineral Engineering, University of Toronto, Toronto, ON, M5S 1A4, Canada
SAVMD: An adaptive signal processing method for identifying protein coding regions	State Key Laboratory of Industrial Control Technology, Zhejiang University, 310027 Hangzhou, China State Key Laboratory of Industrial Control Technology, Zhejiang University, 310027 Hangzhou, China Inertial Technology and Integrated Navigation Laboratory, Beihang University, 100191, Beijing, China Princess Margaret Cancer Centre. University Health Network, Toronto, ON, Canada; State Key Laboratory of Industrial Control Technology, Zhejiang University, 310027 Hangzhou, China State Key Laboratory of Industrial Control

	Technology, Zhejiang University, 310027 Hangzhou, China
Pathways for decarbonizing China's building sector under global warming thresholds	Center for Energy and Environmental Policy Research, Beijing Institute of Technology, Beijing 100081, China School of Management & Economics, Beijing Institute of Technology, Beijing 100081, China School of Management and Economics, Beijing Institute of Technology, Beijing, 100081, China Department of Geography, University of Toronto, Toronto, M5S 3G3, Canada
Dynamic Mode ...; fracture behavior of rocks under hydrostatic pressure using the short core in compression (SCC) method	State Key Laboratory of Explosion Science and Technology, Beijing Institute of Technology, Beijing 100081, China; Engineering Materials Science, Faculty of Engineering and Natural Sciences, Tampere University (TAU), POB 589, FI-33014 Tampere, Finland; State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin 300072, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin 300072, China Department of Civil & Mineral Engineering, University of Toronto, Toronto, ON M5S 1A4, Canada Department of Civil & Mineral Engineering, University of Toronto, Toronto, ON M5S 1A4, Canada; State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin 300072, China Engineering Materials Science, Faculty of Engineering and Natural Sciences, Tampere University (TAU), POB 589, FI-33014 Tampere, Finland
Impacts of COVID-19 on urban rail transit ridership using the Synthetic Control Method	Harbin Institute of Technology, School of Transportation Science & Engineering, 73 Huanghe Road, Harbin, Heilongjiang, 150090, China University of Toronto, Department of Civil & Mineral Engineering, 35 St. George Street, Toronto,

	<p>Ontario, M5S 1A4, Canada Harbin Institute of Technology, School of Transportation Science & Engineering, 73 Huanghe Road, Harbin, Heilongjiang, 150090, China Harbin Institute of Technology, School of Transportation Science & Engineering, 73 Huanghe Road, Harbin, Heilongjiang, 150090, China</p>
<p>An Integer Programming Approach to Solving the Inverse Graph Model for Conflict Resolution with Two Decision Makers</p>	<p>College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, People’s Republic of China College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, People’s Republic of China Department of Mechanical and Industrial Engineering, Ryerson University, Toronto, Canada Centre for International Governance Innovation, Waterloo, Canada; Balsillie School of International Affairs, Waterloo, Canada; Department of Systems Design Engineering, University of Waterloo, Waterloo, Canada</p>
<p>Large Deformation Dynamic Analysis of Cable System by a New Hamiltonian Finite Element Method</p>	<p>Department of Mechanics and Engineering Science, Nanjing University of Science and Technology, 200 Xiaolingwei Street, Nanjing 210094, P. R. China Department of Mechanics and Engineering Science, Nanjing University of Science and Technology, 200 Xiaolingwei Street, Nanjing 210094, P. R. China Institute of Equipment Research, Inner Mongolia North Heavy Industries Group Co. Ltd., 3 Binggong Road, Baotou, Inner Mongolia 014030, P. R. China Department of Mechanical Engineering, York University, 4700 Keele Street, Toronto M3J1P3, Canada</p>
<p>Nanoparticulate Drug Delivery Strategies to Address Intestinal Cytochrome P450 CYP3A4 Metabolism towards Personalized Medicine</p>	<p>Institute of Medical Research, Northwestern Polytechnical University, 127 West Youyi Road, Xi’an 710072, China Advanced Pharmaceuticals & Drug Delivery Laboratory, Leslie Dan Faculty of Pharmacy, University of Toronto, 144 College Street, Toronto, ON M5S 3M2, Canada College of Food Science and</p>

	<p>Engineering, Nanjing University of Finance and Economics, Nanjing 210003, China Institute of Medical Research, Northwestern Polytechnical University, 127 West Youyi Road, Xi'an 710072, China Institute of Medical Research, Northwestern Polytechnical University, 127 West Youyi Road, Xi'an 710072, China Advanced Pharmaceuticals & Drug Delivery Laboratory, Leslie Dan Faculty of Pharmacy, University of Toronto, 144 College Street, Toronto, ON M5S 3M2, Canada</p>
<p>A Novel Deep Convolutional Neural Network Based on ResNet-18 and Transfer Learning for Detection of Wood Knot Defects</p>	<p>College of Science, Northeast Forestry University, Harbin 150040, China School of Instrumentation Science and Engineering, Harbin Institute of Technology, Harbin 150001, China School of Mechatronics Engineering, Harbin Institute of Technology, Harbin 150001, China School of Mechatronics Engineering, Harbin Institute of Technology, Harbin 150001, China Center for Advanced Diffusion-Wave and Photoacoustic Technologies, University of Toronto, Toronto, M5S 3G8, Canada College of Science, Northeast Forestry University, Harbin 150040, China</p>
<p>A novel Stewart-type parallel mechanism with topological reconfiguration: Design, kinematics and stiffness evaluation</p>	<p>College of Mechanical & Electronic Engineering, Nanjing Forestry University, Nanjing 210037, China. Department of Aerospace Engineering, Ryerson University, Toronto, ON M5B 2K3, Canada School of Mechanical Engineering and Rail Transit, Changzhou University, Changzhou 213164, China Department of Aerospace Engineering, Ryerson University, Toronto, ON M5B 2K3, Canada School of Mechanical Engineering, Nanjing University of Science and Technology, Nanjing 210094, China</p>
<p>Recognition and classification of single melt tracks using deep neural network: A fast and effective method to determine process windows in selective laser melting</p>	<p>Department of Mechanical and Energy Engineering, Southern University of Science and Technology, Guangdong 518055, PR China; School of Mechatronics Engineering, Harbin Institute of Technology, Harbin 150001, PR China;</p>

	<p>Department of Materials Science and Engineering, University of Toronto, ON M5S 3E4, Canada Department of Materials Science and Engineering, University of Toronto, ON M5S 3E4, Canada Department of Materials Science and Engineering, University of Toronto, ON M5S 3E4, Canada Department of Mechanical and Energy Engineering, Southern University of Science and Technology, Guangdong 518055, PR China Department of Mechanical and Industrial Engineering, University of Toronto, ON M5S 3E4, Canada Department of Statistical Sciences, University of Toronto, ON M5G 1X6, Canada Department of Materials Science and Engineering, University of Toronto, ON M5S 3E4, Canada</p>
<p>Direction-aware Feature-level Frequency Decomposition for Single Image Deraining</p>	<p>[Nanjing University of Aeronautics and Astronautics Nanjing, China] [Nanjing University of Aeronautics and Astronautics Nanjing, China] [Nanjing University of Aeronautics and Astronautics Nanjing, China] Lingnan University, Hong Kong, China, Xiamen Univeristy, Xiamen, China Xiamen Univeristy, Xiamen, China Ryerson University Toronto Canada Hong Kong Polytechnic University Hong Kong, China</p>
<p>Obstacle Avoidance of Multiple Manipulators Based on 3D Artificial Potential Field Method</p>	<p>School of Mechanical Engineering and Automation, Harbin Institute of Technology, Shenzhen, China, 518055 School of Mechanical Engineering and Automation, Harbin Institute of Technology, Shenzhen, China; Peng Cheng Laboratory, Shenzhen, China School of Mechanical Engineering and Automation, Harbin Institute of Technology, Shenzhen, China, 518055 Ryerson University, Department of Aerospace Engineering, Toronto, ON, Canada, M5B 2K3</p>
<p>Environment Information-based Impedance Control</p>	<p>School of Mechanical Engineering and Automation, Harbin Institute of</p>

	<p>Technology,Shenzhen,China,518055 School of Mechanical Engineering and Automation, Harbin Institute of Technology,Shenzhen,China,518055 School of Mechanical Engineering and Automation, Harbin Institute of Technology,Shenzhen,China,518055 School of Mechanical Engineering and Automation, Harbin Institute of Technology, Shenzhen; Peng Cheng Laboratory, Shenzhen, China Ryerson University, Toronto, ON, Canada; Harbin Institute of Technology, Shenzhen</p>
<p>Optimum Design and Trafficability Analysis for an Articulated Wheel-Legged Forestry Chassis</p>	<p>Engineering Training Center, Beihang University, Beijing 102206, China;; Lassonde School of Engineering, York University, Toronto M3J 1P3, Canada Lassonde School of Engineering, York University, Toronto M3J 1P3, Canada. Engineering Training Center, Beihang University, Beijing 102206, China School of Automation Science and, Electrical Engineering, Beihang University, Beijing 100191, China Engineering Training Center, Beihang University, Beijing 102206, China</p>
<p>Distributed Control of Flexible Payload Transportation Using Multiple Quadrotors</p>	<p>Nanjing University of Aeronautics and Astronautics College of Aerospace Engineering Nanjing China York University,Lassonde School of Engineering,Toronto,Canada Institute for Aerospace Studies, University of Toronto, Toronto, Canada</p>
<p>Robust image-based control for spacecraft uncooperative rendezvous and synchronization using a zooming camera</p>	<p>Aerospace Mechatronics Group, Institute for Aerospace Studies, University of Toronto, Toronto, M3H 5T6, Canada; Research Center of Satellite Technology, Harbin Institute of Technology, 150080, Harbin, People’s Republic of China Aerospace Mechatronics Group, Institute for Aerospace Studies, University of Toronto, Toronto, M3H 5T6, Canada Research Center of Satellite Technology, Harbin Institute of Technology, 150080, Harbin, People’s Republic of China</p>

<p>Review of Recent Progress in Robotic Knee Prosthesis Related Techniques: Structure, Actuation and Control</p>	<p>State Key Laboratory of Mechanical Transmission, Chongqing University, Chongqing, China School of Mechanical Engineering, Tianjin University, Tianjin, China College of Mechanical Engineering, Chongqing University, Chongqing, China School of Advanced Manufacturing Engineering, Chongqing University of Posts and Telecommunications, Chongqing, China Department of Mechanical Engineering, Vrije Universiteit Brussel, Brussels, Belgium; School of Mechanical Engineering, Northwestern Polytechnical University, Xi'an, China College of Mechanical Engineering, Chongqing University, Chongqing, China State Key Laboratory of Mechanical Transmission, Chongqing University, Chongqing, China State Key Laboratory of Mechanical Transmission, Chongqing University, Chongqing, China School of Mechanical Engineering, Northwestern Polytechnical University, Xi'an, China Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, Canada; Research Institute of Unmanned Surface Vessel (USV) Engineering, Shanghai University, Shanghai, China Research Institute of Unmanned Surface Vessel (USV) Engineering, Shanghai University, Shanghai, China Research Institute of Unmanned Surface Vessel (USV) Engineering, Shanghai University, Shanghai, China State Key Laboratory of Mechanical Transmission, Chongqing University, Chongqing, China</p>
<p>Occurrence, removal and mass balance of substituted diphenylamine antioxidants in wastewater treatment plants in Northeast China</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment,</p>

	<p>Harbin Institute of Technology, Harbin, 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China; IJRC-PTS-NA, Toronto, M2N 6X9, Canada Institute of Natural Sciences, North-Eastern Federal University, Russia International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China; Faculty of Chemistry, Biotechnology & Food Sciences (KBM), Norwegian University of Life Sciences (NMBU), Norway</p>
<p>Loss odyssey in medical image segmentation</p>	<p>Department of Mathematics, Nanjing University of Science and Technology, Nanjing, China Department of Medical Biophysics, University of Toronto, Toronto, Canada Department of Medical Biophysics, University of Toronto, Toronto, Canada Department of Medical Biophysics, University of Toronto, Toronto, Canada Department of Mathematics, Nanjing University of Science and Technology, Nanjing, China Department of Mathematics, Nanjing University, Nanjing, China Department of Mathematics, Nanjing University, Nanjing, China Department of Medical Biophysics, University of Toronto, Toronto, Canada; Physical Sciences, Sunnybrook Research Institute, Toronto, Canada</p>
<p>Continuous Leaderless Synchronization Control of Multiple Spacecraft on SO(3)</p>	<p>York University, Toronto, Canada; Nanjing University of Aeronautics and Astronautics, Nanjing, China</p>

<p>A parallel learning particle swarm optimizer for inverse kinematics of robotic manipulator</p>	<p>State Key Laboratory of Robotics and System Harbin Institute of Technology Harbin China State Key Laboratory of Robotics and System Harbin Institute of Technology Harbin China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China; Robotics Research Center, Peng Cheng Laboratory, Shenzhen, China School of Mechanical Engineering and Automation Harbin Institute of Technology Shenzhen China; Department of Aerospace Engineering Ryerson University Toronto Canada</p>
<p>Spectrally pure photon pair generation in asymmetric heterogeneously coupled waveguides</p>	<p>School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, 92 West Dazhi Street, Harbin, 150001, China School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, 92 West Dazhi Street, Harbin, 150001, China School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, 92 West Dazhi Street, Harbin, 150001, China University of Toronto School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, 92 West Dazhi Street, Harbin, 150001, China</p>
<p>Contract-Theoretic Pricing for Security Deposits in Sharded Blockchain With Internet of Things (IoT)</p>	<p>Department of Electrical & Computer Engineering, University of Houston, Houston, TX, USA. School of information and communication engineering, Nanjing Institute of Technology, Nanjing, China School of Computer Science and Engineering Nanyang Technological University, Singapore [Department of Electrical Engineering and Computer Science, Lassonde School of Engineering York University, Toronto, Canada] School of Electronic and Optical Engineering, Nanjing University of Science and Technology, Nanjing, China;</p>

	<p>University of Houston, Houston, TX, USA Department of Electrical & Computer Engineering, University of Houston, Houston, TX, USA.</p>
<p>Multiple-Defect Management for Efficient Perovskite Photovoltaics</p>	<p>State Key Laboratory for Artificial Microstructure and Mesoscopic Physics, School of Physics, Frontiers Science Center for Nano-optoelectronics & Collaborative Innovation Center of Quantum Matter, Peking University, Beijing 100871, China School of Materials Science and Engineering, Key Laboratory of Polymer Chemistry and Physics of Ministry of Education, Peking University, Beijing 100871, China State Key Laboratory for Artificial Microstructure and Mesoscopic Physics, School of Physics, Frontiers Science Center for Nano-optoelectronics & Collaborative Innovation Center of Quantum Matter, Peking University, Beijing 100871, China State Key Laboratory for Artificial Microstructure and Mesoscopic Physics, School of Physics, Frontiers Science Center for Nano-optoelectronics & Collaborative Innovation Center of Quantum Matter, Peking University, Beijing 100871, China State Key Laboratory for Artificial Microstructure and Mesoscopic Physics, School of Physics, Frontiers Science Center for Nano-optoelectronics & Collaborative Innovation Center of Quantum Matter, Peking University, Beijing 100871, China Department of Materials Science and Engineering, University of Toronto, Toronto M5G 3E4, Canada Frontiers Science Center for Flexible Electronics, Xi'an Institute of Flexible Electronics (IFE) and Xi'an Institute of Biomedical Materials & Engineering, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, China State Key Laboratory for Artificial Microstructure and Mesoscopic Physics, School of Physics, Frontiers Science Center for Nano-optoelectronics & Collaborative Innovation</p>

	<p>Center of Quantum Matter, Peking University, Beijing 100871, China; Collaborative Innovation Center of Extreme Optics, Shanxi University, Taiyuan, Shanxi 030006, China School of Materials Science and Engineering, Key Laboratory of Polymer Chemistry and Physics of Ministry of Education, Peking University, Beijing 100871, China State Key Laboratory for Artificial Microstructure and Mesoscopic Physics, School of Physics, Frontiers Science Center for Nano-optoelectronics & Collaborative Innovation Center of Quantum Matter, Peking University, Beijing 100871, China; Collaborative Innovation Center of Extreme Optics, Shanxi University, Taiyuan, Shanxi 030006, China</p>
<p>Evaluation of GOFP over four forest plots using RAMI and UAV measurements</p>	<p>School of Civil Engineering, Hefei University of Technology, Hefei, People’s Republic of China; Jiangsu Provincial Key Laboratory of Geographic Information Science and Technology, International Institute for Earth System Science, Nanjing University, Nanjing, People’s Republic of China Key Laboratory of Information Perception and Systems for Public Security of MIIT, Nanjing University of Science and Technology, Nanjing, China; Max Planck Institute for Biogeochemistry, Jena, Germany; Jiangsu Provincial Key Laboratory of Geographic Information Science and Technology, International Institute for Earth System Science, Nanjing University, Nanjing, People’s Republic of China Jiangsu Provincial Key Laboratory of Geographic Information Science and Technology, International Institute for Earth System Science, Nanjing University, Nanjing, People’s Republic of China School of Geographical Science, Fujian Normal University, Fuzhou, People’s Republic of China; Department of Geography and Program in Planning, University of Toronto, Toronto,</p>

	<p>Canada Jiangsu Provincial Key Laboratory of Geographic Information Science and Technology, International Institute for Earth System Science, Nanjing University, Nanjing, People’s Republic of China College of Environmental and Resource Science, Zhejiang A & F University, Linan, People’s Republic of China School of Resources and Environment, Anhui Agricultural University, Hefei, People’s Republic of China; School of Civil Engineering, Hefei University of Technology, Hefei, People’s Republic of China School of Civil Engineering, Hefei University of Technology, Hefei, People’s Republic of China School of Civil Engineering, Hefei University of Technology, Hefei, People’s Republic of China School of Civil Engineering, Hefei University of Technology, Hefei, People’s Republic of China</p>
<p>Wavelength Conversion Efficiency Enhancement in Modal Phase Matched χ^2 Nonlinear Waveguides</p>	<p>School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, Harbin, China School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, Harbin, China The Edward S. Rogers Department of Electrical and Computer Engineering, Centre for Quantum Information and Quantum Control, University of Toronto, Toronto, ON, Canada School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, Harbin, China School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, Harbin, China School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin Institute of Technology, Harbin, China</p>

<p>Slopes and intercepts from log-log correlations of gas/particle quotient and octanol-air partition coefficient (vapor-pressure) for semi-volatile organic compounds: I. Theoretical analysis</p>	<p>IJRC-PTS-NA, Toronto, Ontario, M2N 6X9, Canada; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment/ School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China; IJRC-PTS, College of Environmental Science and Engineering, Dalian Maritime University, Dalian, PR China Department of Marine Sciences, Marine College, Shandong University, Weihai, 264209, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment/ School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China Institute of Ocean Sciences, Department of Fisheries and Oceans, P.O. Box 6000, Sidney, BC, V8L 4B2, Canada</p>
<p>Time trends of persistent organic pollutants (POPs) and Chemicals of Emerging Arctic Concern (CEAC) in Arctic air from 25 years of monitoring</p>	<p>Air Quality Processes Research Section, Environment and Climate Change Canada, 4905 Dufferin St., Toronto, ON M3H 5T4, Canada. Air Quality Processes Research Section, Environment and Climate Change Canada, 4905 Dufferin St., Toronto, ON M3H 5T4, Canada. Electronic address: hayley.hung@canada.ca. Air Quality Processes Research Section, Environment and Climate Change Canada, 4905 Dufferin St., Toronto, ON M3H 5T4, Canada. NILU, Norwegian Institute for Air Research, P.O. Box 100, NO-2027 Kjeller, Norway NILU, Norwegian Institute for Air Research, P.O. Box 100, NO-2027 Kjeller, Norway NILU, Norwegian Institute for Air Research, P.O. Box 100, NO-2027 Kjeller, Norway IVL Swedish Environmental Research Institute, P.O. Box 47086, GÅrteborg 40 258, Sweden. IVL Swedish Environmental Research Institute, P.O. Box 47086, GÅrteborg 40 258, Sweden. University of Iceland, Department of Pharmacology and Toxicology, Hagi, Hofsvallagata 53, 107</p>

	<p>Reykjavik, Iceland Icelandic Meteorological Office, Bustadavegur 7-9, 105 Reykjavik, Iceland. Department of Environmental Science, Arctic Research Center, Aarhus University, Frederiksborgvej 399, 4000 Roskilde, Denmark Department of Environmental Science, Arctic Research Center, Aarhus University, Frederiksborgvej 399, 4000 Roskilde, Denmark Department of Environmental Science, Arctic Research Center, Aarhus University, Frederiksborgvej 399, 4000 Roskilde, Denmark Finnish Meteorological Institute P.O. Box 503, FI-00101 Helsinki, Finland National Laboratory for Environmental Testing, National Water Research Institute, Environment and Climate Change Canada, Burlington, ON L7R 4A6, Canada State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China Airzone One Ltd., 222, Matheson Blvd. E., Mississauga, ON L4Z 1X1, Canada. Airzone One Ltd., 222, Matheson Blvd. E., Mississauga, ON L4Z 1X1, Canada. Airzone One Ltd., 222, Matheson Blvd. E., Mississauga, ON L4Z 1X1, Canada. IPEM RPA Typhoon, Obninsk, Kaluga reg, Pobeda str, 4, Russian Federation. IPEM RPA Typhoon, Obninsk, Kaluga reg, Pobeda str, 4, Russian Federation. Arctic Monitoring and Assessment Programme Secretariat, The Fram Centre, Box 6606, Langnes, 9296 Tromsø, Norway.</p>
<p>Mixed Coalitional Stabilities With Full Participation of Sanctioning Opponents Within the Graph Model for Conflict Resolution</p>	<p>College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, China; University of Waterloo, Waterloo, Canada College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, China; University of Waterloo, Waterloo, Canada Balsillie School of International Affairs, University of Waterloo, Waterloo, Canada; Centre for</p>

	<p>International Governance Innovation, University of Waterloo, Waterloo, Canada; University of Waterloo, Waterloo, Canada Ryerson University, Toronto, Canada; University of Waterloo, Waterloo, Canada</p>
<p>Slopes and intercepts from log-log correlations of gas/particle quotient and octanol-air partition coefficient (vapor-pressure) for semi-volatile organic compounds: II. Theoretical predictions vs. monitoring</p>	<p>Department of Marine Sciences, Marine College, Shandong University, Weihai, 264209, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, PR China IJRC-PTS, College of Environmental Science and Engineering, Dalian Maritime University, Dalian, PR China College of Environmental Science and Engineering, Tongji University, Shanghai, 200092, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, PR China Institute of Ocean Sciences, Department of</p>

	<p>Fisheries and Oceans, P.O. Box 6000, Sidney, BC, V8L 4B2, Canada Institute of Natural Sciences, North-Eastern Federal University, Russia Department of Marine Sciences, Marine College, Shandong University, Weihai, 264209, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, PR China; IJRC-PTS-NA, Toronto, Ontario, M2N 6X9, Canada</p>
<p>Chinese Millennials' happiness and materialism: Explanations from two life course theories, self-esteem, and money attitudes</p>	<p>Marketing Department, School of Business Sciences University of the Witwatersrand Johannesburg South Africa Ted Rogers School of Retail Management Ryerson University Toronto Canada Department of Marketing Beijing Institute of Technology Beijing China</p>
<p>Principled Exploration via Optimistic Bootstrapping and Backward Induction</p>	<p>Harbin Institute of Technology Northwestern University [Tencent AI Lab] Tianjin University [University of Toronto, Vector Institute, NVIDIA] Harbin Institute of Technology Northwestern U.;</p>
<p>Maximal almost disjoint families, determinacy, and forcing</p>	<p>Department of Mathematical Sciences, University of Copenhagen, Universitetsparken 5, 2100 Copenhagen, Denmark Institute for Advanced Study in Mathematics, Harbin Institute of Technology, 92 West Da Zhi Street, Harbin, Heilongjiang 150001, China; Department of Computer and Mathematical Sciences, University of Toronto Scarborough, 1095 Military Trail, Toronto, ON, M1C1A4, Canada Department of Mathematical Sciences, University of Copenhagen, Universitetsparken 5, 2100 Copenhagen, Denmark</p>
<p>Fate processes of Parabens, Triclocarban and Triclosan during wastewater treatment: assessment via field measurements and model simulations</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, China </p>

	<p>International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, Harbin Institute of Technology, Harbin, China IJRC-PTS-NA & IJRC-AEE-NA, Toronto, Canada; Department of Chemistry and Biochemistry, Concordia University, QuÃ©bec, Canada International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, Harbin Institute of Technology, Harbin, China IJRC-PTS-NA & IJRC-AEE-NA, Toronto, Canada; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, Harbin Institute of Technology, Harbin, China Institute of Natural Sciences, North-Eastern Federal University, Yakutsk, Russia IJRC-PTS-NA & IJRC-AEE-NA, Toronto, Canada; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, Harbin Institute of Technology, Harbin, China</p>
<p>Determination of Polycyclic Aromatic Hydrocarbons and Their Methylated Derivatives in Sewage Sludge from Northeastern China: Occurrence, Profiles and Toxicity Evaluation</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China. International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China Heilongjiang Institute of Labor Hygiene and Occupational Diseases, Harbin 150028, China Heilongjiang Institute of Labor Hygiene and Occupational Diseases, Harbin 150028, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China International Joint Research Center for</p>

	<p>Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China Institute of Natural Sciences, North-Eastern Federal University, 677000 Yakutsk, Russia International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; IJRC-PTS-NA, Toronto, ON M2N 6X9, Canada</p>
<p>Tensile and cyclic deformation response of friction-stir-welded dissimilar aluminum alloy joints: Strain localization effect</p>	<p>Department of Mechanical and Industrial Engineering, Ryerson University, 350 Victoria Street, Toronto, Ontario M5B 2K3, Canada; State Key Laboratory of Solidification Processing, Shaanxi Key Laboratory of Friction Welding Technologies, Northwestern Polytechnical University, Xi'an 710072, China State Key Laboratory of Solidification Processing, Shaanxi Key Laboratory of Friction Welding Technologies, Northwestern Polytechnical University, Xi'an, 710072, China Department of Mechanical and Industrial Engineering, Ryerson University, 350 Victoria Street, Toronto, Ontario, M5B 2K3, Canada</p>
<p>Transient-based leak detection in the frequency domain considering fluid-structure interaction and viscoelasticity</p>	<p>Dept. of Civil and Environmental Engineering, The Hong Kong Polytechnic University (HKPolyU), Hong Kong, China Dept. of Civil and Mineral Engineering, University of Toronto, 44 St. George St., Toronto, ON M5S 2E4, Canada Department of Civil and Environmental Engineering, Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong, China Key Laboratory on</p>

	<p>Reliability and Environmental Engineering Technology, School of Reliability and Systems Engineering, Beihang University, Xueyuan Road No. 37, Haidian District, Beijing 100083, China</p>
<p>Fate and Occurrence of Polycyclic Aromatic Hydrocarbons and Their Derivatives in Water and Sediment from Songhua River, Northeast China</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China Heilongjiang Institute of Labor Hygiene and Occupational Diseases, Harbin 150028, China Heilongjiang Institute of Labor Hygiene and Occupational Diseases, Harbin 150028, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China Institute of Natural Sciences, North-Eastern Federal University, 677000 Yakutsk, Russia International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China;</p>

	IJRC-PTS-NA, Toronto, ON M2N 6X9, Canada
A Review on Additive Manufacturing of Titanium Alloys for Aerospace Applications: Directed Energy Deposition and Beyond Ti-6Al-4V	Department of Materials Science and Engineering; University of Toronto; Toronto Canada Ningbo Institute of Technology, Beihang University, Ningbo, People’s Republic of China; Research Institute for Frontier Science, Beihang University, Beijing, People’s Republic of China Department of Materials Science and Engineering, University of Toronto, Toronto, Canada Department of Materials Science and Engineering, University of Toronto, Toronto, Canada
High-speed nanoindentation mapping of a near-alpha titanium alloy made by additive manufacturing	Department of Materials Science and Engineering; University of Toronto; Toronto Canada Department of Materials Science and Engineering, University of Toronto, Toronto, Canada; Department of Mechanical and Energy Engineering, Southern University of Science and Technology, Guangdong, People’s Republic of China Research Institute for Frontier Science, Beihang University, Beijing, People’s Republic of China Department of Materials Science and Engineering, University of Toronto, Toronto, Canada
TOP-Net Prediction Model Using Bidirectional Long Short-term Memory and Medical-Grade Wearable Multisensor System for Tachycardia Onset: Algorithm Development Study	Key Laboratory for Biomechanics and Mechanobiology of Ministry of Education, Beijing Advanced Innovation Center for Biomedical Engineering, School of Biological Science and Medical Engineering Beihang University Beijing China Department of Computer Management and Application, Chinese PLA General Hospital, Beijing, China. Center for Artificial Intelligence in Medicine, Chinese PLA General Hospital, Beijing, China. Laboratory for Computational Physiology, Institute for Medical Engineering and Science, Massachusetts Institute of Technology, Cambridge, MA, United States. Medical School of Chinese PLA, Beijing, China. US Research Lab, PingAn Tech, San

	<p>Francisco, CA, United States. Beijing SensEcho Science & Technology Co., Ltd, Beijing, China. Dept. of Comput. Sci. & Tech, Tsinghua Univ., Beijing, China [Hangzhou Innovation Institute, Beihang University, Beijing, China] Faculty of Arts & Science, University of Toronto, Toronto, ON, Canada. Department of Hyperbaric Oxygen, Chinese PLA General Hospital, Beijing, China. Key Laboratory for Biomechanics and Mechanobiology of Ministry of Education, Beijing Advanced Innovation Center for Biomedical Engineering, School of Biological Science and Medical Engineering Beihang University Beijing China</p>
<p>Electro-elastic field of a piezoelectric quasicrystal medium containing two cylindrical inclusions</p>	<p>State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China Dept. of Mechanical & Industrial Engineering, University of Toronto, Toronto, Canada#TAB# School of Civil Engineering, Nanjing Forestry University, Nanjing, China Department of Engineering Mechanics, Southeast University, Nanjing, China</p>
<p>Occurrence, Removal, and Mass Balance of Polycyclic Aromatic Hydrocarbons and Their Derivatives in Wastewater Treatment Plants in Northeast China</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China. International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China Heilongjiang Institute of Labor Hygiene and Occupational Diseases, Harbin 150028, China Heilongjiang Institute of Labor Hygiene and Occupational Diseases, Harbin 150028, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and</p>

	<p>Environment, Harbin Institute of Technology (HIT), Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China Institute of Natural Sciences, North-Eastern Federal University, 677000 Yakutsk, Russia Faculty of Chemistry, Biotechnology & Food Sciences (KBM), Norwegian University of Life Sciences (NMBU), 1432 Ås, Norway; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; IJRC-PTS-NA, Toronto, ON M2N 6X9, Canada</p>
<p>Organic Molecules: Desirable Candidates for NIR-II Window Bioimaging</p>	<p>Shenyuan Honors College, Beihang University, Haidian District, Beijing 100191, China Department of Materials Science and Engineering, University of Toronto, Toronto, Ontario, M5S 3E4, Canada Department of Chemical Engineering & Applied Chemistry, University of Toronto, Toronto, Ontario, M5S 3E4, Canada</p>
<p>Editorial: Energy Storage Systems Beyond Li-Ion Intercalation Chemistry</p>	<p>Department of Chemical and Materials Engineering, School of Engineering and Digital Sciences, Nazarbayev University, Kazakhstan Harbin Engineering University, China University of British</p>

	Columbia Okanagan, Canada University of Toronto, Canada
Dynamic modeling and optimal control of cystic echinococcosis	College of Mathematical Sciences, Harbin Engineering University, Harbin, Peopleâ€™s Republic of China; School of Mathematics and Statistics, Northeast Normal University, Changchun, Peopleâ€™s Republic of China School of Mathematics and Statistics, Northeast Normal University, Changchun, Peopleâ€™s Republic of China CDM, LAMPS and Department of Mathematics and Statistics, York University, Toronto, Canada Animal Health Supervision Institute of Xingan League, Tiexi North Road, Ulanhot, Peopleâ€™s Republic of China
Hydrophobic Porous Polypropylene with Hierarchical Structures for Ultrafast and Highly Selective Oil/Water Separation	Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario M5S 3G8, Canada; State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, Heilongjiang 150090, China CREPEC, Department of Chemical Engineering, École Polytechnique de Montréal, Montréal, Québec H3C 3A7, Canada CREPEC, Department of Chemical Engineering, École Polytechnique de Montréal, Montréal, Québec H3C 3A7, Canada Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario M5S 3G8, Canada Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario M5S 3G8, Canada Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario M5S 3G8, Canada
A Novel Three-parameter Weibull Distribution Parameter Estimation Using	Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent

<p>Chaos Simulated Annealing Particle Swarm Optimization in Civil Aircraft Risk Assessment</p>	<p>Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, People’s Republic of China; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada College of Science, Nanjing University of Aeronautics and Astronautics, Nanjing, People’s Republic of China; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, People’s Republic of China</p>
<p>Adaptive Underactuated Orbit/Attitude Control for Space Debris Rendezvous</p>	<p>Harbin Institute of Technology, Research Center of Satellite Technology, Harbin, China, 150080 University of Toronto Institute for Aerospace Studies Aerospace Mechatronics Group, Toronto, Ontario, Canada, M3H 5T6</p>
<p>Two Actuation Methods for a Complete Morphing System Composed of a VGTM and a Compliant Parallel Mechanism</p>	<p>Department of Aerospace Engineering, Ryerson University, Toronto, ON, M5B 2K3, Canada School of Mechatronic Engineering and Automation, Shanghai University, Shanghai 200444, China Department of Aerospace Engineering, Ryerson University, Toronto, ON M5B 2K3, Canada;; Robotics Institute, School of Mechanical Engineering and Automation, Beihang University, Beijing 100191, China School of Mechanical and Electrical Engineering, Shenzhen Polytechnic, Shenzhen 518055, China) School of Mechatronic Engineering and Automation, Shanghai University, Shanghai 200444, China</p>
<p>Model Reference Adaptive Control for Aortic Pressure Regulation in Ex Vivo Heart Perfusion</p>	<p>Dept. of Mechanical & Industrial Engineering, University of Toronto, Toronto, Canada#TAB# School of Astronautics, Harbin Institute of Technology, Harbin, China School of Mechatronic Engineering and Automation</p>

	<p>Shanghai University Shanghai, China School of Astronautics, Harbin Institute of Technology , Harbin , China School of Computer Engineering and Science; Shanghai University; Shanghai China Research Center of Robotics and Micro System, Soochow University, Suzhou, China Faculty of Medicine University of Toronto, Toronto, Canada. Dept. of Mechanical & Industrial Engineering, University of Toronto, Toronto, Canada#TAB#</p>
<p>MUDE-based control of quadrotor for accurate attitude tracking</p>	<p>Institute for Aerospace Studies, University of Toronto, Toronto, Canada; School of Aerospace Engineering, Beijing Institute of Technology, Beijing, China; School of System Science and Engineering, Sun Yat-Sen University, Guangzhou, China Institute for Aerospace Studies, University of Toronto, Toronto, Canada; School of Aeronautics and Astronautics, University of Electronic Science and Technology of China, Chengdu, China; China Aerodynamics Research and Development Center, Mianyang, China School of Aerospace Engineering, Beijing Institute of Technology, Beijing, China School of Aerospace Engineering, Beijing Institute of Technology, Beijing, China Institute for Aerospace Studies, University of Toronto, Toronto, Canada</p>
<p>Lunar flyby transfers to axial orbit</p>	<p>School of Aerospace Engineering, Beijing Institute of Technology, 5 South Zhongguancun Street, Beijing 100081, China Department of Aerospace Engineering, Ryerson University, 350 Victoria Street, Toronto, ON, M5B 2K3 Canada</p>
<p>Performance of an omnidirectional piezoelectric wind energy harvester</p>	<p>Engineering Research Center of Urban Disasters Prevention and Fire Rescue Technology of Hubei Province, School of Civil Engineering, Wuhan University, Wuhan, China School of Civil and Environmental Engineering, Harbin Institute of Technology Shenzhen, China Engineering Research Center of Urban</p>

	<p>Disasters Prevention and Fire Rescue Technology of Hubei Province, School of Civil Engineering, Wuhan University, Wuhan, China Department of Civil & Mineral Engineering University of Toronto Toronto Ontario Canada; Engineering Research Center of Urban Disasters Prevention and Fire Rescue Technology of Hubei Province, School of Civil Engineering Wuhan University Wuhan China Centre for Wind, Waves and Water, School of Civil Engineering The University of Sydney Sydney New South Wales Australia</p>
<p>Flocking in a two-agent Cucker-Smale model with large delay</p>	<p> School of Mathematics and Institute for Advanced Study in Mathematics, Harbin Institute of Technology, Harbin 150001, People’s Republic of China Laboratory for Industrial and Applied Mathematics and Department of Mathematics and Statistics, York University, Toronto, Ontario M3J 1P3 Canada</p>
<p>Toward data-efficient learning: A benchmark for COVID-19 CT lung and infection segmentation</p>	<p>Department of Mathematics, Nanjing University of Science and Technology, Nanjing 210094, P. R. China Institute of Computing Technology, Chinese Academy of Sciences, University of Chinese Academy of Sciences, Beijing, 100190, P. R. China. China Electronics Cloud Brain (Tianjin) Technology CO., Ltd Tianjin300309P. R. China Institute of Bioinformatics and Medical Engineering, Jiangsu University of Technology, Changzhou, 213001, P. R. China. Institute of Science and Technology for Brain-inspired Intelligence, Fudan University, Shanghai, 200433, P. R. China. Department of Medical Biophysics, University of Toronto, Toronto ON M5G 1L7, Canada Department of Radiology, Nanjing Drum Tower Hospital, the Affiliated Hospital of Nanjing University Medical School, Nanjing, 210008, P. R. China. Department of Radiology, Nanjing Drum Tower Hospital, the Affiliated Hospital of Nanjing</p>

	<p>University Medical School, Nanjing, 210008, P. R. China. Department of Radiology, Nanjing Drum Tower Hospital, the Affiliated Hospital of Nanjing University Medical School, Nanjing, 210008, P. R. China. Lenovo Ltd., Beijing, 100094, P. R. China. China Electronics Cloud Brain (Tianjin) Technology CO., Ltd Tianjin300309P. R. China Department of Mathematics, Nanjing University, Nanjing 210093, P.R. China Department of Mathematics, Nanjing University, Nanjing 210093, P.R. China Department of Mathematics, Nanjing University, Nanjing 210093, P.R. China</p>
<p>Robust long-range magnetic correlation across antiphase domain boundaries in CrReO</p>	<p>Department of Physics, University of Toronto, Toronto, Ontario, Canada M5S 1A7#TAB# Department of Physics, University of Toronto, Toronto, Ontario, Canada M5S 1A7#TAB# Department of Physics, University of Toronto, Toronto, Ontario, Canada M5S 1A7#TAB# School of Physics, Key Laboratory of Micro-Nano Measurement-Manipulation and Physics (Ministry of Education), Beihang University, Beijing, 100191, China. National Synchrotron Light Source II, Brookhaven National Laboratory, Upton, New York 11973, USA Department of Physics and Astronomy, The University of Alabama, Tuscaloosa, Alabama 35487, USA Department of Physics The Ohio State University Columbus, Ohio 43210, USA Department of Physics, University of Toronto, Toronto, Ontario, Canada M5S 1A7#TAB#</p>
<p>Image-based control for rendezvous and synchronization with a tumbling space debris</p>	<p>Aerospace Mechatronics Group, Institute for Aerospace Studies, University of Toronto, Toronto, M3H 5T6, Canada; Research Center of Satellite Technology, Harbin Institute of Technology, 150080, Harbin, People’s Republic of China Aerospace Mechatronics Group, Institute for Aerospace Studies, University of Toronto, Toronto, M3H 5T6, Canada Research Center of Satellite Technology,</p>

	Harbin Institute of Technology, 150080, Harbin, People’s Republic of China
Characterization of Cooperators in Quorum Sensing With 2D Molecular Signal Analysis	Melbourne School of Engineering, The University of Melbourne, Melbourne, VIC, Australia. , School of Engineering, University of Warwick, Coventry, U.K. Department of Electrical Engineering and Computer Science, York University, Toronto, ON, Canada. Research School of Electrical, Energy and Materials Engineering The Australian National University Canberra ACT Australia School of Information and Electronics, Beijing Institute of Technology, Beijing, China;
Diphenylamine Antioxidants in wastewater influent, effluent, biosolids and landfill leachate: Contribution to environmental releases	Environment and Climate Change Canada, Science and Technology Branch, 867 Lakeshore Road Burlington, ON, L7S1A1, Canada; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China University of Toronto, Toronto, ON, M5S 3B1, Canada International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China Environment and Climate Change Canada, Science and Technology Branch, 867 Lakeshore Road Burlington, ON, L7S1A1, Canada International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; IJRC-PTS-NA, Toronto, M2N 6X9, Canada

Control Verifications of Space Manipulators Using Ground Platforms	Northwestern Polytechnical University, Xi'an China University of Toronto, Toronto, Canada
Trajectory correction for lunar flyby transfers to libration point orbits using continuous thrust	School of Aerospace Engineering Beijing Institute of Technology Beijing China Department of Aerospace Engineering, Ryerson University, Toronto, Canada
Modeling of a Complete Morphing Mechanism Covered by a Paneled Morphing Skin	Department of Aerospace Engineering, Ryerson University, Toronto, ON, M5B 2K3, Canada Department of Aerospace Engineering, Ryerson University, Toronto, ON, M5B 2K3, Canada Department of Aerospace Engineering, Ryerson University, Toronto, ON, M5B 2K3, Canada School of Mechanical Engineering and Automation, Harbin Institute of Technology (SZ), Xili, Shenzhen 518055China
Robust Optimization for Precision Product using Taguchi-RSM and Desirability Function	Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada; School of Economics and Management, Nanjing University of Science and Technology, Nanjing, China (College of Civil Engineering, Fuzhou University, Fuzhou, China) School of Management Science and Industrial Engineering Nanjing University of Finance and Economics Nanjing China School of Economics & Management Nanjing University of Science and Technology Nanjing China School of Economics & Management Nanjing University of Science and Technology Nanjing China
Orbital analysis of small bodies in co-orbital motion with Jupiter through the torus structure	School of Aerospace Engineering, Beijing Institute of Technology, 5 South Zhongguancun Street, Beijing 100081, China Department of Aerospace Engineering, Ryerson University, 350 Victoria Street, Toronto, ON, M5B 2K3 Canada
Throughput Maximization for Intelligent Reflecting Surface Aided MIMO WPCNs With Different DL/UL Reflection Patterns	School of Information and Electronics, Beijing Institute of Technology, Beijing, China; State Key Laboratory of Internet of Things for Smart City, University of Macau, Macau, China School of Information and Electronics, Beijing

	<p>Institute of Technology, Beijing, China; School of Information and Electronics, Beijing Institute of Technology, Beijing, China; Department of Electrical, Computer and Biomedical Engineering, Ryerson University, Toronto, ON, Canada. School of Information and Electronics, Beijing Institute of Technology, Beijing, China;</p>
<p>Interaction between positive and negative dielectric microparticles/microorganism in optoelectronic tweezers</p>	<p>School of Mechanical Engineering and Automation, Beihang University , Beijing 100191 , China School of Mechanical Engineering and Automation, Beihang University , Beijing 100191 , China School of Mechanical Engineering and Automation, Beihang University , Beijing 100191 , China School of Mechanical Engineering and Automation, Beihang University , Beijing 100191 , China School of Mechanical Engineering and Automation, Beihang University , Beijing 100191 , China [School of Mechatronical Engineering, Beijing Institute of Technology, Beijing 100081, China] Department of Chemistry, University of Toronto 80 St. George St., Toronto, ON M5S 3H6, Canada School of Mechanical Engineering & Automation, Beihang University, Beijing, 100191, China; Beijing Advanced Innovation Center for Biomedical Engineering, Beihang University, Beijing, 100191, China School of Mechanical Engineering & Automation, Beihang University, Beijing, 100191, China; Beijing Advanced Innovation Center for Biomedical Engineering, Beihang University, Beijing, 100191, China</p>
<p>Present and future resilience research driven by science and technology</p>	<p>Department of Structural Geotechnical and Building Engineering (DISEG), Politecnico di Torino Turin Italy Department of Structural Geotechnical and Building Engineering (DISEG), Politecnico di Torino Turin Italy Institute of Engineering Mechanics (IEM), China Earthquake Administration (CEA), China Department of Civil, Structural and</p>

	<p>Environmental Engineering, University at Buffalo, New York, USA Department of Urban and Civil Engineering, Faculty of Engineering, Ibaraki University, Ibaraki Prefecture, Japan Department of Civil, Geomatic and Environmental Engineering (D-BAUG), ETH Zurich, Switzerland California Polytechnic State University, San Luis Obispo, California, USA. University of Manitoba, , Winnipeg, Manitoba, Canada; Department of Disaster Mitigation for Structures; Tongji University; Shanghai China Department of Civil Engineering , Tsinghua University , Beijing , China Department of Civil and Mechanics, Harbin Institute of Technology, Shenzhen, China Department of Civil & Mineral Engineering University of Toronto Toronto Canada Department of Disaster Mitigation for Structures; Tongji University; Shanghai China Department of Civil and Environmental Engineering Waseda University Shinjuku Tokyo Japan Department of Civil and Environmental Engineering, UCLA, Los Angeles, California, USA Department of Safety Technologies and Protective Structures, Fraunhofer EMI, Freiburg, Germany Faculty of Engineering, University of Bristol Bristol, UK</p>
<p>Prediction Interval Estimation of Aeroengine Remaining Useful Life Based on Bidirectional Long Short-Term Memory Network</p>	<p>College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China School of Earth Sciences and Engineering , Hohai University, Nanjing 211100, China [Lassonde School of Engineering, York University, Toronto M3J1P3, Canada.]</p>
<p>Uncorrelated photon pair generation in asymmetric heterogeneously coupled waveguides</p>	<p>Harbin Institute of Technology,School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser,Harbin,China,150001 Harbin Institute of Technology,School of Astronautics and National Key Laboratory</p>

	<p>of Science and Technology on Tunable Laser, Harbin, China, 150001 Harbin Institute of Technology, School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin, China, 150001 University of Toronto, The Edward S. Rogers Department of Electrical and Computer Engineering, Toronto, Canada, M5S 3G4 Harbin Institute of Technology, School of Astronautics and National Key Laboratory of Science and Technology on Tunable Laser, Harbin, China, 150001</p>
<p>Estimation and inference of time-varying auto-covariance under complex trend: A difference-based approach</p>	<p>Institute for Advanced Study in Mathematics at the Harbin Institute of Technology (HIT), China; Department of Statistical Sciences, University of Toronto, Canada Department of Statistics, Purdue University, USA Department of Statistical Sciences, University of Toronto, Canada</p>
<p>Nonlinear Pricing Based Distributed Offloading in Multi-User Mobile Edge Computing</p>	<p>School of Information and Electronics, Beijing Institute of Technology, Beijing, P.R China School of Information and Electronics, Beijing Institute of Technology, Beijing, P.R China School of Information and Electronics, Beijing Institute of Technology, Beijing, P.R China School of Information and Electronics, Beijing Institute of Technology, Beijing, P.R China [Department of Electrical & Computer Engineering, University of Windsor, Windsor, ON, Canada] Department of Electrical, Computer, and Biomedical Engineering, Ryerson University, Toronto ON M5B 2K3, Canada</p>
<p>Impacts of reinforcement ratio and fatigue load level on the chloride ingress and service life estimating of fatigue loaded reinforced concrete (RC) beams</p>	<p>School of Transportation Science and Engineering, Beihang University, Haidian District, Beijing 100191, China; College of Architecture and Civil Engineering, Beijing University of Technology, Chaoyang District, Beijing 100124, China School of Transportation Science and Engineering, Beihang University, Haidian District, Beijing 100191, China; China Academy of Railway Sciences Co., Ltd., Haidian District, Beijing 100081, China </p>

	<p>School of Transportation Science and Engineering, Beihang University, Haidian District, Beijing 100191, China Department of Civil & Mineral Engineering, University of Toronto, Ontario M5S 1A4, Canada</p>
<p>Numerical investigation on the static performance of aerostatic journal bearings with different pocket shapes by the finite-element method</p>	<p>School of Mechatronic Engineering, Harbin Institute of Technology, Nangang, China; Department of Mechanical and Industrial Engineering, University of Toronto, Ontario, Canada Department of Mechanical and Industrial Engineering, University of Toronto, Ontario, Canada School of Mechatronic Engineering, Harbin Institute of Technology, Nangang, China School of Mechatronic Engineering, Harbin Institute of Technology, Nangang, China</p>
<p>Connectivity Preservation and Obstacle Avoidance in Small Multi-Spacecraft Formation with Distributed Adaptive Tracking Control</p>	<p>Institute for Aerospace Studies, University of Toronto, Toronto, Canada; School of Astronautics, Beihang University, Beijing, China Institute for Aerospace Studies, University of Toronto, Toronto, Canada School of Astronautics, Beihang University, Beijing, CHINA.</p>
<p>Single-Beat Measurement of Left Ventricular Contractility in Normothermic Ex Situ Perfused Porcine Hearts</p>	<p>School of Mechatronic Engineering and Automation Shanghai University Shanghai University, Shanghai, China School of Mechatronic Engineering and Automation Shanghai University School of Mechatronic Engineering and Automation Shanghai University State Key Laboratory of Mechanical Transmissions Chongqing University School of Astronautics Harbin Institute of Technology Faculty of Medicine University of Toronto School of Mechatronic Engineering and Automation Shanghai University School of Mechatronic Engineering and Automation Shanghai University School of Mechatronic Engineering and Automation Shanghai University Division of Hepatobiliary and Pancreatic Surgery, Department of Surgery, Key Lab of Combined Multi-Organ Transplantation,</p>

	<p>Ministry of Public Health, First Affiliated Hospital Zhejiang University School of Medicine Faculty of Medicine University of Toronto Department of Mechanical & Industrial Engineering University of Toronto</p>
<p>Experimental studies on the effect of ultrasonic treatment and hydrogen donors on residual oil characteristics</p>	<p>School of Mechatronics Engineering, Harbin Institute of Technology, Harbin 150001, China) China University of Petroleum (Beijing), Beijing 102249, China; CNOOC EnerTech-Drilling & Production Co., Tianjin 300452, China College of Chemical Engineering, China University of Petroleum (Huadong), Qingdao 266580, China School of Mechatronics Engineering, Harbin Institute of Technology, Harbin 150001, China College of Chemical Engineering, China University of Petroleum (Huadong), Qingdao 266580, China School of Mechatronics Engineering, Harbin Institute of Technology, Harbin 150001, China School of Mechatronics Engineering, Harbin Institute of Technology, Harbin 150001, China Department of Mechanical Engineering, Lassonde School of Engineering, York University, Toronto M3J 1P3, Canada</p>
<p>New equation to predict size-resolved gas-particle partitioning quotients for polybrominated diphenyl ethers</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin, 150090, PR China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, HIT (PA-HIT), Harbin, 150090, PR China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), School of Environment, HIT, Harbin, 150090, PR China Department of Environmental Engineering, Shanghai Maritime University, Shanghai, 201306, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS),</p>

	<p>State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin, 150090, PR China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, HIT (PA-HIT), Harbin, 150090, PR China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), School of Environment, HIT, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin, 150090, PR China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, HIT (PA-HIT), Harbin, 150090, PR China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), School of Environment, HIT, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin, 150090, PR China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, HIT (PA-HIT), Harbin, 150090, PR China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), School of Environment, HIT, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin, 150090, PR China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, HIT (PA-HIT), Harbin,</p>
--	--

	<p>150090, PR China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), School of Environment, HIT, Harbin, 150090, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin, 150090, PR China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, HIT (PA-HIT), Harbin, 150090, PR China; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), School of Environment, HIT, Harbin, 150090, PR China Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, PR China Institute of Ocean Sciences, Department of Fisheries and Oceans, P.O. Box 6000, Sidney, BC, V8L 4B2, Canada Institute of Natural Sciences, North-Eastern Federal University, Russia School of Environment, Key Laboratory for Yellow River and Huai River Water Environment and Pollution Control, Ministry of Education, Henan Normal University, Xinxiang, Henan, 453007, PR China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin, 150090, PR China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, HIT (PA-HIT), Harbin, 150090, PR China; IJRC-PTS-NA, Toronto, Ontario, M2N 6X9, Canada; Heilongjiang Provincial Key Laboratory of Polar Environment and Ecosystem (HPKL-PEE), School of Environment, HIT, Harbin, 150090, PR China</p>
--	--

	<p>State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, M3H 5T4, Canada IJRC-PTS-NA, Toronto, M2N 6X9, Canada; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin, 150090, China</p>
<p>Low-thrust transfer to the Earth-Moon triangular libration point via horseshoe orbit</p>	<p>Shenyuan Honors College, Beihang University, Beijing, 100191, China York University, Toronto, M3J1P3, Canada. School of Astronautics, Beihang University, Beijing 100191 (China) The 9th Designing of CASIC, Wuhan, 430040, China</p>
<p>0D/2D Co₃O₄/TiO₂ Z-Scheme heterojunction for boosted photocatalytic degradation and mechanism investigation</p>	<p>State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University, Nanjing, Jiangsu, 210023, China State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University, Nanjing, Jiangsu, 210023, China School of Chemical Engineering, Nanjing University of Science and Technology, Nanjing, Jiangsu, 210094, China State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University, Nanjing, Jiangsu, 210023, China Department of Materials Science and Engineering,</p>

	<p>University of Toronto, Toronto, Ontario, M5S 3E4, Canada State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University, Nanjing, Jiangsu, 210023, China State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University, Nanjing, Jiangsu, 210023, China State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University, Nanjing, Jiangsu, 210023, China State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University, Nanjing, Jiangsu, 210023, China College of Environment, Hohai University, Nanjing, Jiangsu, 210098, China School of Chemical Engineering, Nanjing University of Science and Technology, Nanjing, Jiangsu, 210094, China State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University, Nanjing, Jiangsu, 210023, China State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University, Nanjing, Jiangsu, 210023, China</p>
<p>Identifying influence patterns of regional agricultural drought vulnerability using a two-phased grey rough combined model</p>	<p>College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, China Department of Mechanical and Industrial Engineering, Ryerson University, Toronto, Canada College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, China School of Economics and Management, Southeast University, Nanjing, China</p>
<p>Lock-in carrierography non-destructive imaging of silicon wafers and silicon solar cells</p>	<p>School of Instrumentation Science and Engineering, Harbin Institute of Technology, Harbin 150001, China School of Mechatronics Engineering, Harbin Institute of Technology, Harbin 150001, China School of Mechatronics Engineering, Harbin Institute of Technology, Harbin 150001, China Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT),</p>

	University of Toronto, Toronto M5S 3G8, Canada
Analysis of complex cognitive task and pattern recognition using distributed patterns of EEG signals with cognitive functions	School of Economics and Management, Harbin Engineering University, Harbin, P.R. China School of Economics and Management, Harbin Engineering University, Harbin, P.R. China Management School, Harbin University of Commerce, Harbin, P.R. China College of Innovative Business and Accountancy, Dhurakij Pundit University, Bangkok, Thailand Ryerson University, Toronto, Canada Faculty of Technology, Design and Environment, Visual Artificial Intelligence Lab, Oxford Brookes University, Oxford, UK
Optically Induced Molecular Logic Operations	MIT Key Laboratory of Critical Material Technology for New Energy Conversion and Storage, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin 150001, China School of Engineering and Applied Sciences, Harvard University, 9 Oxford Street, Cambridge, Massachusetts 02138 (United States) Department of Chemistry and Chemical Biology, Harvard University, 12 Oxford Street, Cambridge, Massachusetts, 02138, United States State Key Laboratory for Precision Measurement Technology and Instruments, Department of Precision Instrument, Tsinghua University, Beijing 100084, China MIT Key Laboratory of Critical Material Technology for New Energy Conversion and Storage, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin 150001, China MIT Key Laboratory of Critical Material Technology for New Energy Conversion and Storage, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin 150001, China MIT Key Laboratory of Critical Material Technology for New Energy Conversion and Storage, School of Chemistry and Chemical Engineering, Harbin Institute of

	<p>Technology, Harbin 150001, China Physics Department, Technical University of Munich, 85748 Garching, Germany. Department of Chemistry and Department of Computer Sciences, University of Toronto, 80 St. George Street, Toronto, Ontario M5S 3H6, Canada. School of Engineering and Applied Sciences, Harvard University, 9 Oxford Street, Cambridge, Massachusetts 02138, United States</p>
<p>Correction: Robustness Analysis and Performance Tuning for the Quaternion Proportional-Derivative Attitude Controller</p>	<p>Beihang University, 100191 Beijing, People's Republic of China Ryerson University, Toronto, Ontario, M5B 2K3, Canada</p>
<p>Clinical Translation of Long-Acting Drug Delivery Systems for Posterior Capsule Opacification Prophylaxis</p>	<p>Xi'an People's Hospital (Xi'an Fourth Hospital), Shaanxi Eye Hospital, Affiliated People's Hospital of Northwest University, 21 Jiefang Road, Xi'an 710004, China Xi'an People's Hospital (Xi'an Fourth Hospital), Shaanxi Eye Hospital, Affiliated People's Hospital of Northwest University, 21 Jiefang Road, Xi'an 710004, China Xi'an Key Laboratory of Stem Cell and Regenerative Medicine, Institute of Medical Research, Northwestern Polytechnical University, 127 West Youyi Road, Xi'an 710072, China Xi'an Key Laboratory of Stem Cell and Regenerative Medicine, Institute of Medical Research, Northwestern Polytechnical University, 127 West Youyi Road, Xi'an 710072, China Xi'an People's Hospital (Xi'an Fourth Hospital), Shaanxi Eye Hospital, Affiliated People's Hospital of Northwest University, 21 Jiefang Road, Xi'an 710004, China Department of Pharmaceutical Sciences, Leslie Dan Faculty of Pharmacy, University of Toronto, 144 College Street, Toronto, ON M5S 3M2, Canada Xi'an Key Laboratory of Stem Cell and Regenerative Medicine, Institute of Medical Research, Northwestern Polytechnical University, 127</p>

	West Youyi Road, Xi'an 710072, China Xi'an People's Hospital (Xi'an Fourth Hospital), Shaanxi Eye Hospital, Affiliated People's Hospital of Northwest University, 21 Jiefang Road, Xi'an 710004, China; Xi'an Key Laboratory of Stem Cell and Regenerative Medicine, Institute of Medical Research, Northwestern Polytechnical University, 127 West Youyi Road, Xi'an 710072, China
Global dynamics of a ring-tethered three-satellite system in any plane	State Key Laboratory of Mechanics and Control for Aerospace Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China Department of Mechanical Engineering, York University, Toronto, Canada
N-heteroacenes as an organic gain medium for room temperature masers	Imperial College London Imperial College London Imperial College London University College London Beijing Institute of Technology University of Southern California Imperial College London Imperial College London University of Toronto University of Warwick Imperial College London
Discovering Structural Errors From Business Process Event Logs (Extended Abstract)	Nanjing University of Science and Technology, School of Computer Science and Engineering, Nanjing, China Nanjing University of Science and Technology, School of Computer Science and Engineering, Nanjing, China University of Toronto, Middleware Systems Research Group, Toronto, Canada Hohai University, College of Computer and Information, Nanjing, China
Atomic Level Regulation of Cobalt Single Atom Nanozymes: Engineering High Efficiency Catalase Mimics	Department of Electrical and Computer Engineering University of Toronto Toronto Ontario M5S1A4 Canada; Department of Chemistry Tsinghua University Beijing 100084 China Experimental Center of Advanced Materials School of Materials Science & Engineering Beijing Institute of Technology Beijing 100081 China College of Chemistry and Chemical Engineering Inner Mongolia University Hohhot 010021

	<p>China Beijing Synchrotron Radiation Facility Institute of High Energy Physics Chinese Academy of Sciences Beijing 100049 China Department of Materials Science and Engineering University of Toronto Toronto Ontario M5S3E4 Canada Department of Chemistry Tsinghua University Beijing 100084 China Department of Chemistry Tsinghua University Beijing 100084 China Department of Chemistry Tsinghua University Beijing 100084 China College of Chemistry and Chemical Engineering Inner Mongolia University Hohhot 010021 China CAS Engineering Laboratory for Nanozyme Institute of Biophysics Chinese Academic of Science Beijing 100101 China Department of Chemistry University of Toronto Ontario M5S3H6 Canada Department of Chemistry Tsinghua University Beijing 100084 China Experimental Center of Advanced Materials School of Materials Science & Engineering Beijing Institute of Technology Beijing 100081 China</p>
<p>Atomic Level Regulation of Cobalt Single Atom Nanozymes: Engineering High Efficiency Catalase Mimics</p>	<p>Department of Chemistry, Tsinghua University, Beijing, 100084 China; Department of Electrical and Computer Engineering, University of Toronto, Toronto, Ontario, M5S1A4 Canada; These authors contributed equally to this work. These authors contributed equally to this work.; Experimental Center of Advanced Materials, School of Materials Science & Engineering, Beijing Institute of Technology, Beijing, 100081 China College of Chemistry and Chemical Engineering, Inner Mongolia University, Hohhot, 010021 China; These authors contributed equally to this work. Beijing Synchrotron Radiation Facility, Institute of High Energy Physics, Chinese Academy of Sciences, Beijing, 100049 China Department of Materials Science and Engineering, University of Toronto, Toronto, Ontario, M5S3E4 Canada </p>

	<p>Department of Chemistry, Tsinghua University, Beijing, 100084 China Department of Chemistry, Tsinghua University, Beijing, 100084 China Department of Chemistry, Tsinghua University, Beijing, 100084 China College of Chemistry and Chemical Engineering, Inner Mongolia University, Hohhot, 010021 China CAS Engineering Laboratory for Nanozyme, Institute of Biophysics, Chinese Academic of Science, Beijing, 100101 China Department of Chemistry, University of Toronto, Ontario, M5S3H6 Canada Department of Chemistry, Tsinghua University, Beijing, 100084 China Experimental Center of Advanced Materials, School of Materials Science & Engineering, Beijing Institute of Technology, Beijing, 100081 China</p>
<p>N-heteroacenes as an organic gain medium for room temperature masers</p>	<p>Imperial College London Imperial College London Imperial College London Imperial College London University College London Beijing Institute of Technology University of Southern California Imperial College London Imperial College London University of Toronto University of Warwick Imperial College London</p>
<p>Steering Micromotors via Reprogrammable Optoelectronic Paths</p>	<p>Sauvage Laboratory for Smart Materials, School of Materials Science and Engineering, Harbin Institute of Technology (Shenzhen), Shenzhen 518055, China; Institute of Biomedical Engineering, University of Toronto, Toronto M5S 3E1, Canada Sauvage Laboratory for Smart Materials, School of Materials Science and Engineering, Harbin Institute of Technology (Shenzhen), Shenzhen 518055, China Institute of Biomedical Engineering, University of Toronto, Toronto M5S 3E1, Canada Institute of Biomedical Engineering, University of Toronto, Toronto M5S 3E1, Canada Sauvage Laboratory for Smart Materials, School of Materials Science and Engineering, Harbin Institute of</p>

	<p>Technology (Shenzhen), Shenzhen 518055, China Sauvage Laboratory for Smart Materials, School of Materials Science and Engineering, Harbin Institute of Technology (Shenzhen), Shenzhen 518055, China School of Physics and Astronomy and Institute of Natural Sciences, Shanghai Jiao Tong University, Shanghai 200240, China School of Mechatronical Engineering, Beijing Institute of Technology, Beijing 100081, China Sauvage Laboratory for Smart Materials, School of Materials Science and Engineering, Harbin Institute of Technology (Shenzhen), Shenzhen 518055, China Institute of Biomedical Engineering, University of Toronto, Toronto M5S 3E1, Canada</p>
<p>An open source engineering practice assistant training system based on virtual reality</p>	<p>Beihang University, Beihang School, Engineering training center, Beijing, China York University, The Lassonde school of engineering, Toronto, Canada York University, The Lassonde school of engineering, Toronto, Canada Beihang University, Beihang School, Engineering training center, Beijing, China Beihang University, Beihang School, Engineering training center, Beijing, China</p>
<p>Repairable Fountain Coded Storage Systems for Multi-Tier Mobile Edge Caching Networks</p>	<p>School of Electronics and Information Engineering, Harbin Institute of Technology (Shenzhen), Shenzhen, China School of Electronics and Information Engineering, Harbin Institute of Technology (Shenzhen), Shenzhen, China Department of Electrical, Computer and Biomedical Engineering, Ryerson University, Toronto, ON, Canada. Department of Computing Sciences, Texas A&M University "Corpus Christi, Corpus Christi, TX, USA School of Engineering and Mathematical Sciences, La Trobe University, Melbourne, VIC, Australia School of Electronics and Information Engineering, Harbin Institute of Technology (Shenzhen), Shenzhen, China</p>

<p>Two Parallel Single-Gimbal Control Moment Gyros Actuated Spacecraft Attitude Maneuver</p>	<p>Institute of Space Science and Applied Technology, Harbin Institute of Technology (Shenzhen), China Research Center of the Satellite Technology, Harbin Institute of the Technology, Harbin, China Research Center of the Satellite Technology, Harbin Institute of the Technology, Harbin, China Research Center of the Satellite Technology, Harbin Institute of the Technology, Harbin, China Shanghai Jiao-Tong University, Shanghai, China Ryerson University Toronto Canada</p>
<p>Postponed maintenance scheduling integrating state variation and environmental impact</p>	<p>Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON M5S 2EA, Canada School of Reliability and Systems Engineering, Beihang University, Beijing 100191, China</p>
<p>Stiffness modeling of n(3RRIS) reconfigurable series-parallel manipulators by combining virtual joint method and matrix structural analysis</p>	<p>State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, 150080, P. R. China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, 150080, P. R. China Department of Mechanical Engineering, York University, Toronto M3J1P3, Canada State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, 150080, P. R. China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150080, P. R. China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, 150080, P. R. China</p>
<p>Seasonal variation and influence factors of organophosphate esters in air particulate matter of a northeastern Chinese test home</p>	<p>University Corporation for Polar Research, Beijing 100875, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS)/International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China University Corporation for Polar Research, Beijing 100875, China; International Joint Research Center for Persistent Toxic</p>

	<p>Substances (IJRC-PTS)/International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China University Corporation for Polar Research, Beijing 100875, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS)/International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China IJRC-PTS-NA, Toronto M2N 6X9, Canada; University Corporation for Polar Research, Beijing 100875, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS)/International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China College of Agricultural Resource and Environment, Heilongjiang University, Harbin 150080, China Key Laboratory of Coastal Environmental Processes and Ecological Remediation, Yantai Institute of Coastal Zone Research, CAS, Yantai 264003, China University Corporation for Polar Research, Beijing 100875, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS)/International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China University Corporation for Polar Research, Beijing 100875, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS)/International Joint Research Center for Arctic Environment and Ecosystem</p>
--	---

	<p>(IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China University Corporation for Polar Research, Beijing 100875, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS)/International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China University Corporation for Polar Research, Beijing 100875, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS)/International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China University Corporation for Polar Research, Beijing 100875, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS)/International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China IJRC-PTS-NA, Toronto M2N 6X9, Canada; University Corporation for Polar Research, Beijing 100875, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS)/International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China School of Environment, Harbin Institute of Technology, Harbin 150090, China</p>
<p>Direct Observation of Defectâ€œAided Structural Evolution in a Nickelâ€œRich Layered Cathode</p>	<p>Key Laboratory of Carbon Materials of Zhejiang Province Institute of New Materials and Industrial Technologies</p>

Wenzhou University Wenzhou Zhejiang 325027 China, Department of Chemical Engineering University of Waterloo Waterloo Ontario N2L 3G1 Canada, Center for Functional Nanomaterials Brookhaven National Laboratory Upton NY 11973 USA | Department of Chemistry and Chemical Biology Harvard University 12 Oxford Street Cambridge MA 02138 USA, Department of Chemistry and Department of Computer Science University of Toronto Toronto Ontario M5S 3H6 Canada | Energy and Environment Directorate Pacific Northwest National Laboratory 902 Battelle Boulevard Richland WA 99352 USA, College of Chemistry and Chemical Engineering Xiamen University Xiamen Fujian 361005 China | State Key Laboratory of Solidification Processing School of Materials Science and Engineering Northwestern Polytechnical University Xian 710072 China | Department of Materials Science and Chemical Engineering Stony Brook University Stony Brook NY 11794 USA | Center for Functional Nanomaterials Brookhaven National Laboratory Upton NY 11973 USA | Key Laboratory of Carbon Materials of Zhejiang Province Institute of New Materials and Industrial Technologies Wenzhou University Wenzhou Zhejiang 325027 China | Department of Materials Science and Chemical Engineering Stony Brook University Stony Brook NY 11794 USA | National Laboratory for Condensed Matter Physics Institute of Physics Chinese Academy of Sciences Beijing 100190 China | Key Laboratory of Carbon Materials of Zhejiang Province Institute of New Materials and Industrial Technologies Wenzhou University Wenzhou Zhejiang 325027 China | Department of Chemical Engineering University of Waterloo Waterloo Ontario N2L 3G1 Canada |

	<p>Center for Functional Nanomaterials, Brookhaven National Laboratory, Upton, NY, 11973 USA; National Laboratory for Condensed Matter Physics, Institute of Physics, Chinese Academy of Sciences, Beijing, 100190 China</p>
<p>Direct Observation of Defect-Aided Structural Evolution in a Nickel-Rich Layered Cathode</p>	<p>Center for Functional Nanomaterials Brookhaven National Laboratory Upton NY 11973 USA; Key Laboratory of Carbon Materials of Zhejiang Province, Institute of New Materials and Industrial Technologies, Wenzhou University, Wenzhou, Zhejiang, 325027, China.; Department of Chemical Engineering University of Waterloo Waterloo Ontario N2L 3G1 Canada Department of Chemistry and Department of Computer Science University of Toronto Toronto Ontario M5S 3H6 Canada; Department of Chemistry and Chemical Biology Harvard University 12 Oxford Street Cambridge MA 02138 USA Energy and Environment Directorate, Pacific Northwest National Laboratory, 902 Battelle Boulevard, Richland, WA, 99352, USA.; College of Chemistry and Chemical Engineering Xiamen University Xiamen Fujian 361005 China State Key Laboratory of Solidification Processing, School of Materials Science and Engineering, Northwestern Polytechnical University, Xian 710072, China Department of Materials Science and Chemical Engineering, Stony Brook University, Stony Brook, NY 11794, USA Center for Functional Nanomaterials, Brookhaven National Laboratory, Upton, NY 11973 (USA) Key Laboratory of Carbon Materials of Zhejiang Province, Institute of New Materials and Industrial Technologies, Wenzhou University, Wenzhou, Zhejiang, 325027, China. Department of Materials Science and Chemical Engineering, Stony Brook University, Stony Brook, NY 11794, USA National Laboratory for Condensed</p>

	<p>Matter Physics, Institute of Physics, Chinese Academy of Sciences, Beijing 100190, China Key Laboratory of Carbon Materials of Zhejiang Province, Institute of New Materials and Industrial Technologies, Wenzhou University, Wenzhou, Zhejiang, 325027, China. DEPARTMENT OF CHEMICAL ENGINEERING , UNIVERSITY OF WATERLOO , WATERLOO , ONTARIO , N2L 3G1 , CANADA Center for Functional Nanomaterials Brookhaven National Laboratory Upton NY 11973 USA; National Laboratory for Condensed Matter Physics, Institute of Physics, Chinese Academy of Sciences, Beijing, 100190, China.</p>
<p>Controller-Aware Path optimization for Enhancing Path Tracking Performance</p>	<p>Beijing Institute of Technology, School of Mechanical Engineering, Beijing, China Beijing Institute of Technology, School of Mechanical Engineering, Beijing, China Institute for Aerospace Studies, University of Toronto, Toronto Robotics and Artificial Intelligence Laboratory, Toronto, Canada Beijing Institute of Technology, School of Mechanical Engineering, Beijing, China Beijing Institute of Technology, School of Mechanical Engineering, Beijing, China</p>
<p>Opportunistic Data Collection in Cognitive Wireless Sensor Networks: Air-Ground Collaborative Online Planning</p>	<p>Institute of Systems Engineering, Academy of Military Sciences, Beijing, China; College of Communications Engineering, Army Engineering University, Nanjing, China [College of Communications Engineering, Army Engineering University, Nanjing, China] [College of Communications Engineering, Army Engineering University, Nanjing, China] [College of Communications Engineering, Army Engineering University, Nanjing, China] Department of Electrical and Computer Engineering Ryerson University Toronto Canada College of Electronic and information Engineering, Nanjing University of Aeronautics and Astronautics Nanjing, China [College of</p>

	Communications Engineering, Army Engineering University, Nanjing, China]
Opportunistic Utilization of Dynamic Multi-UAV in Device-to-Device Communication Networks	[College of Communications Engineering, Army Engineering University, Nanjing, China] [College of Communications Engineering, Army Engineering University, Nanjing, China] [College of Communications Engineering, Army Engineering University, Nanjing, China] [College of Communications Engineering, Army Engineering University, Nanjing, China] [College of Communications Engineering, Army Engineering University, Nanjing, China] College of Electronic and information Engineering, Nanjing University of Aeronautics and Astronautics Nanjing, China Department of Electrical and Computer Engineering Ryerson University Toronto Canada College of Information and Communication, National University of Defense Technology, Wuhanxs, China National Innovation Institute of Defense Technology, Academy of Military Sciences PLA China, Beijing, China
Type synthesis of metamorphic mechanisms with scissor-like linkage based on different kinds of connecting pairs	State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, 150001, PR China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, 150001, PR China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, 150001, PR China School of Mechanical Engineering, York University, Toronto, Canada
Study on the reliability assessment and early-warning method of online auditing based on the perspective of IT control	Nanjing Audit University, Nanjing, China University of Toronto, Toronto, Canada Nanjing University of Aeronautics and Astronautics, Nanjing, China
A Novel Stick-Slip Nanopositioning Stage Integrated with a Flexure Hinge-Based Friction Force Adjusting Structure	School of Mechatronic Engineering and Automation, Shanghai University, Shanghai 200444, China Department of Mechanical & Industrial Engineering University of Toronto Toronto ON M5S 3G8 Canada School of Mechatronic Engineering and Automation, Shanghai University, Shanghai 200444, China College of Mechanical and Electrical

	<p>Engineering & Robotics and Microsystem Center, Soochow University, Suzhou 215021, China. School of Mechatronic Engineering and Automation, Shanghai University, Shanghai 200444, China College of Automation, Harbin Engineering University, Harbin 150001, China Department of Mechanical & Industrial Engineering University of Toronto Toronto ON M5S 3G8 Canada</p>
<p>Modeling gas/particle partitioning of polybrominated diphenyl ethers (PBDEs) in the atmosphere: A review</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China Institute of Ocean Sciences, Department of Fisheries and Oceans, P.O. Box 6000, Sidney, BC V8L 4B2, Canada Department of Pediatrics, Department of Environmental Medicine, New York University School of Medicine, New York, NY 10016, USA Institute of Natural Sciences, North-Eastern Federal University, Russia IJRC-PTS-NA, Toronto, Ontario M2N 6X9, Canada; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China</p>
<p>A data-driven network model for the emerging COVID-19 epidemics in Wuhan, Toronto and Italy</p>	<p>College of Mathematical Sciences, Harbin Engineering University, Harbin, Heilongjiang, 150001, China College of Mathematical Sciences, Harbin Engineering University, Harbin, Heilongjiang, 150001, China School of Engineering and Mathematical Sciences, Melbourne, La Trobe University, 3086, Australia College of Mathematical Sciences, Harbin Engineering University,</p>

	<p>Harbin, Heilongjiang, 150001, China College of Mathematical Sciences, Harbin Engineering University, Harbin, Heilongjiang, 150001, China Instituto Politécnico Nacional, Centro de Biotecnología Genómica, Cd. Reynosa, Tamaulipas, 88710, México, Mexico Department of Mathematics, Tulane University, New Orleans, LA, 70118, USA Lamps and Center of Disease Modelling (CDM), Department of Mathematics and Statistics, York University, Toronto, ON, M3J 1P3, Canada</p>
<p>Mechanically robust ANF/MXene composite films with tunable electromagnetic interference shielding performance</p>	<p>CAS Key Laboratory of Nanosystem and Hierarchical Fabrication and CAS Center for Excellence in Nanoscience, National Center for Nanoscience and Technology, Beijing 100190, China; University of Chinese Academy of Sciences, Beijing 100049, China School of Aeronautic Science and Engineering, Beihang University, Beijing 100191, China CAS Key Laboratory of Nanosystem and Hierarchical Fabrication and CAS Center for Excellence in Nanoscience, National Center for Nanoscience and Technology, Beijing 100190, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario M5S 3G8, Canada Center for Mechanics of Solids, Structures and Materials, Department of Aerospace Engineering and Engineering Mechanics, The University of Texas at Austin, Austin, TX 78712, USA State Key Laboratory for Turbulence and Complex Systems, College of Engineering, Peking University, Beijing 100871, China CAS Key Laboratory of Nanosystem and Hierarchical Fabrication and CAS Center for Excellence in Nanoscience, National Center for Nanoscience and Technology, Beijing 100190, China CAS Key Laboratory of Nanosystem and Hierarchical Fabrication and CAS Center for Excellence in Nanoscience, National</p>

	Center for Nanoscience and Technology, Beijing 100190, China
Predicting disease-associated genes: Computational methods, databases, and evaluations	Division of Biomedical Engineering University of Saskatchewan Saskatoon Canada; Princess Margaret Cancer Centre University Health Network Toronto Canada School of Computer Science and Technology, Northwestern Polytechnical University, China School of Mathematics and Statistics, Hainan Normal University, Haikou, China; Department of Mechanical Engineering and Department of Computer Science University of Saskatchewan Saskatoon Canada
Modeling and Dynamics Analysis of Zika Transmission with Limited Medical Resources	Department of Mathematics, Nanjing University of Aeronautics and Astronautics, Nanjing , People's Republic of China Department of Mathematics, Nanjing University of Aeronautics and Astronautics, Nanjing 210016, People's Republic of China Departamento de Matemática Aplicada, Instituto de Matemática e Estatística, Universidade de São Paulo, Rua do Matão, 1010, Cidade Universitária, São Paulo, SP, CEP 05508-090, Brazil. LAMPS and Department of Mathematics and Statistics, York University, Toronto, ON M3J 1P3, Canada
Highly expanded fine-cell foam of polylactide/polyhydroxyalkanoate/nano-fibrillated polytetrafluoroethylene composites blown with mold-opening injection molding	Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada; Dr. Foam Canada, Ontario, Canada. Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada; Department of Mechanical Engineering, Urmia University, Urmia, Iran Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada; School of Materials Science and Engineering, Harbin

	Engineering University, Harbin, Heilongjiang, PR China.
Long-term impacts of urbanization through population migration on China's energy demand and CO2 emissions	School of Economics and Management, Harbin Institute of Technology (Shenzhen), Shenzhen, China; Environmental Science and New Energy Technology Engineering Laboratory, Tsinghua-Berkeley Shenzhen Institute, Shenzhen, China Environmental Science and New Energy Technology Engineering Laboratory, Tsinghua-Berkeley Shenzhen Institute, Shenzhen, China School of Environment and Nature Resources, Renmin University of China, Beijing, China School of Environment and Nature Resources, Renmin University of China, Beijing, China Department of Economics, York University, Toronto, Canada; Environmental Science and New Energy Technology Engineering Laboratory, Tsinghua-Berkeley Shenzhen Institute, Shenzhen, China
Quantitative non-destructive single-frequency thermal-wave-radar imaging of case depths in hardened steels	Department of Astronautical Science and Mechanics, Harbin Institute of Technology, Harbin 150001, China; Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT), Department of Mechanical and Industrial Engineering, University of Toronto, Toronto M5S 3G8, Canada Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT), Department of Mechanical and Industrial Engineering, University of Toronto, Toronto M5S 3G8, Canada Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT), Department of Mechanical and Industrial Engineering, University of Toronto, Toronto M5S 3G8, Canada; School of Optoelectronic Science and Engineering and Collaborative Innovation Center of Suzhou Nano Science and Technology, Soochow University, Suzhou 215006, China Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT), Department of Mechanical and Industrial

	Engineering, University of Toronto, Toronto M5S 3G8, Canada
Cooperative Path Planning for Aerial Recovery of a UAV Swarm Using Genetic Algorithm and Homotopic Approach	Harbin Institute of Technology, School of Astronautics, Harbin 150001, China Harbin Institute of Technology, School of Astronautics, Harbin 150001, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON M5S 3G8, Canada; Harbin Institute of Technology, School of Astronautics, Harbin 150001, China Harbin Institute of Technology, School of Astronautics, Harbin 150001, China Harbin Institute of Technology, School of Astronautics, Harbin 150001, China
Definition and Application of Variable Resistance Coefficient for Wheeled Mobile Robots on Deformable Terrain	State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China BeiHang University, Beijing, China Department of Aerospace Engineering, Ryerson University, Toronto, ON, Canada#TAB# Department of Aerospace Engineering, Ryerson University, Toronto, ON, Canada#TAB#
Partially debonded circular inclusion in one-dimensional quasicrystal material with piezoelectric effect	State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China Dept. of Mechanical & Industrial Engineering, University of Toronto, Toronto, Canada#TAB# School of Science, Harbin Institute of Technology, Shenzhen, China. State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China

<p>Dynamics of orbital boost maneuver of low Earth orbit satellites by electrodynamic tethers</p>	<p>School of Aeronautics and Astronautics Shanghai Jiao Tong University Shanghai China School of Aeronautics and Astronautics Shanghai Jiao Tong University Shanghai China Department of Mechanical Engineering, York University, Toronto, Canada School of Science Nanjing University of Science and Technology Nanjing China School of Aeronautics and Astronautics Shanghai Jiao Tong University Shanghai China</p>
<p>Quasi-bielliptic three-body problem</p>	<p>Department of Aerospace Engineering, Ryerson University, Toronto, ON, M5B 2K3, Canada School of Astronautics, Beihang University, Beijing 100191 (China)</p>
<p>Analysis of consumer attitudes towards autonomous, connected, and electric vehicles: A survey in China</p>	<p>School of Management and Economics, Beijing Institute of Technology, Beijing, 100081, China; Department of Civil & Mineral Engineering, University of Toronto, Toronto, ON, M5S 1A4, Canada; Collaborative Innovation Center of Electric Vehicles in Beijing, Beijing, 100081, China School of Management and Economics, Beijing Institute of Technology, Beijing, 100081, China; Beijing Key Laboratory of Energy Economics and Environmental Management, Beijing, 100081, China; Collaborative Innovation Center of Electric Vehicles in Beijing, Beijing, 100081, China; Sustainable Development Research Institute for Economy and Society of Beijing, Beijing, 100081, China School of Management and Economics, Beijing Institute of Technology, Beijing, 100081, China; Collaborative Innovation Center of Electric Vehicles in Beijing, Beijing, 100081, China; Department of Civil Engineering, University of Ottawa, Ottawa, ON, K1N 6N5, Canada</p>
<p>Health index extraction for power-shift steering transmission using selected oil field data</p>	<p>Jianglu Machinery and Electronics Group Company, NORINCO Group, Xiangtan, China; School of Mechanical Engineering, Beijing Institute of Technology, Beijing, China School of Mechanical Engineering, Beijing Institute of Technology, Beijing,</p>

	China Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, ON, Canada; School of Mechanical Engineering, Beijing Institute of Technology, Beijing, China School of Mechanical Engineering, Beijing Institute of Technology, Beijing, China
The Discrete Stockwell Transforms for Infinite-Length Signals and Their Real-Time Implementations	Beijing Institute of Technology, School of Information and Electronics, Beijing, China, 100081 York University, Department of Mathematics and Statistics, Toronto, Canada, M3J 1P3
Opportunistic UAV Utilization in Wireless Networks: Motivations, Applications, and Challenges	[Army Engineering University, Nanjing] [Army Engineering University, Nanjing] [Institute of Communications Engineering, Nanjing, China] [Army Engineering University, Nanjing] Hohai University, Nanjing, China [Nanjing University of Aeronautics and Astronautics, Nanjing, China] Univ. of Toronto, Toronto, ON, Canada
Dynamic maintenance strategy with iteratively updated group information	School of Reliability and Systems Engineering, Beihang University, Beijing, China School of Reliability and Systems Engineering, Beihang University, Beijing, China School of Reliability and Systems Engineering, Beihang University, Beijing, China Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, Canada School of Reliability and Systems Engineering, Beihang University, Beijing, China
Design of hazard identification system for aircraft power supply system based on SIMPLORER and MATLAB co-simulation	Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada; Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China College of Science, Nanjing University of Aeronautics and Astronautics, Nanjing, China; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent

	<p>Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China</p>
<p>Design of hazard identification system for aircraft power supply system based on SIMPLORER and MATLAB co-simulation:</p>	<p>Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada; Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China College of Science, Nanjing University of Aeronautics and Astronautics, Nanjing, China; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada [Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China] [Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China] [Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China]</p>
<p>DeepNOMA: A Unified Framework for NOMA Using Deep Multi-Task Learning</p>	<p>School of Information and Electronics, Beijing Institute of Technology, Beijing, China; School of Information and Electronics, Beijing Institute of Technology, Beijing, China; School of Information and Electronics, Beijing</p>

	<p>Institute of Technology, Beijing, China; Department of Electrical, Computer and Biomedical Engineering, Ryerson University, Toronto, ON, Canada. DoCoMo Beijing Communications Laboratories Co., Ltd Beijing China DoCoMo Beijing Communications Laboratories Co., Ltd Beijing China</p>
<p>A simplified finite volume lattice Boltzmann method for simulations of fluid flows from laminar to turbulent regime, Part II: Extension towards turbulent flow simulation</p>	<p>National Key Laboratory of Science and Technology on Aerodynamic Design and Research, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, China National Key Laboratory of Science and Technology on Aerodynamic Design and Research, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, China Department of Mechanical & Industrial Engineering, Ryerson University, Toronto, Ontario, Canada M5B 2K3 National Key Laboratory of Science and Technology on Aerodynamic Design and Research, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, China National Key Laboratory of Science and Technology on Aerodynamic Design and Research, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, China</p>
<p>Thermo-responsive separation membrane with smart anti-fouling and self-cleaning properties</p>	<p>MIIT Key Laboratory of Critical Materials Technology for New Energy Conversion and Storage, State Key Laboratory of Urban Water Resource and Environment, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin 150001, China Beijing Originwater Technology Co., LTD, Beijing 109591, China MIIT Key Laboratory of Critical Materials Technology for New Energy Conversion and Storage, State Key Laboratory of Urban Water Resource and Environment, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin 150001, China Key Laboratory of Materials Processing and</p>

	<p>Mold (Zhengzhou University), Ministry of Education, National Engineering Research Center for Advanced Polymer Processing Technology, Zhengzhou University, Zhengzhou 450002, China Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, M5S 3G8 Ontario, Canada MIT Key Laboratory of Critical Materials Technology for New Energy Conversion and Storage, State Key Laboratory of Urban Water Resource and Environment, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin 150001, China MIT Key Laboratory of Critical Materials Technology for New Energy Conversion and Storage, State Key Laboratory of Urban Water Resource and Environment, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin 150001, China</p>
<p>Surface recombination velocity on wet-cleaned silicon wafers using heterodyne lock-in camera interferometry imaging: measurement uniqueness investigation</p>	<p>Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT), University of Toronto, Toronto, M5S 3G8, Canada; School of Instrumentation Science and Engineering, Harbin Institute of Technology, Harbin, 150001, People’s Republic of China Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT), University of Toronto, Toronto, M5S 3G8, Canada Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT), University of Toronto, Toronto, M5S 3G8, Canada Advanced Processing Equipment Technology (APET) Co., Ltd, 20-15, Sukwoo-Dong, Hwaseong-City, Gyeonggi-do 463-802, Republic of Korea School of Instrumentation Science and Engineering, Harbin Institute of Technology, Harbin, 150001, People’s Republic of China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, 150001, People’s Republic of</p>

	China Center for Advanced Diffusion-Wave and Photoacoustic Technologies (CADIPT), University of Toronto, Toronto, M5S 3G8, Canada
Efficient Algorithms for Flexible Job Shop Scheduling with Parallel Machines	University of Toronto School of Economics & Management, Beijing University of Posts and Telecommunications, Beijing, China University of Texas at Dallas; Beijing Institute of Technology University of Texas at Dallas - Naveen Jindal School of Management © Texas A&M University
Silicon Nitride Whisker-Reinforced Aluminum Matrix Composites: Twinning and Precipitation Behavior	School of Materials Science and Engineering, Tongji University, Shanghai 200092, China School of Materials Science and Engineering, Tongji University, Shanghai 200092, China School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China School of Materials Science and Engineering, Tongji University, Shanghai 200092, China; College of Mechatronics and Control Engineering, Shenzhen University, Shenzhen 518060, China Department of Mechanical and Industrial Engineering, Ryerson University, Toronto, ON M5B 2K3, Canada
The spatial fourth-order compact splitting FDTD scheme with modified energy-conserved identity for two-dimensional Lorentz model	School of Science, Nanjing University of Science and Technology, Nanjing, Jiangsu, 210094, China School of Mathematical Sciences, Ocean University of China, Qingdao, 266100, China; Department of Mathematics and Statistics, York University, Toronto, Ontario, M3J 1P3, Canada
Gas/particle partitioning of semi-volatile organic compounds in the atmosphere: Transition from unsteady to steady state	Heilongjiang Provincial Key laboratory of Polar Environment and Ecosystem (HPKL-PEE), School of Environment, HIT, Harbin 150090, China; IJRC-PTS-NA, Toronto M2N 6X9, Canada; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; International Joint

	<p>Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, HIT (PA-HIT), Harbin 150090, China Heilongjiang Provincial Key laboratory of Polar Environment and Ecosystem (HPKL-PEE), School of Environment, HIT, Harbin 150090, China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, HIT (PA-HIT), Harbin 150090, China International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology (HIT), Harbin 150090, China; International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), Polar Academy, HIT (PA-HIT), Harbin 150090, China Institute of Ocean Sciences, Department of Fisheries and Oceans, P.O. Box 6000, Sidney, BC V8L 4B2, Canada Wadsworth Center, New York State Department of Health, Department of Environmental Health Sciences, School of Public Health, State University of New York at Albany, Empire State Plaza, P.O. Box 509, Albany, NY 12201-0509, USA</p>
<p>A simplified finite volume lattice Boltzmann method for simulations of fluid flows from laminar to turbulent regime, Part I: Numerical framework and its application to laminar flow simulation</p>	<p>National Key Laboratory of Science and Technology on Aerodynamic Design and Research, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, China National Key Laboratory of Science and Technology on Aerodynamic Design and Research, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, China Department of Mechanical & Industrial Engineering, Ryerson University, Toronto, Ontario, Canada M5B 2K3 National Key</p>

	<p>Laboratory of Science and Technology on Aerodynamic Design and Research, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, China National Key Laboratory of Science and Technology on Aerodynamic Design and Research, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, China</p>
<p>The effect of similarity on the evolution of fairness in the ultimatum game</p>	<p>School of Electronic and Information Engineering, Beihang University, Beijing 100191, China; Key Laboratory of Advanced technology of Near Space Information System (Beihang University), Ministry of Industry and Information Technology of China, China Department of Computer Science, University of Toronto, 6 King's College Road, Toronto, Ontario M5S 3G4, Canada School of Electronic and Information Engineering, Beihang University, Beijing 100191, China; Key Laboratory of Advanced technology of Near Space Information System (Beihang University), Ministry of Industry and Information Technology of China, China School of Electronic and Information Engineering, Beihang University, Beijing 100191, China; Key Laboratory of Advanced technology of Near Space Information System (Beihang University), Ministry of Industry and Information Technology of China, China School of Mathematical Sciences, University of Electronic Science and Technology of China, Chengdu 611731, China</p>
<p>Attitude Tracking Control for Rigid-Flexible Coupled Spacecraft with Guaranteed Performance Bounds</p>	<p>Harbin Institute of Technology, 150001 Harbin, People's Republic of China Ryerson University, Toronto, Ontario, M5B 2K3, Canada Harbin Institute of Technology, 150001 Harbin, People's Republic of China Harbin Institute of Technology, 150001 Harbin, People's Republic of China</p>

<p>Chloride concentration distributions in fatigue damaged RC beams revealed by energy-dispersive X-ray spectroscopy</p>	<p>School of Transportation Science and Engineering Beihang University Beijing 100191 China School of Transportation Science and Engineering Beihang University Beijing 100191 China Department of Civil and Mineral Engineering, University of Toronto, Toronto, ON M5S 1A4, Canada School of Civil Engineering, Harbin Institute of Technology, Harbin 150090, China) Laboratory of Corrosion Science & Electrochemical Engineering, Department of Civil and Environmental Engineering, Washington State University, Pullman, WA 99164-2910, USA</p>
<p>Graph Model Under Unknown and Fuzzy Preferences</p>	<p>School of Economics and Management, Nanjing University of Science and Technology, Nanjing, China; Jiangsu Industrial Cluster Decision-making and Consulting Research Base, Nanjing, China; Centre for Low-carbon Economy and Environment Policy Studies, Nanjing, China; Centre for International Economy and Trade Studies, Nanjing, China Centre for International Governance Innovation, Waterloo, Canada; Department of Systems Design Engineering, University of Waterloo, Waterloo, Canada; Balsillie School of International Affairs, Waterloo, Canada Department of Mathematics, Wilfrid Laurier University, Waterloo ON, Canada Department of Mechanical and Industrial Engineering , Ryerson University , Toronto, ON, Canada School of Economics, Ocean University of China , Qingdao, China</p>
<p>Effects of the reinforcement ratio and chloride corrosion on the fatigue behavior of RC beams</p>	<p>School of Transportation Science and Engineering, Beihang University, 37 Xueyuan Road, Haidian District, Beijing 100191, China School of Transportation Science and Engineering, Beihang University, 37 Xueyuan Road, Haidian District, Beijing 100191, China School of Transportation Science and Engineering, Beihang University, 37 Xueyuan Road, Haidian District, Beijing 100191, China </p>

	<p>Department of Civil and Mineral Engineering University of Toronto 35 St. George Street. Toronto, ON M5S 1A4, Canada</p>
<p>DDcGAN: A Dual-Discriminator Conditional Generative Adversarial Network for Multi-Resolution Image Fusion</p>	<p>Electronic Information School, Wuhan University Wuhan China Electronic Information School, Wuhan University Wuhan China School of Computer Science and Technology, Harbin Institute of Technology, Harbin, China Electronic Information School, Wuhan University Wuhan China Department of Electrical, Computer, and Biomedical Engineering; Ryerson University; Toronto Canada</p>
<p>Universal unilateral electro-spinning/spraying strategy to construct water-unidirectional Janus membranes with well-tuned hierarchical micro/nanostructures</p>	<p> School of Marine Science and Technology, Sino-Europe Membrane Technology Research Institute, Harbin Institute of Technology, Weihai 264209, P. R. China Key Laboratory of Materials Processing and Mold (Zhengzhou University), Ministry of Education; National Engineering Research Center for Advanced Polymer Processing Technology Zhengzhou University Zhengzhou 450002 China Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering University of Toronto Toronto Ontario Canada </p>
<p>Contract Design for Time Resource Assignment and Pricing in Backscatter-Assisted RF-Powered Networks</p>	<p>School of Information and Electronics, Beijing Institute of Technology, Beijing, China; School of Computer Science and Engineering Nanyang Technological University, Singapore Department of Electrical Engineering and Computer Science, York University, Toronto, ON, Canada. School of Information and Electronics, Beijing Institute of Technology, Beijing, China; School of Information and Electronics, Beijing Institute of Technology, Beijing, China;</p>
<p>AIM 2020: Scene Relighting and Illumination Estimation Challenge</p>	<p>EPFL, Lausanne, Switzerland EPFL, Lausanne, Switzerland EPFL, Lausanne, Switzerland ETHZ, Zrich, Switzerland EECS, York University, Toronto, Canada EECS, York University, Toronto, Canada </p>

	<p> National University of Defense Technology, Changsha, China National University of Defense Technology, Changsha, China National University of Defense Technology, Changsha, China Department of Electronic and Information Engineering, The Hong Kong Polytechnic University, Hong Kong, China CS laboratory at the Ecole Polytechnique, Palaiseau, France; Department of Electronic and Information Engineering, The Hong Kong Polytechnic University, Hong Kong, China Department of Electronic and Information Engineering, The Hong Kong Polytechnic University, Hong Kong, China Jadavpur University, Kolkata, India Indian Institute of Technology, Jodhpur, India Punjab Engineering College (PEC), Chandigarh, India Dalian Maritime University, Dalian, China China Everbright Bank, Beijing, China Couger Inc, Tokyo, Japan Sethu Institute of Technology, Virudhunagar, India Thiagarajar College of Engineering, Virudhunagar, India Computer Vision and Computational Photography Group, School of Computer Science, Northwestern Polytechnical University, Xi'an, China Computer Vision and Computational Photography Group, School of Computer Science, Northwestern Polytechnical University, Xi'an, China Computer Vision and Computational Photography Group, School of Computer Science, Northwestern Polytechnical University, Xi'an, China Computer Vision and Computational Photography Group, School of Computer Science, Northwestern Polytechnical University, Xi'an, China Indian Institute of Technology Madras, Chennai, India Indian Institute of Technology Madras, Chennai, India Indian Institute of Technology Madras, Chennai, India College of Engineering, Trivandrum, India College of Engineering, Trivandrum, India College </p>
--	---

<p>PLSD: A Perceptually Accurate Line Segment Detection Approach</p>	<p>College of Automation Engineering, Nanjing University of Aeronautics and Astronautics Nanjing, China Nondestructive Detection and Monitoring Technology for High Speed Transportation Facilities, Key Laboratory of Ministry of Industry and Information Technology, Nanjing, China; College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, China College of Automation Engineering, Nanjing University of Aeronautics and Astronautics Nanjing, China York University , Toronto Canada</p>
<p>Primed Left Ventricle Heart Perfusion Creates Physiological Aortic Pressure in Porcine Hearts</p>	<p>From the Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, Ontario Canada. School of Astronautics, Harbin Institute of Technology, Harbin, China.; From the Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, Ontario Canada. School of Mechatronic Engineering and Automation, Shanghai University, China Department of Cardiovascular Surgery, University Health Network, Canada.; From the Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, Ontario Canada. Department of Cardiovascular Surgery, University Health Network, Canada. School of Mechatronic Engineering and Automation, Shanghai University, China From the Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, Ontario Canada. From the Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, Ontario Canada. Schaefer School of Engineering and Science Stevens Institute of Technology, Hoboken, NJ From the Department of Mechanical & Industrial Engineering, University of Toronto, Toronto, Ontario Canada. Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada.; Department of</p>

	Cardiovascular Surgery, University Health Network, Canada.
Effects of clamping force on carrying energy ability of a harmonic scalpel	Beijing Advanced Innovation Center for Biomedical Engineering, Beihang University, Beijing, 100191, China Beijing Advanced Innovation Center for Biomedical Engineering, Beihang University, Beijing, 100191, China Shandong Economy and Information Technology Institute, No. 134, Jiefang Road, Jiâ€™nan, 250013, China Beijing Advanced Innovation Center for Biomedical Engineering, Beihang University, Beijing, 100191, China Beijing Advanced Innovation Center for Biomedical Engineering, Beihang University, Beijing, 100191, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada
Broad-band lead halide perovskite quantum dot single-mode lasers	Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences, Beijing 100049, China; Key Laboratory of Materials for High-Power Laser, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, Shanghai, China; Shanghai; Hangzhou Institute for Advanced Study, UCAS, 310024 Hangzhou, China Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences, Beijing 100049, China; China; Key Laboratory of Materials for High-Power Laser, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, Shanghai, China; Shanghai Hangzhou Institute for Advanced Study; Key Laboratory of Materials for High-Power Laser, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, Shanghai, China; Shanghai; Hangzhou Institute for Advanced Study, UCAS, 310024 Hangzhou, China Department of Electrical and Computer Engineering, University of Toronto, 35 St

	<p>George Street, Toronto, Ontario M5S 1A4, Canada; Toronto; Canada Division of Physical Sciences and Engineering, King Abdullah University of Science and Technology (KAUST), Thuwal 23955-6900, Kingdom of Saudi Arabia; Thuwal 23955-6900; Kingdom of Saudi Arabia Nanjing; China; College of Science, Nanjing University of Aeronautics and Astronautics, Nanjing, China Hangzhou Institute for Advanced Study; Key Laboratory of Materials for High-Power Laser, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, Shanghai, China; Shanghai; Hangzhou Institute for Advanced Study, UCAS, 310024 Hangzhou, China</p>
<p>Deep Learning-Based Approach for Civil Aircraft Hazard Identification and Prediction</p>	<p>Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada; Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China [University of Toronto, Toronto, Canada, College of Science, Nanjing University of Aeronautics and Astronautics, Nanjing, China] [Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China] [Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China] Department of Mechanical Engineering, Center for Advanced Life Cycle Engineering, University of Maryland, College Park, USA; Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China [Civil Aviation Key Laboratory of Aircraft Health Monitoring and Intelligent Maintenance, College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing, China]</p>

<p>Injection Molded Strong Polypropylene Composite Foam Reinforced with Rubber and Talc</p>	<p>Key Laboratory for Liquid-Solid Structural Evolution and Processing of Materials (Ministry of Education), Shandong University, Jinan, Shandong, 250061 China; Centre for Precision Engineering, School of Mechatronics Engineering, Harbin Institute of Technology, Harbin, 150001 China; Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario, M5S 3G8 Canada Centre for Precision Engineering, School of Mechatronics Engineering, Harbin Institute of Technology, Harbin, 150001 China Key Laboratory for Liquid-Solid Structural Evolution and Processing of Materials (Ministry of Education), Shandong University, Jinan, Shandong, 250061 China Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario, M5S 3G8 Canada Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario, M5S 3G8 Canada</p>
<p>An empirical examination of individual green policy perception and green behaviors</p>	<p>Antai College of Economics and Management, Shanghai Jiao Tong University, Shanghai, China School of Management, Harbin Institute of Technology, Harbin, China School of Public Administration, Central China Normal University, Wuhan, China University of Toronto, Toronto, Canada School of Management and Labor Relations, Rutgers University, Piscataway, New Jersey, USA</p>
<p>China's long-term low carbon transition pathway under the urbanization process</p>	<p>Tsinghua-Berkeley Shenzhen Institute, Tsinghua University, Shenzhen, 518055, China; School of Economics and Management, Harbin Institute of Technology (Shenzhen), Shenzhen, 518055, China School of Environment and Natural Resources, Renmin University of</p>

	<p>China, Beijing 100872,China) School of Environment and Natural Resources, Renmin University of China, Beijing 100872,China) School of Environment and Natural Resources, Renmin University of China, Beijing 100872,China) School of Environment and Natural Resources, Renmin University of China, Beijing 100872,China) Department of Economics, York University, Toronto, M3J1P3, Canada; Tsinghua-Berkeley Shenzhen Institute, Tsinghua University, Shenzhen, 518055, China</p>
<p>A practical methodology to evaluate internationally consistent energy data for China's transport sector</p>	<p>Environmental Science and New Energy Technology Engineering Laboratory, Tsinghua-Berkeley Shenzhen Institute, Shenzhen, 518055, China; School of Economics and Management, Harbin Institute of Technology (Shenzhen), Shenzhen, 518055, China Environmental Science and New Energy Technology Engineering Laboratory, Tsinghua-Berkeley Shenzhen Institute, Shenzhen, 518055, China Environmental Science and New Energy Technology Engineering Laboratory, Tsinghua-Berkeley Shenzhen Institute, Shenzhen, 518055, China School of Environment and Nature Resources, Renmin University of China, Beijing, 100872, China School of Environment and Nature Resources, Renmin University of China, Beijing, 100872, China Environmental Science and New Energy Technology Engineering Laboratory, Tsinghua-Berkeley Shenzhen Institute, Shenzhen, 518055, China; Department of Economics, York University, Toronto, M3J1P3, Canada</p>
<p>Integration of nanoindentation and finite element method for interpretable tensile properties: A cross-scale calculation method of uneven joints</p>	<p>Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada; School of Energy and Power Engineering, Beihang University, Beijing, 100191, China Department of Materials Science and Engineering, University of Toronto,</p>

	<p>Toronto, ON M5S 3E4, Canada School of Energy and Power Engineering, Beihang University, Beijing, 100191, China Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada School of Energy and Power Engineering, Beihang University, Beijing, 100191, China</p>
<p>Seasonal variations of airborne phthalates and novel non-phthalate plasticizers in a test residence in cold regions: Effects of temperature, humidity, total suspended particulate matter, and sources</p>	<p>International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; School of Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China. College of the Environment and Ecology, Xiamen University, Xiamen, China; Air Quality Processes Research Section, Environment and Climate Change Canada, 4905 Dufferin Street, Toronto, Ontario M3H 5T4, Canada. International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; School of Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China. Electronic address: llyan7664@163.com. International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; School of Environment, Harbin Institute of Technology, Harbin 150090,</p>

	<p>China; University Corporation for Polar Research, Beijing 100875, China. International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; School of Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China. International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; School of Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China. Air Quality Processes Research Section, Environment and Climate Change Canada, 4905 Dufferin Street, Toronto, Ontario M3H 5T4, Canada. International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; School of Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China; IJRC-PTS-NA, Toronto M2N 6X9, Canada.</p>
<p>Recursive Zero-COVID model and quantitation of control efforts of the Omicron epidemic in Jilin province</p>	<p>Harbin Engineering University, Harbin, 150001, China Northeast Normal University, Changchun, 130024, China Northeast Normal University, Changchun, 130024, China Northeast Normal University, Changchun, 130024, China </p>

	<p>Northeast Normal University, Changchun, 130024, China York University, Toronto, Canada York University, Toronto, Canada Changchun University of Science and Technology, Changchun, 130013, China Jilin University, Changchun, 130021, China Jilin University, Changchun, 130021, China Changchun Center for Disease Control and Prevention, Changchun, 130033, China Northeast Normal University, Changchun, 130024, China York University, Toronto, Canada</p>
<p>Hybrid Analog and Digital Beamforming for RIS-Assisted mmWave Communications</p>	<p>School of Cyberspace Science and Technology, Beijing Institute of Technology, Beijing, China School of Information and Electronics, Beijing Institute of Technology, Beijing, China Department of Electrical, Computer and Biomedical Engineering, Toronto Metropolitan University (Formerly Ryerson University), Toronto, ON, Canada Information Systems Technology and Design Pillar, Singapore University of Technology and Design, Singapore</p>
<p>STAR-RIS Enabled Downlink Secure NOMA Network Under Imperfect CSI of Eavesdroppers</p>	<p>School of electronics and information engineering, Harbin Institute of Technology, Harbin, Heilongjiang Province, China School of electronics and information engineering, Harbin Institute of Technology, Harbin, Heilongjiang Province, China Department of Electrical & Computer Engineering, University of Toronto, Toronto, ON, Canada</p>
<p>Dynamic failure characteristics of surrounding rocks under different lateral pressure coefficients in deep tunnel transient excavation</p>	<p>Tianjin University State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Explosion Science and Technology, Beijing Institute of Technology, Beijing, China; State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School</p>

	<p>of Civil Engineering, Tianjin University, Tianjin, China; Department of Civil and Mineral Engineering, University of Toronto, Toronto, Canada State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China</p>
<p>Correction: Dynamic Mode II Fracture Toughness of Rocks Subjected to Various In Situ Stress Conditions</p>	<p>Beijing Institute of Technology; Tianjin University State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China; Department of Civil and Mineral Engineering, University of Toronto, Toronto, Canada</p>
<p>A data-driven deep learning network for massive MIMO detection with high-order QAM</p>	<p>College of Information and Communication Engineering, Harbin Engineering University, Harbin 150001, China College of Information and Communication Engineering, Harbin Engineering University, Harbin 150001, China Department of Electrical Engineering and Computer Science, York University, Toronto, ON M3J 1P3, Canada College of Information and Communication Engineering, Harbin Engineering University, Harbin 150001, China</p>
<p>Deep imbalanced domain adaptation for transfer learning fault diagnosis of bearings under multiple working conditions</p>	<p>Centre for Maintenance Optimization and Reliability Engineering, University of Toronto, Toronto M5S 3G8, Canada; School of Mechanical Engineering, Southeast University, Nanjing 211189, PR</p>

	<p>China School of Mechanical Engineering, Southeast University, Nanjing 211189, PR China School of Mechanical Engineering, Southeast University, Nanjing 211189, PR China School of Mechanical Engineering, Southeast University, Nanjing 211189, PR China School of Mechanical Engineering, Nanjing University of Science and Technology, Nanjing 210014, PR China Centre for Maintenance Optimization and Reliability Engineering, University of Toronto, Toronto M5S 3G8, Canada</p>
<p>Domain generalization via adversarial out-domain augmentation for remaining useful life prediction of bearings under unseen conditions</p>	<p>Centre for Maintenance Optimization and Reliability Engineering, University of Toronto, Toronto M5S 3G8, Canada; School of Mechanical Engineering, Southeast University, Nanjing 211189, PR China School of Mechanical Engineering, Southeast University, Nanjing 211189, PR China School of Mechanical Engineering, Southeast University, Nanjing 211189, PR China School of Mechanical Engineering, Southeast University, Nanjing 211189, PR China School of Mechanical Engineering, Nanjing University of Science and Technology, Nanjing 210014, PR China Centre for Maintenance Optimization and Reliability Engineering, University of Toronto, Toronto M5S 3G8, Canada</p>
<p>A nonlinear interactive grey multivariable model based on dynamic compensation for forecasting the economy-energy-environment system</p>	<p>Department of Mechanical and Industrial Engineering, Ryerson University, 350 Victoria Street, Toronto, Ontario M5B 2K3, Canada; College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, Jiangsu 211100, China College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, Jiangsu 211100, China Department of Mechanical and Industrial Engineering, Ryerson University, 350 Victoria Street, Toronto, Ontario M5B 2K3, Canada College of Economics and Management, Nanjing University of Aeronautics and</p>

	Astronautics, Nanjing, Jiangsu 211100, China
Uncertainty quantification of separation control with synthetic jet actuator over a NACA0025 airfoil	School of Energy Science and Technology, Harbin Institute of Technology, Harbin, 150001, China School of Energy Science and Technology, Harbin Institute of Technology, Harbin, 150001, China School of Energy Science and Technology, Harbin Institute of Technology, Harbin, 150001, China School of Energy Science and Technology, Harbin Institute of Technology, Harbin, 150001, China School of Energy Science and Technology, Harbin Institute of Technology, Harbin, 150001, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, H3G 1M8, Canada
CONSTRUCTING MAXIMAL COFINITARY GROUPS	Department of Mathematics University of Toronto 40 St. George Street, Toronto Ontario M5S 2E4 Canada and Institute for Advanced Study in Mathematics, Harbin Institute of Technology 92 West Da Zhi Street, Harbin, Heilongjiang 150001 China
Fuzzy levels of preference strength in a graph model with multiple decision makers	School of Economics and Management, Nanjing University of Science and Technology, Nanjing, Jiangsu 210094, China; Jiangsu Industrial Cluster Decision-making and Consulting Research Base, Nanjing, Jiangsu 210094, China Department of Systems Design Engineering, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada; Balsillie School of International Affairs, Waterloo, Ontario N2L 6C2, Canada; Centre for International Governance Innovation, Waterloo, Ontario N2L 6C2, Canada Department of Systems Design Engineering, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada; Department of Mathematics, Wilfrid Laurier University, Waterloo, Ontario N2L 3C5, Canada Department of Systems Design Engineering, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada; Department of Mechanical and

	Industrial Engineering, Ryerson University Toronto, Ontario M5B 2K3, Canada
Concurrent Rendezvous Control of Underactuated Space Manipulators	Northwestern Polytechnical University, 710072 Xi'an, People's Republic of China University of Toronto, Institute for Aerospace Studies, Toronto, M3H 5T6 Canada Luleå University of Technology, Kiruna 98128, Sweden
Task-Driven Relay Assignment in Distributed UAV Communication Networks	[College of Communications Engineering, Army Engineering University, Nanjing, China] [College of Communications Engineering, Army Engineering University, Nanjing, China] College of Information and Communication National University of Defense Technology Wuhan China [College of Communications Engineering, Army Engineering University, Nanjing, China] [College of Communications Engineering, Army Engineering University, Nanjing, China] [College of Communications Engineering, Army Engineering University, Nanjing, China] [College of Communications Engineering, Army Engineering University, Nanjing, China] College of Electronic and information Engineering, Nanjing University of Aeronautics and Astronautics Nanjing, China [Department of Electrical, and Computer Engineering, Ryerson University, Toronto, ON, Canada]
Distributed passivity-based control for multiple flexible spacecraft with attitude-only measurements	Department of Earth and Space Science and Engineering, York University, 4700 Keele St., Toronto, M3J 1P3, Canada Department of Earth and Space Science and Engineering, York University, 4700 Keele St., Toronto, M3J 1P3, Canada State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, 29 Yudao St, Nanjing 210016, China#TAB#
Joint Multi-User Computation Offloading and Data Caching for Hybrid Mobile Cloud/Edge Computing	School of Information and Electronics, Beijing Institute of Technology, Beijing, China; School of Information and Electronics, Beijing Institute of Technology, Beijing, China; Academy of Military Sciences PLA, National Innovation Institute of Defense

	<p>Technology, Beijing, China Department of Computing Sciences, Texas A&M University “ Corpus Christi, Corpus Christi, TX, USA [Department of Electrical, and Computer Engineering, Ryerson University, Toronto, ON, Canada]</p>
<p>Dynamic Mode Decomposition Analysis of Flow Separation in a Diffuser to Inform Flow Control Strategies</p>	<p>College of Energy and Power Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, Jiangsu 210016, China; Turbulence Research Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON M5S 3G8, Canada College of Energy and Power Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, Jiangsu, 210016, China College of Energy and Power Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, Jiangsu, 210016, China Turbulence Research Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON M5S 3G8, Canada</p>
<p>Author Correction: Dopant-induced electron localization drives CO2 reduction to C2 hydrocarbons</p>	<p>Department of Electrical and Computer Engineering, University of Toronto, Toronto, Ontario, Canada.; MIT Key Laboratory of Critical Materials Technology for New Energy Conversion and Storage, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin, China. [Department of Electrical & Computer Engineering, University of Toronto, Toronto, Ontario, Canada] State Key Laboratory of Power Metallurgy, Central South University, Changsha, China.; Department of Electrical and Computer Engineering, University of Toronto, Toronto, Ontario, Canada. [Department of Electrical & Computer Engineering, University of Toronto, Toronto, Ontario, Canada] [Department of Electrical & Computer Engineering, University of Toronto, Toronto, Ontario, Canada] Department of Materials Science and Engineering, University of Toronto, Toronto, Ontario,</p>

	<p>Canada. Department of Electrical and Computer Engineering, University of Toronto, Toronto, Ontario, Canada.; Department of Chemistry, KU Leuven, Leuven, Belgium. Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario, Canada. Department of Chemistry, University of Western Ontario, London, Ontario, Canada [Institute of Super-Microstructure and Ultrafast Process in Advanced Materials, School of Physics and Electronics, Central South University, Changsha, China] [Institute of Super-Microstructure and Ultrafast Process in Advanced Materials, School of Physics and Electronics, Central South University, Changsha, China] [Department of Electrical & Computer Engineering, University of Toronto, Toronto, Ontario, Canada] EMAT, University of Antwerp, Antwerp, Belgium [Department of Electrical & Computer Engineering, University of Toronto, Toronto, Ontario, Canada] Department of Chemistry, University of Western Ontario, London, Ontario, Canada EMAT, University of Antwerp, Antwerp, Belgium Department of Chemistry KU Leuven Leuven BELGIUM Department of Mechanical and Industrial Engineering; University of Toronto; Toronto Ontario Canada MIT Key Laboratory of Critical Materials Technology for New Energy Conversion and Storage, School of Chemistry and Chemical Engineering Harbin Institute of Technology Harbin China Department of Electrical and Computer Engineering, University of Toronto, Toronto, Ontario, Canada. ted.sargent@utoronto.ca.</p>
<p>Monotone dynamics and global behaviors of a West Nile virus model with mosquito demographics</p>	<p>Department of Applied Mathematics, Nanjing University of Science and Technology, Nanjing, People's Republic of China Department of Mathematics, Shaoxing University,</p>

	Zhejiang, People's Republic of China Department of Mathematics and Statistics, The University of Toledo, Toledo, USA. Lamps and Department of Mathematics and Statistics, York University, Toronto, Canada
Space Structure Vibration Suppression Using Control Moment Gyroscope Null Motion	Harbin Institute of Technology, 150080 Harbin, People's Republic of China University of Toronto, Toronto, Ontario M3H 5T6, Canada Harbin Institute of Technology, 150080 Harbin, People's Republic of China
High-temperature oxidation mechanisms of nano-/submicro-scale lamellar structures in an intermetallic alloy	School of Materials Sci. & Eng., Tongji University, Shanghai, 201804, China. School of Materials Science and Engineering, Harbin Institute of Technology at Weihai, Weihai 264209, China School of Materials Science and Engineering, Tongji University, Shanghai 201804, China School of Materials Science and Engineering, Tongji University, Shanghai 201804, China School of Materials Science and Engineering, Harbin University of Science and Technology, Harbin 150080, China Institute of Physics, Chinese Academy of Sciences, Beijing 100190, China; Institute of Physical Science and Information Technology, Anhui University, Hefei 230601, China School of Materials Science and Engineering, Tongji University, Shanghai 201804, China School of Materials Science and Engineering, Tongji University, Shanghai 201804, China; College of Mechatronics and Control Engineering, Shenzhen University, Shenzhen 518060, China Department of Mechanical and Industrial Engineering, Ryerson University, Toronto, Ontario M5B 2K3, Canada
The bifurcation of periodic orbits and equilibrium points in the linked restricted three-body problem with parameter	Department of Earth and Space Science and Engineering, York University, Toronto M3J 1P3, Canada Department of Earth and Space Science and Engineering, York University, Toronto M3J 1P3, Canada School of Astronautics, Beihang University,

	Beijing 100191 (China) School of Astronautics, Beihang University, Beijing 100191 (China)
A Demand Response Scheme in Smart Grid with Clustering of Residential Customers	Nanjing University of Aeronautics and Astronautics, College of Computer Science and Technology, Nanjing, China Nanjing University of Aeronautics and Astronautics, College of Computer Science and Technology, Nanjing, China Nanjing University of Aeronautics and Astronautics, College of Computer Science and Technology, Nanjing, China Nanjing University of Aeronautics and Astronautics, College of Computer Science and Technology, Nanjing, China York University, Department of Electrical Engineering and Computer science, Toronto, Canada
Dynamic Access Point and Service Selection in Backscatter-Assisted RF-Powered Cognitive Networks	School of Information and Electronics, Beijing Institute of Technology, Beijing, China; School of Computer Science and Engineering Nanyang Technological University, Singapore School of Computer Science and Engineering Nanyang Technological University, Singapore Department of Electrical Engineering and Computer Science, York University, Toronto, ON, Canada. School of Information and Electronics, Beijing Institute of Technology, Beijing, China; [Center for Intelligent Networking and Communications, University of Electronic Science and Technology of China, Chengdu, China]
Constructing a Comprehensive Clinical Database Integrating Patients' Data from Intensive Care Units and General Wards	Chinese PLA General Hospital, Department of Computer Management and Application, Beijing, China School of Biological Science and Medical Engineering Beihang University Beijing China Chinese PLA General Hospital, Department of Biomedical Engineering, Beijing, China Chinese PLA General Hospital, Department of Biomedical Engineering, Beijing, China University of Toronto Faculty of Arts &

	<p>Science Toronto Canada Chinese PLA General Hospital, Department of Biomedical Engineering, Beijing, China Medical Big Data Center, Chinese PLA General Hospital, Beijing, China Chinese PLA General Hospital, Department of Biomedical Engineering, Beijing, China</p>
<p>Eggplant-derived SiC aerogels with high-performance electromagnetic wave absorption and thermal insulation properties</p>	<p>Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto M5S 3G8, Canada; MIIT Key Laboratory of Critical Materials Technology for New Energy Conversion and Storage, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin 150001, China MIIT Key Laboratory of Critical Materials Technology for New Energy Conversion and Storage, School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin 150001, China</p>
<p>A New Fuzzy Belonging-based Multi-view K-means Clustering Algorithm</p>	<p>University of Toronto, Department of Computer Science, Toronto, Canada, M5S1A1 Nanjing Normal University, College of Computer Science and Technology, Nanjing, China, 210097 Nanjing University of Aeronautics and Astronautics, College of Electronic and Information Engineering, Nanjing, China, 20016 Nanjing University of Aeronautics and Astronautics, College of Electronic and Information Engineering, Nanjing, China, 20016</p>
<p>Failsafe Mechanism Design for Autonomous Aerial Refueling using State Tree Structures</p>	<p>Institute for Aerospace Study, University of Toronto, Toronto, Ontario, M3H 5T6, Canada School of Automation Science and Electrical Engineering, Beihang University, Beijing 100191, P. R. China Department of Electrical and Computer Engineering, University of Toronto, Toronto, Ontario, M5S 3G4, Canada</p>
<p>Static performance of the aerostatic journal bearing with grooves</p>	<p>School of Mechatronic Engineering, Harbin Institute of Technology, Harbin, China; Department of Mechanical and</p>

	<p>Industrial Engineering, University of Toronto, Toronto, Canada Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada School of Mechatronic Engineering, Harbin Institute of Technology, Harbin, China</p>
<p>Effect of hygrothermal environment on traction-separation behavior of carbon fiber/epoxy interface</p>	<p>School of Transportation Science and Engineering, Beihang University, 37 Xueyuan Road, Beijing 100191, China School of Civil and Environmental Engineering, Harbin Institute of Technology, Shenzhen, Shenzhen 518055, China Department of Civil and Mineral Engineering, University of Toronto, Toronto, Ontario M5S 1A4, Canada School of Transportation Science and Engineering, Beihang University, 37 Xueyuan Road, Beijing 100191, China</p>
<p>Mixed stabilities for analyzing opponents' heterogeneous behavior within the graph model for conflict resolution</p>	<p>Department of Systems Design Engineering, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada; College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, Jiangsu 211106, China College of Economics and Management, Nanjing University of Aeronautics and Astronautics, Nanjing, Jiangsu 211106, China Centre for International Governance Innovation, Waterloo, Ontario N2L 6C2, Canada; Department of Systems Design Engineering, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada; Balsillie School of International Affairs, Waterloo, Ontario N2L 6C2, Canada Department of Mechanical and Industrial Engineering, Ryerson University, Toronto, Ontario M5B 2K3, Canada; Department of Systems Design Engineering, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada</p>
<p>A New Mechanism of Dynamic Phase Transformations in An Isothermal Forged Beta-Gamma Intermetallic Alloy</p>	<p>School of Materials Sci. & Eng., Tongji University, Shanghai, 201804, China. School of Materials Science and Engineering, Tongji University, Shanghai</p>

	<p>201804, China School of Materials Science and Engineering, Harbin Institute of Technology, Weihai 264209, China School of Materials Science and Engineering, Tongji University, Shanghai 201804, China School of Materials Science and Engineering, Tongji University, Shanghai 201804, China; College of Mechatronics and Control Engineering, Shenzhen University, Shenzhen 518060, China Department of Mechanical and Industrial Engineering, Ryerson University, Toronto, ON M5B 2K3, Canada</p>
<p>Investigation on backflow phenomenon in the aerostatic journal bearing</p>	<p>School of Mechatronic Engineering, Harbin Institute of Technology, Harbin, China; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada School of Mechatronic Engineering, Harbin Institute of Technology, Harbin, China Dept. of Mechanical & Industrial Engineering, University of Toronto, Toronto, Canada#TAB#</p>
<p>Unknown geometrical constraints estimation and trajectory planning for robotic door-opening task with visual teleoperation assists</p>	<p>Harbin Institute of Technology, Heilongjiang, China Harbin Institute of Technology, Heilongjiang, China Harbin Institute of Technology, Heilongjiang, China Harbin Institute of Technology, Heilongjiang, China Ryerson University, Toronto, Canada Harbin Institute of Technology, Heilongjiang, China</p>
<p>Semi-volatile organic compounds in infant homes: Levels, influence factors, partitioning, and implications for human exposure</p>	<p>University Corporation for Polar Research, Beijing, 100875, PR China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China University Corporation for Polar Research, Beijing, 100875, PR China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic</p>

	<p>Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China University Corporation for Polar Research, Beijing, 100875, PR China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China University Corporation for Polar Research, Beijing, 100875, PR China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China University Corporation for Polar Research, Beijing, 100875, PR China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China; IJRC-PTS-NA & IJRC-AEE-NA, Toronto, Ontario, M2N 6X9, Canada International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), College of Agricultural Resource and Environment, Heilongjiang University, Harbin 150080, PR China University Corporation for Polar Research, Beijing, 100875, PR China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research</p>
--	--

	<p>Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China University Corporation for Polar Research, Beijing, 100875, PR China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China University Corporation for Polar Research, Beijing, 100875, PR China; International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, School of Environment, Harbin Institute of Technology, Harbin, 150090, PR China; IJRC-PTS-NA & IJRC-AEE-NA, Toronto, Ontario, M2N 6X9, Canada</p>
<p>Distributed Time-Varying Formation Control for Multiagent Systems With Directed Topology Using an Adaptive Output-Feedback Approach</p>	<p>Systems Control Group, Department of Electrical and Computer Engineering, University of Toronto, Toronto, ON, Canada Beijing Advanced Innovation Center for Big Data and Brain Computing, Beihang University, Beijing, China School of Automation Science and Electrical Engineering, Science and Technology on Aircraft Control Laboratory, Beihang University, Beijing, China School of Automation Science and Electrical Engineering, Science and Technology on Aircraft Control Laboratory, and the Beijing Advanced Innovation Center for Big Data and Brain Computing, Beihang University, Beijing, China</p>
<p>Static recrystallization of pure titanium after cryo-deformation</p>	<p>School of Materials Science and Engineering, Tongji University, Shanghai,</p>

	<p>China; School of Materials Engineering, Jiangsu University of Technology, Changzhou, China School of Materials Science and Engineering, Harbin Institute of Technology at Weihai, Weihai, 264209, China. School of Materials Science and Engineering, TongJi University, Shanghai, China School of Materials Science and Engineering, TongJi University, Shanghai, China School of Materials Science and Engineering, TongJi University, Shanghai, China Department of Mechanical and Industrial Engineering, Ryerson University, Toronto, Ontario M5B 2K3 Canada</p>
<p>Three-Dimensional High-Fidelity Dynamic Modeling of Tether Transportation System with Multiple Climbers</p>	<p>York University, Toronto (Ontario) M3J 1P3, Canada Northwestern Polytechnical University, 710072 Xi'an, People's Republic of China York University, Toronto (Ontario) M3J 1P3, Canada</p>
<p>Optimal condition-based and age-based opportunistic maintenance policy for a two-unit series system</p>	<p>Department of Mechanical and Industrial Engineering, University of Toronto, 5 King's College Road, Toronto, ON M5S 3G8, Canada; School of Management and Economics, Beijing Institute of Technology, Beijing 100081, PR China Department of Mechanical and Industrial Engineering, University of Toronto, 5 King's College Road, Toronto, ON M5S 3G8, Canada School of Management and Economics, Beijing Institute of Technology, Beijing 100081, PR China</p>
<p>Iterative learning control of a flexible manipulator considering uncertain parameters and unknown repetitive disturbance</p>	<p>York University, 4700 Keele Street, Toronto, M3J 1P3, Canada. School of Automation, Beijing Institute of Technology, 5 South Zhongguancun Street, Beijing, 100081, China York University, 4700 Keele Street, Toronto, M3J 1P3, Canada.</p>
<p>Group maintenance scheduling for two-component systems with failure interaction</p>	<p>School of Reliability and Systems Engineering, Beihang University, Beijing, China; Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario, Canada School of Reliability and Systems Engineering, Beihang University, Beijing,</p>

	China School of Reliability and Systems Engineering, Beihang University, Beijing, China
Porous C/Ni composites derived from fluid coke for ultra-wide bandwidth electromagnetic wave absorption performance	Electrochemical NanoEnergy Group, School of Chemical Engineering and Light Industry, Guangdong University of Technology, Guangzhou, China; Department of Chemical Engineering & Applied Chemistry, University of Toronto, 200 College Street, Toronto, Ontario M5S 3E5, Canada; School of Chemistry and Chemical Engineering, Harbin Institute of Technology, 92 Dazhi Street, Harbin 150001, China Electrochemical NanoEnergy Group, School of Chemical Engineering and Light Industry, Guangdong University of Technology, Guangzhou, China Electrochemical NanoEnergy Group, School of Chemical Engineering and Light Industry, Guangdong University of Technology, Guangzhou, China Department of Chemical Engineering and Applied Chemistry, University of Toronto, 200 College Street, Toronto, Ontario, M5S3E5, Canada School of Chemistry and Chemical Engineering, Harbin Institute of Technology, 92 Dazhi Street, Harbin 150001, China
Guest Editorial Neuro-Robotics Systems: Sensing, Cognition, Learning, and Control	Department of automation, University of Science and Technology of China, Hefei, China [Dept. of Advanced Robotics, Istituto Italiano di Tecnologia, Genoa, Italy] [Dept. of Advanced Robotics, Istituto Italiano di Tecnologia, Genoa, Italy] Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada School of Mechatronics, Beijing Institute of Technology, Beijing CHINA
Facile Microembossing Process for Microchannel Fabrication for Nanocellulose-Paper-Based Microfluidics	Department of Electrical Engineering and Electronics, University of Liverpool, Liverpool L69 7ZX, U.K. School of Advanced Technology, Xi'an Jiaotong - Liverpool University, Suzhou 215123, China School of Advanced Technology,

	<p>Xi'an Jiaotong - Liverpool University, Suzhou215123, China Department of Electrical Engineering and Electronics, University of Liverpool, LiverpoolL69 7ZX, U.K.; School of Intelligent Manufacturing and Transportation, Suzhou City University, Suzhou215000, China Department of Electrical Engineering and Electronics, University of Liverpool, LiverpoolL69 7ZX, U.K. Department of Electrical Engineering and Electronics, University of Liverpool, LiverpoolL69 7ZX, U.K. Department of Electrical Engineering and Electronics, University of Liverpool, LiverpoolL69 7ZX, U.K. School of Science, Harbin Institute of Technology - Shenzhen, Shenzhen518055, China School of Nano-Tech and Nano-Bionics, University of Science and Technology of China, Hefei230026, China Department of Electrical Engineering and Electronics, University of Liverpool, LiverpoolL69 7ZX, U.K. Department of Electrical Engineering and Electronics, University of Liverpool, LiverpoolL69 7ZX, U.K. Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, OntarioM5S 2E8, Canada Department of Electrical Engineering and Electronics, University of Liverpool, LiverpoolL69 7ZX, U.K.</p>
<p>Simulation as Experimentation</p>	<p>University of Ottawa, Ottawa, Canada The RAND Corporation and the Pardee RAND Graduate School, Santa Monica, USA Autodesk Research, Toronto, Canada Trax.Co, Toronto, Canada University of Corsica, Corte, France Aix-Marseille University (LSIS), Marseille, France University of Exeter Business School, Exeter, UK University of Exeter Medical School, Exeter, UK Midea Cloud Tech Co., Ltd, Jilin, China Beihang University, Beijing, China CASICloud-Tech Co., Ltd., Haidian, China</p>

<p>Loeb extension and Loeb equivalence II</p>	<p>Institute for Advanced Study in Mathematics Harbin Institute of Technology Harbin, Heilongjiang 150001, China University of Toronto Toronto, Ontario, Canada M5S 2E4 and Institute for Advanced Study in Mathematics Harbin Institute of Technology Harbin, Heilongjiang 150001, China University of Toronto Toronto, Ontario, Canada M5S 2E4</p>
<p>Design and Robustness Analysis of a Wave-Based Controller for Tethered Towing of Defunct Satellites</p>	<p>School of Aerospace Engineering, Beijing Institute of Technology, Beijing, China, 100081 School of Aerospace Engineering, Beijing Institute of Technology, Beijing, China, 100081 Ryerson University, Department of Aerospace Engineering, Toronto, Canada, M5B 2K3</p>
<p>Multi-UAV Cooperative Hunting Using PSO in 3D Cluttered Environment</p>	<p>University of Toronto Institute for Aerospace Studies, Toronto, Canada Harbin Engineering University, Harbin, China University of Toronto Institute for Aerospace Studies, Toronto, Canada School of Electrical and Electronic Engineering, The University of Adelaide, Australia, and College of Engineering and Science, Victoria University, Footscray, Australia University of Toronto Institute for Aerospace Studies, Toronto, Canada</p>
<p>Sensorless Force Estimation of a Lever-Based Variable Stiffness Actuator Using a Current-Deflection Fusion Method</p>	<p>Zhengzhou Tobacco Research Institute, Zhengzhou, China School of Mechanical Engineering and Automation, Harbin Institute of Technology, Shenzhen, China Department of Aerospace Engineering, Ryerson University, Toronto, Canada School of Mechanical Engineering and Automation, Harbin Institute of Technology, Shenzhen, China School of Mechanical Engineering and Automation, Harbin Institute of Technology, Shenzhen, China</p>
<p>Forecasting crude oil market volatility using variable selection and common factor</p>	<p>School of Economics and Management, Nanjing University of Science and Technology, Nanjing, China Department of Mechanical and Industrial Engineering, Ryerson University, Toronto, Canada </p>

	School of Economics and Management, Nanjing University of Science and Technology, Nanjing, China
Active shape control for flexible space structures using an optimal gyricity distribution	Beijing Institute of Technology, School of Automation, No. 5, South Street, Zhongguancun, Haidian District, Beijing 100081, China; Harbin Institute of Technology, Research Center of Satellite Technology, Yikuang Street #2, Harbin 150080, China; University of Toronto Institute for Aerospace Studies, 4925 Dufferin Street, Toronto, Ontario M3H 5T6, Canada University of Toronto Institute for Aerospace Studies, 4925 Dufferin Street, Toronto, Ontario M3H 5T6, Canada
A physical model of a supercapacitor to reveal the mechanism of the voltage recovery phenomenon	Key Laboratory of Multifunctional Nanomaterials and Smart Systems, Advanced Materials Division, Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, Suzhou, 215123, China; College of Materials Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, 211106, China; Department of Chemical Engineering & Applied Chemistry, University of Toronto, Toronto, ON M5S 3E5, Canada Department of Chemical Engineering & Applied Chemistry, University of Toronto, Toronto, ON M5S 3E5, Canada Department of Chemical Engineering & Applied Chemistry, University of Toronto, Toronto, ON M5S 3E5, Canada
Symmetric and asymmetric dynamics of a tethered satellite in nontypical planes	State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, 210016, China Department of Mechanical Engineering, York University, Toronto, Ontario, Canada, M3J 1P3
Multi-domain Resource Multiplexing Based Secure Transmission for Satellite-Assisted IoT: AO-SCA Approach	State Key Lab. of ISN and School of Cyber Engineering, Xidian University, Xi'an, China State Key Lab. of ISN and School of Telecommunications Engineering, Xidian University,

	<p>Xi'an, China State Key Lab. of ISN and School of Telecommunications Engineering, Xidian University, Xi'an, China College of Electronic Information Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, China Department of Electrical, Computer and Biomedical Engineering, Toronto Metropolitan University, Toronto, ON, Canada Department of Electrical Engineering, College of Engineering, Qassim University, Qassim, Saudi Arabia Department of Electrical Engineering, College of Engineering, Qassim University, Qassim, Saudi Arabia</p>
<p>Joint In-Orbit Computation and Communication for Minimizing Download Time from LEO Satellites</p>	<p>Beijing Institute of Technology, Beijing, China Beijing Institute of Technology, Beijing, China School of Information Technology, Carleton University, Ottawa, ON, Canada Beijing Institute of Technology, Beijing, China Department of Electrical, Computer, and Biomedical Engineering, Toronto Metropolitan University (formerly Ryerson University), Toronto, ON, Canada</p>
<p>Charging demand prediction in Beijing based on real-world electric vehicle data</p>	<p>Beijing Co-innovation Center for Electric Vehicles, Beijing 100081, China; National Engineering Research Center of Electric Vehicles, Beijing Institute of Technology, Beijing 100081, China; Department of Civil & Mineral Engineering, University of Toronto, Toronto M5S 1A4, Canada Beijing Co-innovation Center for Electric Vehicles, Beijing 100081, China; Chongqing Innovation Center, Beijing Institute of Technology, Chongqing 401120, China Department of Civil & Mineral Engineering, University of Toronto, Toronto M5S 1A4, Canada Beijing Co-innovation Center for Electric Vehicles, Beijing 100081, China; Chongqing Innovation Center, Beijing Institute of Technology, Chongqing 401120, China Beijing Co-innovation Center for Electric Vehicles, Beijing</p>

	<p>100081, China; Chongqing Innovation Center, Beijing Institute of Technology, Chongqing 401120, China Beijing Co-innovation Center for Electric Vehicles, Beijing 100081, China; National Engineering Research Center of Electric Vehicles, Beijing Institute of Technology, Beijing 100081, China</p>
<p>All-in-One digital microfluidics pipeline for proteomic sample preparation and analysis</p>	<p>Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, ON, M5S 3H6, Canada Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, ON, M5S 3H6, Canada School of Mechatronical Engineering, Beijing Institute of Technology, Beijing, 100081, China; Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, ON, M5S 3H6, Canada Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, ON, M5S 3H6, Canada Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, ON, M5S 3H6, Canada Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, ON, M5S 3H6, Canada Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, ON, M5S 3H6, Canada Donnelly Centre for Cellular and Biomolecular Research, University of Toronto, 160 College Street, Toronto, ON, M5S 3E1, Canada Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, ON, M5S 3H6, Canada; Saskatchewan Cancer Agency, University of Saskatchewan, 107 Wiggins Road, Saskatoon, SK S7N 5E5, Canada Lunenfeld-Tanenbaum Research Institute, Mount Sinai Hospital, 600 University Avenue, Toronto, ON, M5G 1X5, Canada; Clinical Research Center for Reproduction and Genetics in Hunan Province,</p>

	<p>Reproductive and Genetic Hospital of CITIC-XIANGYA, Changsha, Hunan, 410000, China Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, ON, M5S 3H6, Canada Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, ON, M5S 3H6, Canada</p>
<p>A review on microrobots driven by optical and magnetic fields</p>	<p>School of Mechatronical Engineering, Beijing Institute of Technology, Beijing, 100081, China School of Mechatronical Engineering, Beijing Institute of Technology, Beijing, 100081, China School of Medical Technology, Beijing Institute of Technology, Beijing 100081, China Arthur and Sonia Labatt Brain Tumour Research Centre, The Hospital for Sick Children, Toronto, ONT, M5G 1X8, Canada Shenzhen Institute of Artificial Intelligence and Robotics for Society (AIRS), Shenzhen 518129, China; School of Science and Engineering, The Chinese University of Hong Kong, Shenzhen 518172, China School of Mechatronical Engineering, Beijing Institute of Technology, Beijing, 100081, China School of Mechatronical Engineering, Beijing Institute of Technology, Beijing, 100081, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, M5S 3G8, Canada Beijing Advanced Innovation Center for Intelligent Robots and Systems, Beijing Institute of Technology, Beijing, 100081, China</p>
<p>What do we know about the production and release of persistent organic pollutants in the global environment?</p>	<p>School of Public Health, University of Nevada, Reno, 1664 N. Virginia Street, Reno, Nevada 89557-0274, USA College of Environmental Sciences and Engineering, Peking University, Beijing 100871, China School of Public Health, University of Nevada, Reno, 1664 N. Virginia Street, Reno, Nevada 89557-0274, USA Department of Chemistry, University of Oslo, P. O. Box 1033, Oslo NO-0315, Norway; NILU-Norwegian Institute for Air</p>

	<p>Research, P. O. Box 100, Kjeller NO-2027, Norway NILU-Norwegian Institute for Air Research, P. O. Box 100, Kjeller NO-2027, Norway International Joint Research Center for Persistent Toxic Substances (IJRC-PTS), State Key Laboratory of Urban Water Resource and Environment, School of Environment, Harbin Institute of Technology, Harbin 150090, China; IJRC-PTS-NA, Toronto, Ontario M2N 6X9, Canada</p>
<p>A Closed-Loop Shared Control Framework for Legged Robots</p>	<p>State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China; Huawei, Shenzhen, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China Department of Electrical Engineering and Automation, Aalto University, Espoo, Finland State Key Laboratory of Robotics and Systems, Harbin Institute of Technology, Harbin, China Department of Aerospace Engineering, Toronto Metropolitan University, Toronto, ON, Canada School of Computing, University of Leeds, Leeds, U.K.</p>
<p>Effect of Varying Functionally Graded Indices and Thickness of Tgo on Stress and Cracks Competitive Growth in Functionally Graded Thermal Barrier Coatings</p>	<p>Zhengzhou University of Light Industry Zhengzhou University of Light Industry University of Toronto Harbin Institute of Technology Zhengzhou University of Light Industry Zhengzhou University of Light Industry Zhengzhou University of Light Industry</p>
<p>FDGNN: Feature-Aware Disentangled Graph Neural Network for Recommendation</p>	<p>Department of Cyber Science and Engineering, Nanjing University of Science and Technology, Nanjing, China Department of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing, China Department of Computer Science and Engineering, Nanjing University of Science</p>

	<p>and Technology, Nanjing, China Department of Computer Engineering, University of Toronto, Toronto, Canada School of Software and Electrical Engineering, Swinburne University of Technology, Melbourne, VIC, Australia Department of Computer Science and Engineering, Indian Institute of Technology (Indian School of Mines), Dhanbad, India College of Computer Science and Technology, China University of Petroleum (East China), Dongying, China</p>
<p>Refine-Net: Normal Refinement Neural Network for Noisy Point Clouds</p>	<p>Computer Science and Technology, Nanjing University, 12581 Nanjing, Jiangsu, China, (e-mail: hrzhou98@gmail.com) College of Mechanical and Electrical Engineering, Nanjing University of Aeronautics and Astronautics, 47854 Nanjing, JiangSu, China, 210016 (e-mail: chenhonghuacn@gmail.com) Institute of Advanced Integration Technology, Shenzhen Institutes of Advanced Technology Chinese Academy of Sciences, 85411 Shenzhen, Guangdong, China, (e-mail: yingkui.zhang@foxmail.com) Instrument Science and Opto-electronic Engineering, Hefei University of Technology, 12513 Hefei, Anhui, China, 230009 (e-mail: mingqiang.wei@gmail.com) Department of Mathematics and Information Technology, The Education University of Hong Kong, Hong Kong, Hong Kong, Hong Kong, (e-mail: hrxie2@gmail.com) College of Electronic and Information Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, Jiangsu, China, (e-mail: davis.wjun@gmail.com) National Key Lab for Novel Software Technology, Nanjing University, Nanjing University, Nanjing, Jiangsu, China, 210023 (e-mail: lutong@nju.edu.cn) Nursing, Hong Kong Polytechnic University, 26680 Kowloon,</p>

	Hong Kong, Hong Kong, (e-mail: harry.qin@polyu.edu.hk) Electrical and computer engineering, Ryerson university, Toronto, Ontario, Canada, M5B 2K3 (e-mail: xzhang@ee.ryerson.ca)
A Unified Joint Optimization of Training Sequences and Transceivers Based on Matrix-Monotonic Optimization	School of Information and Electronics, Beijing Institute of Technology, Beijing, China School of Information and Electronics, Beijing Institute of Technology, Beijing, China School of Cyberspace Science and Technology, Beijing Institute of technology, Beijing, China School of Information and Electronics, Beijing Institute of Technology, Beijing, China Department of Electrical, Computer and Biomedical Engineering, Ryerson University, Toronto, ON, Canada Department of Electronics and Computer Science, University of Southampton, Southampton, UK
Effective Online Portfolio Selection for the Long-Short Market Using Mirror Gradient Descent	School of Cyberspace Science and Technology, Beijing Institute of Technology, Beijing, China School of Cyberspace Science and Technology, Beijing Institute of Technology, Beijing, China School of Information and Electronics, Beijing Institute of Technology, Beijing, China School of Cyberspace Science and Technology, Beijing Institute of Technology, Beijing, China Tsinghua Berkeley Shenzhen Institute, Shenzhen, China and the Department of Electrical, Computer & Biomedical Engineering, Toronto Metropolitan University, Canada
Unsupervised Fault Detection With Deep One-Class Classification and Manifold Distribution Alignment	Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada; School of Mechanical Engineering, Southeast University, Nanjing, China School of Mechanical Engineering, Southeast University, Nanjing, China School of Mechanical Engineering, Southeast University, Nanjing, China School of Mechatronics Engineering, Nanjing Forestry University, Nanjing, China

	School of Mechanical Engineering, Nanjing University of Science and Technology, Nanjing, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada
Distributed Attitude Consensus of Multiple Flexible Spacecraft	State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China York University, Toronto, Canada State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China
Random Caching Design for Multi-User Multi-Antenna HetNets with Interference Nulling	School of Electronic and Information Engineering, Harbin Institute of Technology, Harbin, China School of Electronic and Information Engineering, Harbin Institute of Technology, Harbin, China Department of Electrical and Computer Engineering, University of Toronto, Toronto, ON, Canada
Mobile Charging Services for the Internet of Electric Vehicles: Concepts, Scenarios, and Challenges	College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China Department of Electrical Engineering and Computer Science, York University, Toronto, Canada School of Computer Science and Engineering, Nanyang Technological University, Singapore
Constrained control for systems on matrix Lie groups with uncertainties	The Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, ON, M5S 3G4 Canada; School of Mechatronical Engineering, Beijing Institute of

	<p>Technology, Beijing, China School of Mechatronical Engineering, Beijing Institute of Technology, Beijing, China School of Mechatronical Engineering, Beijing Institute of Technology, Beijing, China School of Electrical Engineering, Korea Advanced Institute of Science and Technology, Daejeon, Korea</p>
<p>Dynamic Mode II Fracture Toughness of Rocks Subjected to Various In Situ Stress Conditions</p>	<p>Tianjin University; Beijing Institute of Technology State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China State Key Laboratory of Hydraulic Engineering Simulation and Safety, School of Civil Engineering, Tianjin University, Tianjin, China; Department of Civil and Mineral Engineering, University of Toronto, Toronto, Canada</p>
<p>Recent Advances in Cognitive Informatics and Cognitive Computing towards Autonomous Systems (Plenary Panel Report-II of IEEE ICCI*CC'22)</p>	<p>Dept of ECE, Univ. of Manitoba, Winnipeg, Canada Bogazici University, Bebek, Istanbul, Turkey Nipissing University, ON, Canada DRDC, Toronto, Canada Dept. of Computer Science, Purdue Univ., USA CPSC Department, University of Calgary Chongqing Univ. of Posts and Telecommunications, China Dept. of Computing, Hong Kong Polytechnic Univ., Hong Kong School of AI, Chongqing Univ. of Science and Technology, Chongqing, China Univ. of Regina, Canada Faculty of Computer and Information Sciences, Hosei University, Tokyo, Japan School of Computer Science and Engineer, Beihang University, Beijing, China</p>
<p>Microscopic revelation of the solid-gas coupling and Knudsen effect on the thermal conductivity of silica aerogel with inter-connected pores</p>	<p>College of Vehicle and Traffic Engineering, Henan University of Science and Technology, Luoyang, China; Department of Mechanical and Industrial Engineering,</p>

	<p>University of Toronto, Toronto, Canada Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada Department of Mechanical Engineering, McMaster University, Hamilton, Canada School of Energy Science and Engineering, Harbin Institute of Technology, Harbin, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Canada</p>
<p>Attitude Control and Stability Analysis of Electric Sail</p>	<p>Earth and Space Science and Engineering, York University, 7991 Toronto, Ontario, Canada Mechanical Engineering, York University, 7991 Toronto, Ontario, Canada, M3J 1P3 College of Aerospace Engineering, Nanjing University of Aeronautics and Astronautics, 47854 Nanjing, China, 210016</p>
<p>Existence of matching priors on compact spaces</p>	<p>Harbin Institute of Technology Institute of Advanced Study in Mathematics, , Harbin, Heilongjiang 150001, China University of Toronto Department of Statistical Sciences, , 100 St. George Street, Toronto, Ontario M5G 1Z5, Canada Department of Mathematics and Statistics, University of Ottawa</p>
<p>Tongue Segmentation and Color Classification Using Deep Convolutional Neural Networks</p>	<p>School of Computer Science, Beijing Institute of Technology, Beijing 100081, China School of Computer Science, Beijing Institute of Technology, Beijing 100081, China School of Information Technology, York University, Toronto, ON M3J 1P3, Canada School of Computer Science, Beijing Institute of Technology, Beijing 100081, China School of Computer Science, Beijing Institute of Technology, Beijing 100081, China</p>
<p>Self-Supervised learning for Conversational Recommendation</p>	<p>University of Chinese Academy of Sciences, Beijing 100049, China; Key Lab of Intelligent Information Processing, Institute of Computing Technology, Chinese Academy of Sciences, Beijing 100190, China WeChat Search Application Department, Tencent, China University of Chinese Academy of Sciences,</p>

	<p>Beijing 100049, China; Key Lab of Intelligent Information Processing, Institute of Computing Technology, Chinese Academy of Sciences, Beijing 100190, China Institute of Artificial Intelligence, Beihang University, Beijing 100191, China University of Toronto, Canada Gaoling School of Artificial Intelligence, Renmin University, Beijing, China; Beijing Key Laboratory of Big Data Management and Analysis Methods Beijing Academy of Artificial Intelligence, China University of Chinese Academy of Sciences, Beijing 100049, China; Key Lab of Intelligent Information Processing, Institute of Computing Technology, Chinese Academy of Sciences, Beijing 100190, China</p>
<p>Discovering Structural Errors From Business Process Event Logs</p>	<p>[School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing, Jiangsu China 210094 (e-mail: wsong@njust.edu.cn)] [School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing, Jiangsu, China, (e-mail: xishanyongye@126.com)] Middleware Systems Research Group, University of Toronto, Toronto, ON, Canada [Computer Science, Hohai University, Nanjing, Jiangsu, China, (e-mail: pchzhang@hhu.edu.cn)]</p>
<p>Thermodynamic analysis on wetting state transitions of rough surfaces with 3D irregular microstructure</p>	<p>College of Aerospace and Civil Engineering, Harbin Engineering University, Harbin 150001, China; Department of Materials Science and Engineering, University of Toronto, Toronto, Ontario M5S 3E4, Canada Department of Materials Science and Engineering, University of Toronto, Toronto, Ontario M5S 3E4, Canada Department of Materials Science and Engineering, University of Toronto, Toronto, Ontario M5S 3E4, Canada College of Aerospace and Civil Engineering, Harbin Engineering University, Harbin 150001, China</p>

<p>Cycle-SNSPGAN: Towards Real-World Image Dehazing via Cycle Spectral Normalized Soft Likelihood Estimation Patch GAN</p>	<p>School of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China School of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China School of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China Shenzhen Research Institute, Nanjing University of Aeronautics and Astronautics, Shenzhen, China Fujian Key Laboratory of Sensing and Computing for Smart Cities, School of Informatics, Xiamen University, Xiamen, China Department of Electrical, Computer and Biomedical Engineering, Ryerson University, Toronto, ON, Canada Department of Geography and Environmental Management and the Department of Systems Design Engineering, University of Waterloo, Waterloo, ON, Canada</p>
<p>Tuning microstructure and improving the corrosion resistance of a Ti-6Al-3Nb-2Zr-1Mo alloy via solution and aging treatments</p>	<p>National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China; Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China HIT-Chungu Joint Research Center for Additive Manufacturing Materials, Anhui Chungu 3D Printing Institute of Intelligent Equipment and Industrial Technology, Wuhu 241200, China; National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute</p>

	<p>of Technology, Harbin 150001, China Laboratory for Space Environment and Physical Science, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China AVIC Manufacturing Technology Institute, Beijing 100024, China Yunnan Titanium Industry Co., Ltd., Chuxiong 651209, China; School of Materials Science and Engineering, Kunming University of Science and Technology, Kunming 650093, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada</p>
<p>Accumulations and equilibrium conditions of organophosphate esters (OPEs) in the indoor window film and the estimation of concentrations in air</p>	<p>International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China Air Quality Processes Research Section, Environment and Climate Change Canada, 4905 Dufferin Street, Toronto, Ontario M3H 5T4, Canada International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key</p>

	<p>Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China International Joint Research Center for Arctic Environment and Ecosystem (IJRC-AEE), State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China; University Corporation for Polar Research, Beijing 100875, China College of the Environment and Ecology, Xiamen University, Xiamen, China; Air Quality Processes Research Section, Environment and Climate Change Canada, 4905 Dufferin Street, Toronto, Ontario M3H 5T4, Canada</p>
<p>Design and Implementation of a Fully-Actuated Integrated Aerial Platform Based on Geometric Model Predictive Control</p>	<p>The Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, ON M5S 3G4, Canada; School of Mechatronical Engineering, Beijing Institute of Technology, Beijing 100081, China School of Mechatronical Engineering, Beijing Institute of Technology, Beijing 100081, China</p>
<p>Federated Deep Recommendation System Based on Multi-View Feature Embedding</p>	<p>Nanjing University of Science and Technology, Department of Computer Science and Engineering, Nanjing, China State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing,</p>

	<p>China; Department of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing, China University of Auckland, Business School, Auckland, New Zealand University of Toronto, Computer Engineering, Toronto, Canada Nanjing University of Science and Technology, Department of Computer Science and Engineering, Nanjing, China Nanjing University of Science and Technology, Department of Computer Science and Engineering, Nanjing, China</p>
<p>Enhanced tensile ductility of an additively manufactured near-\hat{I}± titanium alloy by microscale shear banding</p>	<p>Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada Research Institute for Frontier Science, Beihang University, 37 Xueyuan Road, Beijing, China Department of Mechanical and Industrial Engineering, Toronto Metropolitan University (formerly Ryerson University), 350 Victoria Street, Toronto, Ontario M5B 2K3, Canada Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada Research Institute for Frontier Science, Beihang University, 37 Xueyuan Road, Beijing, China Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada</p>
<p>High-Fidelity Dynamic Modeling and Simulation of Planetary Rovers Using Single-Input-Multi-Output Joints With Terrain Property Mapping</p>	<p>State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China Department of Aerospace Engineering, Ryerson University, Toronto, ON, Canada State Key Laboratory of</p>

	<p>Robotics and System, Harbin Institute of Technology, Harbin, China School of Automotive Engineering, Harbin Institute of Technology (Weihai), Weihai, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin, China</p>
<p>A Data-Driven Packet Routing Algorithm for an Unmanned Aerial Vehicle Swarm: A Multi-Agent Reinforcement Learning Approach</p>	<p>School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing, China School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing, China Department of Electrical Engineering and Computer Science, Lassonde School of Engineering, York University, Toronto, Canada School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing, China School of Electrical and Mechanical Engineering, Suzhou Global Institute of Software Technology, Suzhou, China</p>
<p>Automated End-Effector Alignment in Robotic Micromanipulation</p>	<p>Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada; Research Institute of Intelligent Control and Systems, Harbin Institute of Technology, Harbin, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada School of Electronic and Information Engineering, Suzhou University of Science and Technology, Suzhou, China School of Science and Engineering, Chinese University of Hong Kong, Shenzhen, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, ON, Canada</p>
<p>Hybrid Nonlinear Transceiver Optimization for the RIS-Aided MIMO Downlink</p>	<p>School of Cyberspace Science and Technology, Beijing Institute of Technology, Beijing, China School of Information and Electronics, Beijing Institute of Technology, Beijing, China </p>

	<p>School of Cyberspace Science and Technology, Beijing Institute of Technology, Beijing, China Department of Electrical, Computer, and Biomedical Engineering, Ryerson University, Toronto, ON, Canada Department of Electronics and Computer Science, University of Southampton, Southampton, UK</p>
<p>Adaptive Autonomous Navigation of Multiple Optoelectronic Microrobots in Dynamic Environments</p>	<p>University College London, London, U.K. University College London, London, U.K. University of Toronto, Toronto, Ontario, Canada University of Toronto, Toronto, Ontario, Canada School of Mechatronic Engineering, Beijing Institute of Technology, Beijing, China University College London, London, U.K. University of Toronto, Toronto, Ontario, Canada Wellcome/EPSRC Centre for Interventional and Surgical Sciences (WEISS), University College London, London, United Kingdom National Physical Laboratory, Teddington, U.K.; University College London, London, U.K.</p>
<p>Random Access With Massive MIMO-OTFS in LEO Satellite Communications</p>	<p>Department of Electronic Engineering, Shanghai Jiao Tong University, Shanghai, China Department of Electronic Engineering, Shanghai Jiao Tong University, Shanghai, China School of Information and Electronics, Beijing Institute of Technology, Beijing, China School of Information and Electronics, Beijing Institute of Technology, Beijing, China Department of Electrical, Computer, and Biomedical Engineering, Ryerson University, Toronto, ON, Canada Department of Electronic Engineering, Shanghai Jiao Tong University, Shanghai, China</p>
<p>Expandable Fully Actuated Aerial Vehicle Assembly: Geometric Control Adapted from an Existing Flight Controller and Real-World Prototype Implementation</p>	<p>The Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Toronto, ON M5S 3G4, Canada The School of Mechatronic Engineering, Beijing Institute of Technology, Beijing 100081, China The School of Mechatronic</p>

	Engineering, Beijing Institute of Technology, Beijing 100081, China
Bifunctional bimetal-POSS films integrating UV-IR shielding and reversible thermochromism	Harbin Institute of Technology Department of Material Science and Engineering, University of Toronto, Toronto, Canada; School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin, People’s Republic of China School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin, People’s Republic of China Wenzhou Institute, University of Chinese Academy of Sciences, Wenzhou, People’s Republic of China
Distributed Passivity-Based Control with Attitude-Only Measurements	State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China York University, Toronto, Canada State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China
Continuous Constrained Attitude Regulation on SO(3)	State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China York University, Toronto, Canada State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China
Distributed Attitude Tracking and Synchronization on SO(3) Under Directed Graphs	State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China York University, Toronto, Canada State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China
Koopman-Operator-Based Attitude Dynamics and Control on SO(3)	State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China York University, Toronto, Canada State Key

	Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China
Continuous Leaderless Synchronization Control of Multiple Rigid Spacecraft on SO(3)	State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China York University, Toronto, Canada State Key Laboratory of Mechanics and Control of Mechanical Structures, Nanjing University of Aeronautics and Astronautics, Nanjing, China
Highly Accurate Visual Method of Mars Terrain Classification for Rovers Based on Novel Image Features	Key Laboratory of Marine Robotics, Shenyang 110169, China; State Key Laboratory of Robotics, Shenyang Institute of Automation, Chinese Academy of Sciences, Shenyang 110016, China; State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150001, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150001, China Beijing Aerospace Control Center Key Laboratory on the Technology of Space Flight Dynamics, Beijing 100190, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150001, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150001, China State Key Laboratory of Robotics and System, Harbin Institute of Technology, Harbin 150001, China Department of Aerospace Engineering, Ryerson University, Toronto, ON M5B2K3, Canada
Actuation Arrangement of Rigid Foldable Waterbomb Origami	Harbin Institute of Technology State Key Laboratory of Robotics and System, , Harbin 150001 , China ; Harbin Institute of Technology School of Mechanical Engineering and Automation, , Shenzhen 518055 , China Harbin Institute of Technology School of Mechanical Engineering and Automation, , Shenzhen 518055 , China Harbin Institute of

	<p>Technology State Key Laboratory of Robotics and System, , Harbin 150001 , China ; Harbin Institute of Technology School of Mechatronics Engineering, , Harbin 150001 , China Harbin Institute of Technology School of Mechanical Engineering and Automation, , Shenzhen 518055 , China ;; Ryerson University Department of Aerospace Engineering, , Toronto, ON M5B 2K3 , Canada</p>
<p>Controlling the columnar-to-equiaxed transition during Directed Energy Deposition of Inconel 625</p>	<p>Herbert Gleiter Institute of Nanoscience, Nanjing University of Science and Technology, Nanjing 210094, China Herbert Gleiter Institute of Nanoscience, Nanjing University of Science and Technology, Nanjing 210094, China Herbert Gleiter Institute of Nanoscience, Nanjing University of Science and Technology, Nanjing 210094, China Nanjing Enigma Automation Corporation, LTD, Nanjing 211153, China School of Physical Science and Technology, Northwestern Polytechnical University, Xi'an 710072, China Herbert Gleiter Institute of Nanoscience, Nanjing University of Science and Technology, Nanjing 210094, China Department of Mechanical Engineering, McGill University, Montreal, QC H3A 0C3, Canada Department of Materials Science & Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada Department of Materials Science & Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada School of Materials Science and Engineering, Nanjing University of Science and Technology, Nanjing 210094, China UNIDEMI, Department of Mechanical and Industrial Engineering, NOVA School of Science and Technology, Universidade NOVA de Lisboa, Caparica 2829-516, Portugal Herbert Gleiter Institute of Nanoscience, Nanjing University of Science and Technology, Nanjing 210094, China School of Materials Science and</p>

	Engineering, Nanjing University of Science and Technology, Nanjing 210094, China
<p>Tuning microstructure and improving the corrosion resistance of Ti-6Al-3Nb-2Zr-1Mo alloy using the electron beam freeform fabrication</p>	<p>Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada; National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China HIT-Chungu Joint Research Center for Additive Manufacturing Materials, Anhui Chungu 3D Printing Institute of Intelligent Equipment and Industrial Technology, Wuhu 241200, China; National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China School of Space Environment and Physical Science, Harbin Institute of Technology, Harbin 150001, China AVIC Manufacturing Technology Institute, Beijing 100024, China School of Materials Science and Engineering, Kunming University of Science and Technology, Kunming 650093, China; Yunnan Titanium Industry Co., Ltd., Chuxiong 651209, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials</p>

	<p>Science and Engineering, Harbin Institute of Technology, Harbin 150001, China Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada</p>
<p>Tuning microstructure and enhancing corrosion property of Ti-6Al-3Nb-2Zr-1Mo alloy through electron beam surface melting</p>	<p>Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada; National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China HIT-Chungu Joint Research Center for Additive Manufacturing Materials, Anhui Chungu 3D Printing Institute of Intelligent Equipment and Industrial Technology, Wuhu 241200, China; National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China Laboratory for Space Environment and Physical Science, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China AVIC Manufacturing Technology Institute, Beijing 100024, China Yunnan Titanium Industry Co., Ltd., Chuxiong 651209, China; School of Materials Science and Engineering, Kunming University of Science and Technology, Kunming 650093,</p>

	<p>China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China National Key Laboratory for Precision Hot Processing of Metals, School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, China Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada</p>
<p>Large eddy simulation study on trailing edge cutback cooling with a whisker lip</p>	<p>Department of Mechanical and Industrial Engineering, University of Toronto, Toronto M5S 3G8, Canada; School of Energy Science and Engineering, Harbin Institute of Technology, Harbin 150001, China School of Energy Science and Engineering, Harbin Institute of Technology, Harbin 150001, China Department of Mechanical and Industrial Engineering, University of Toronto, Toronto M5S 3G8, Canada School of Energy Science and Engineering, Harbin Institute of Technology, Harbin 150001, China School of Energy Science and Engineering, Harbin Institute of Technology, Harbin 150001, China</p>
<p>Reduced Graphene Oxide-Based Dielectric Nanocomposites with Small Dielectric Relaxation Times for Emerging Dielectric Electronics with High-Frequency Performance Demands</p>	<p>College of Materials Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China College of Materials Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China International Science & Technology Cooperation Base for Laser Processing Robot, College of Mechanical and Electrical Engineering, Wenzhou University, Wenzhou 325035, China College of Materials Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China Department of Materials Science and Engineering, Nanjing University, 22 Hankou Road, Nanjing</p>

	210093, China Department of Chemical Engineering & Applied Chemistry, University of Toronto, Toronto, Ontario M5S 3E5, Canada
Training Beam Design for Channel Estimation in Hybrid mmWave MIMO Systems	School of Information and Electronics, Beijing Institute of Technology, Beijing 100081, China. School of Information and Electronics, Beijing Institute of Technology, Beijing 100081, China. School of Information and Electronics, Beijing Institute of Technology, Beijing 100081, China. Department of Electrical, Computer, and Biomedical Engineering, Ryerson University, Toronto, ON M5B 2K3, Canada. School of Information and Electronics, Beijing Institute of Technology, Beijing 100081, China.
Editorial: Multi-site neuroimage analysis: Domain adaptation and batch effects	Department of Computing Science, University of Alberta, Edmonton, AB, Canada; Department of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China; Alberta Machine Intelligence Institute (Amii), Edmonton, AB, Canada Department of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing, China Department of Psychiatry, University of Alberta, Edmonton, AB, Canada Department of Computing Science, University of Alberta, Edmonton, AB, Canada; Canadian Institute for Advanced Research (CIFAR) AI Chair, Toronto, ON, Canada; Alberta Machine Intelligence Institute (Amii), Edmonton, AB, Canada
Small-depth nanoindentation studies of an additively manufactured titanium alloy: Anisotropic nanomechanical properties and correlation with microscopic mechanical behaviour	Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada Department of Mechanical and Materials Engineering, Florida International University, Miami, FL 33174, USA Department of Mechanical and Industrial

	<p>Engineering, Toronto Metropolitan University, 350 Victoria Street, Toronto, Ontario M5B 2K3, Canada Research Institute for Frontier Science, Beihang University, 37 Xueyuan Road, Beijing, P.R. China Department of Materials Science and Engineering, University of Toronto, Toronto, ON M5S 3E4, Canada</p>
<p>Out-of-plane chaotic motion and suppression for tethered tug-debris systems with thrust perturbation</p>	<p>State Key Laboratory of Mechanics and Control for Aerospace Structures, Nanjing University of Aeronautics and Astronautics, Nanjing 210016, China Department of Mechanical Engineering, York University, Toronto, Ontario, Canada M3J 1P3</p>
<p>New Parent Flowfield for Streamline-Traced Intakes</p>	<p>Nanjing University of Aeronautics and Astronautics, 210016 Nanjing, People’s Republic of China Nanjing University of Aeronautics and Astronautics, 210016 Nanjing, People’s Republic of China Nanjing University of Aeronautics and Astronautics, 210016 Nanjing, People’s Republic of China Ryerson University, Toronto, Ontario M5B 2K3, Canada North China University of Technology, 100144 Beijing, People’s Republic of China</p>