

## Special Issue

# Advanced Fluid Power Systems and Actuators

### Message from the Guest Editors

Hydraulic and pneumatic actuators play an important role in widespread industrial applications such as power transmission, renewable energy systems, construction machineries, transportation, and automation. Therefore, contributions from all fields related to fluid power systems and actuators are welcome to this Special Issue:

- Theory, applications, and case studies of hydraulic/pneumatic systems and actuators;
- Fluid power transmissions, machines, and actuators;
- New design for hydraulic/pneumatic systems and actuators;
- Friction estimation in hydraulic/pneumatic systems and actuators;
- Energy regeneration and efficiency improvement in hydraulic/pneumatic systems;
- Intelligent and precision tracking control for hydraulic/pneumatic actuators;
- Intelligent hydraulic machines: safety and reliability for human-machine interactions.

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### Guest Editors

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### Deadline for manuscript submissions

closed (20 November 2021)



## Actuators

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## About the Journal

### Message from the Editorial Board

We are just entering the Next Wave of Technology (NWT) where actuators will play the same role as the computer chip did for computers/social media approximately four decades ago. Just in the U.S., production of \$1 trillion year of electromechanical systems (vehicles, orthotics, manufacturing cells, freight trains, aircraft, etc.) will be impacted by the NWT, all driven by actuators. Five key trends can be found for the future perspectives: “Performance to Reliability”, “Hard to Soft”, “Macro to Nano”, “Homo to Hetero” and “Single to Multi functional”. We invite papers that primarily impact these economic sectors; those illustrating basic scientific principles are also welcome.

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### Editors-in-Chief

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