



Recent Developments in Precision Actuation Technologies

Guest Editors:

Prof. Dr. Bin-tang Yang

State Key Laboratory of
Mechanical System and
Vibration, Shanghai Jiao Tong
University, Shanghai 200240,
China

Dr. Yikun Yang

State Key Laboratory of
Mechanical System and
Vibration, Shanghai Jiao Tong
University, Shanghai 200240,
China

Dr. Xiaoqing Sun

Department of Mechanical
Engineering, Donghua University,
Shanghai 201620, China

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Message from the Guest Editors

Dear Colleagues,

Precision actuation technologies are vital in many fields of precision engineering, such as precision machining, active control of micro-vibration, surgical robots, etc. One of the main components of precision actuation technologies is precision actuators. Actuators based on smart materials have attracted the attention of a large number of researchers in recent years. These materials include piezoelectric materials, magnetostrictive materials, shape memory alloys, dielectric materials, etc. Another of the main components of precision actuation technologies is control methods. Smart material actuators often have strong nonlinearity, so it is necessary to study effective control methods to achieve precise actuation. Research into new precision actuators, precision actuation control methods and applications of precision actuation technology is still very active. This Special Issue aims to collect original papers on various types of precision actuation mechanisms, actuator design, control methods and applications, not limited to specific application areas.

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