



Design and Control of Compliant Manipulators

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Message from the Guest Editor

Dear Colleagues,

Targeting at different tasks, compliant manipulators can be driven by various actuators such as smart materials actuators (e.g., piezoelectric actuator, shape memory alloy, magnetostrictive actuator, ionic polymer, dielectric elastomer), electromagnetic actuators, fluidic/pneumatic actuators, electrothermal actuators, etc. Compliant manipulators have been applied extensively in different scenarios ranging from macro-, micro- to nano-scale. Example applications including micro/nano-manipulation, assembly automation, medical instruments, rehabilitation robots, biomedical engineering, and so on. Such applications are enabled by the design and implementation of sophisticated control strategies, involving motion control, force control, visual servo control, intelligent control, etc. The main focus of this Special Issue is on new design, control and applications of compliant manipulators dedicated to diverse science and engineering fields.

Website :

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