



New Formulations in the Applied Mechanics to Robotics

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Message from the Guest Editor

Applied mechanics in robotics refers to the modeling and simulation of the geometry, kinematics, elastokinematics, dynamics, and elastodynamics of the rigid or elastic structures of robots.

This analysis is performed on robots characterized by serial and parallel structures, as well as on mobile.....

The main purpose of this Special Issue is to encourage researchers to share the latest developments in the field of advanced dynamics of robotic systems; higher-order dynamic equations; analytical dynamics of complex systems; and mathematical modelling of serial, parallel, and mobile robot structures (e.g., the use of matrix exponential or of polynomial interpolation functions and the establishment of dynamic equations of motion based on the acceleration energies).

Keywords

- Robotics
- Kinematics control
- Advanced kinematics
- Matrix exponentials in robotics
- Motion trajectories
- Robot dynamics
- Acceleration energies
- Analytical dynamics
- Advanced dynamics





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Message from the Editor-in-Chief

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