Special Issue

Intelligent Bio-Inspired Robots: New Trends and Future Perspectives

Message from the Guest Editors

Recent research has shown that robotics can take advantage of and widen its intervention spaces through the implementation of strategies and mechanisms derived from biological systems. By understanding the principles behind biological, biochemical, and biomechanical processes, the design of new components and devices can lead to more human-friendly systems, also through soft or reconfigurable structures, as well as smarter and more energy-efficient architectures than conventional ones. This Special Issue aims to present an overview of new trends and results in the study and development of intelligent and bio-inspired robots. Topics may include (but are not limited to):

- Mechanical and mechatronic design of bio-inspired robots;
- Biomimetic approaches in design and manufacturing;
- Human–robot physical interaction;
- Cognitive robots;
- Underwater and space robots;
- Bioinspired and swarm robotic systems;
- Exoskeletons;
- Prostheses;
- Haptic devices;
- Biomechanics.

Guest Editors

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Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.
Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.
There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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