

Bioinspired Walking, Rolling, and Jumping Robot for Venus Exploration

A. Western, M. Hassanalian

Bioinspiration

- Long-Nosed Leopard Lizard
- Golden Wheel Spider
- Octopus

Robot Design

- Spherical Body for Electronics
- Formation Changing Legs
- Walking, Rolling, and Jumping Capabilities
- Flexible Composite Material Suitable for High Temperatures
- Obstacle Detection and Avoidance

Advantages of this Robot

- Speed and Mobility
- Reduced Energy Consumption
- Larger area of Exploration
- Detailed Surface Mapping

