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In this issue

Research Article

Open Access Research Article PTZAID:ARA-8-117

Digital twinning of surveillance robot

Published On: January 23, 2024 | Pages: 001 - 007

Author(s): Saranya M*, Archana N, Lavanya SS, Ooviyavalli K, Sneha B and Sujana K

Surveillance robots provide troops with real-time information about their surroundings, including enemy positions, terrain, and potential threats. This information is invaluable for making informed decisions and ensuring the safety of military personnel. Geo-fenced robots are robots equipped with technology that restricts their movements within predefined geographic b ...

Abstract View Full Article View DOI: 10.17352/ara.000017

Review Article

Open Access Review Article PTZAID:ARA-8-119

Design Ideation for Autonomous Reproductive Worm Robot: Inheritance from Biological Worm C.elegans

Published On: August 09, 2024 | Pages: 030 - 046

Author(s): Debanik Roy* and Rudra Prasanna Banerjee

The vast domain of Bio-inspired Robotics has been nourished with several key-themes of design over the years and those are, no doubt conceptually brilliant. The size effect of such bio-robotic gadgets was also tackled through modernage manufacturing as well as assembly technologies and we have got experimental gadgets like worm robots as outcome. However, in all such ...

Abstract View Full Article View DOI: 10.17352/ara.000019

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Modeling, mechanics and experimental investigation of perpetual vibration of

serial-chain direct-drive flexible robotic system

Published On: March 02, 2024 | Pages: 008 - 029

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The domain of Flexible Robotic Systems (FRS) is an exciting ensemble of global robotics research of the present decade, which unfurls various real-time data like rheology, vibration, sensor fusion, and non-linear coupled dynamics for control. As some of these features, especially strain-induced deflection and vibration, are inherent in FRS, the design and prototype de ...

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