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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 modern-age 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 ...

Abstract View | Full Article View | DOI: 10.17352/ara.000018