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Autore	Nguyen Duc-Nam
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Altri autori (Persone)	TranNgoc Dang Khoa HuynhVan Tuan OnoTakahito NguyenVan Hieu PandeyAshok Kumar
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Nota di contenuto	Adaptive neural sliding mode control for motion tracking of piezoelectric actuator -- Compliant constant force guiding mechanism -- Manufacturing and experimental study with soft actuators made of silicone material -- Investigations on influence of micro and nano pulse laser source for µ 3D printing of ceramics over flexible substrates for functional applications -- A Research on the Principle of Stepping Process for Humanoid Robot -- Development of an autonomous ultrafine bubble system for increasing oxygen intensitive in litopenaeus vannamei shrimp pond -- Performance Analysis of Ti and Cu rich SMA coated Optical Fiber Sensors For Low and High temperature Condition

Monitoring of Systems -- Planar sensor design for force torque measurement based on fiber optic sensing -- Multi objective optimization of saw blade module in a new type of frame saw machine using the Parameter Space Investigation Method -- Influence of laser micromachining and compositional variation of NiTi on NiTi Kapton polyimide bimorph actuators for opto mechatronics applications.- Impact of Helical Intake Manifold Geometries on Swirl Generation in Cylinder of Small Diesel Engine -- Non invasive Lactate Monitoring SystemUsing Mobile Imaging and Paper based Biosensors.

Sommario/riassunto

This book brings together investigations which combine theoretical and experimental results related to such systems as flexure hinges and compliant mechanisms for precision applications, the non-linear analytical modeling of compliant mechanisms, mechanical systems using compliance as a bipedal robot and reconfigurable tensegrity systems and micro-electro-mechanical systems (MEMS) as energy efficient micro-robots, microscale force compensation, magnetoelectric micro-sensors, acoustical actuators and the wafer bonding as a key technology for the MEMS fabrication. The book gathers the contributions presented at the 7th Conference on Microactuators, Microsensors and Micromechanisms (MAMM), held in Ho Chi Minh City, Vietnam, in November 2024. The aim of the conference was to provide a special opportunity for a know-how exchange and collaboration in various disciplines concerning systems pertaining to micro-technology. The conference was organized under the patronage of International Federation for the Promotion of Mechanism and Machine Science (IFToMM).