1. Record Nr. UNINA9910254329803321

Autore	Pandit Shweta
Titolo	Spectrum Sharing in Cognitive Radio Networks : Medium Access Control Protocol Based Approach / / by Shweta Pandit, Ghanshyam Singh
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-53147-6
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XXIII, 254 p. 81 illus., 58 illus. in color.)
Disciplina	621.3815
Soggetti	Electronic circuits Signal processing Energy policy Energy and state Electronics Electronic Circuits and Systems Signal, Speech and Image Processing Energy Policy, Economics and Management Electronics and Microelectronics, Instrumentation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Cognitive Radio Communication System¾Spectrum Sharing Techniques -- Spectrum Sensing in Cognitive Radio: Potential Techniques and Future Perspective -- Medium Access Control Protocol for Distributed Cognitive Radio Network -- Distributed Cognitive Radio Medium Access Control Protocol in Perfect and Imperfect Channel Sensing Scenarios -- Throughput Enhancement using Bandwidth Wastage in MAC Protocol of the Distributed Cognitive Radio Network -- Power Allocation for Optimum Energy Efficiency in MAC Protocol of Cognitive Radio Communication System -- Frame Structure for Throughput Maximization in Cognitive Radio Communication -- Capacity Limits over Fading Environment with Imperfect Channel State Information for Cognitive Radio Network -- Channel Capacity of Cognitive Radio in Fading Environment with CSI and Interference Power Constraints --

	Framework for Cross-Layer Optimization in Cognitive Radio Network.
Sommario/riassunto	This book discusses the use of the spectrum sharing techniques in cognitive radio technology, in order to address the problem of spectrum scarcity for future wireless communications. The authors describe a cognitive radio medium access control (MAC) protocol, with which throughput maximization has been achieved. The discussion also includes use of this MAC protocol for imperfect sensing scenarios and its effect on the performance of cognitive radio systems. The authors also discuss how energy efficiency has been maximized in this system, by applying a simple algorithm for optimizing the transmit power of the cognitive user. The study about the channel fading in the cognitive user and licensed user and power adaption policy in this scenario under peak transmit power and interference power constraint is also present in this book.

2.

Record Nr.	UNINA9910726277003321
Autore	Petuya Victor
Titolo	Proceedings of I4SDG Workshop 2023 : IFToMM for Sustainable Development Goals / / edited by Victor Petuya, Giuseppe Quaglia, Tigran Parikyan, Giuseppe Carbone
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	9783031324390 9783031324383
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (506 pages)
Collana	Mechanisms and Machine Science, , 2211-0992 ; ; 134
Altri autori (Persone)	QuagliaGiuseppe ParikyanTigran CarboneGiuseppe
Disciplina	621
Soggetti	Robotics Biomedical engineering Sustainability Robotic Engineering Biomedical Engineering and Bioengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di contenuto

Experimental Investigation to Enhance Performances of MRE in Energy Harvesting -- Dynamic motion evaluation of a novel hybrid Wind & Wave integrated platform -- Model and Control Analysis for a Point absorber wave energy converter in Lebu, Chile -- Novel Pseudo 3D Design of Solar Thermal Facades with Triangle and Trapeze Solar Thermal Collectors for Increased Architectural Acceptanc -- Fast frequency-domain based tool for FOWT platforms preliminary design. -- A framework for improving energy efficiency and sustainability of collaborative robots -- Modeling and Parametric Analysis of Quasi-Translational Parallel Continuum Manipulators -- Energy Efficiency of a SCARA-Like Manipulator with Elastic Balancing -- Deep learning technique to identify abrupt movements in human-robot collaboration -- Planning Real-time Energy Efficient Trajectories for a Two Degrees of Freedom Balanced Serial Manipulator -- Reducing energy consumption and driving torque in an underactuated robotic arm through natural motion -- Online vs offline calibration of 5 DOFs robotic manipulator -- Task-Specific Synthesis and Design of a mobile six-DoF Hexa Parallel Robot for Weed Control -- Optimization of the design parameters of the 6-DOF mobility platform -- Identification of surgical forceps using YOLACT++ -- RehaWrist.q - Development of a 3 DoF Cable-Driven End-Effector Wearable Robot for Rehabilitation of the Wrist Joint -- Lifting Assist Device for Transfer in Cooperation with Caregivers -- Design and prototyping of a semi-wearable robotic leg for sit-to-stand motion assistance of hemiplegic patients -- Comprehensive control strategy design for a wheelchair power-assist device -- Analytical Synthesis of the Seven-Bar Linkage 7-RR(RRRR)RR used for Medical Disinfection Robot -- Design of a Novel Medical Rolling Walker for Use in Hospital Environment -- Influence of design parameters in energy lost for eccentric cam mechanisms with translational roller follower -- Friction Models for a Sustainable Design: Friction Coefficient in Lubricated Conformal Pairs -- Evolution of Gear Machining Technology in a Japanese Manufacturer - Realization of Skiving Method as an Application of 5-Axes Machining Center - -- A vibration exciter for dynamic testing of large structures -- Low Cost 3D printed Pneumatic Linear Actuator -- Development of Orientation Modules with Linear Actuation -- Analytical Synthesis of Five-Bar Linkage 5-RTRTR -- An Automatic Measurement System for Shape Memory Alloys' Wire Resistivity Characterization -- Fault Detection in Induction Machines of Air Handling Units -- Development of a remote-controlled scaled multi-actuated vehicle -- Functional Design and Prototyping of a Novel Soft Fingertip with Variable Stiffness -- Machine-learning based energy estimation on a high-speed transportation system -- Overturning stability for the SNAP Cargo family of pedalassisted ultralight vehicles -- Gas bearings applications in automotive fuel cell technology -- Numerical simulation of cylindrical lithium-ioncells impact -- Conceptual design and numerical analysis of a photobioreactor to cultivate Arthrospira -- Movement smoothness metrics in human-machine interaction -- Humanitarian Techniques in the Teaching of Technical Sciences -- Teaching Appropriate Technologies with the Applied Mechanics approach to sensitize students to their future role in environmental sustainability and social justice -- Machine learning algorithm for robotic inverse kinematic problem -- Robot Motion planning in ROS environment -- Intersubjective dynamics in Cooperative Robots -- A code of ethics for social cooperative robots -- Crankshaft balancing design platform: a practical application -- A Drop-In Phase Change Material- Based Augmented Cooling System for Track Capable Vehicles -- Decarbonizing Marine Sector: The Drop – In solution of Marine

Sustainable Fuels following their lubricity performance -- On the influence of the actual load sharing factor in increasing the power density in gearboxes -- Driveability Constrained Models for Optimal Control of Hybrid Electric Vehicles -- Lubricant-chemistry kinetic model of antiwear film using structure oriented lumping, quantum chemical molecular dynamics, and machine learning -- Torsional Dynamic Performance of a Transmission Test Bench: an Investigation on the Effect of Motors Controllers Parameters -- Sustainable design of machine guards -- Robotic System for Hand Rehabilitation based on Mirror Therapy -- Development of energy optimization strategies for catenary-free tramways -- Multibody simulation of an underactuated gripper for sustainable waste sorting -- Preliminary study on a handle with haptic devices for collaborative robotics in a remote maintenance environment -- Joint stiffness analysis and TSA-based regulation for underactuated soft grippers with monolithic structure.

Sommario/riassunto

This volume contains the proceedings of the 2nd IFToMM Workshop for Sustainable Development Goals - I4SDG 2023 held in Bilbao, Spain, on 22-23 June 2023. The workshop papers are focused on those aspects of the theory, design and applications of Mechanism and Machine Science that are fundamental for moving towards sustainable development. The main topics of the workshop are: sustainable energy systems, robotics and mechatronics, biomechanical and medical systems, education, linkages, gears, transmissions and actuators, engines and powertrains, tribology, transportation machinery, service systems for sustainability, humanitarian engineering and socio-technical systems for sustainable and inclusive development. The contributions, selected through a rigorous international peer-review process, highlight many exciting ideas that will drive new research directions and foster multidisciplinary collaboration between researchers from different backgrounds.