Record Nr. UNINA9910835058003321 Autore Youssef Ebrahim Samer El Titolo Synergetic Cooperation Between Robots and Humans: Proceedings of the CLAWAR 2023 Conference—Volume 1 / / edited by Ebrahim Samer El Youssef, Mohammad Osman Tokhi, Manuel F. Silva, Leonardo Mejia Rincon Cham: .: Springer Nature Switzerland: .: Imprint: Springer, . 2024 Pubbl/distr/stampa **ISBN** 3-031-47269-1 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (282 pages) Lecture Notes in Networks and Systems, , 2367-3389;; 810 Collana Disciplina 629.892 Soggetti Control engineering Robotics Automation Computational intelligence Control, Robotics, Automation Computational Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di contenuto Biped walking with robots and exoskeletons: Marching towards bionic gait -- Multibody dynamics with contact-impact events: Roots, models and applications -- Human-like bipedal locomotion -- Analysis of the influence of human exposure to risk and ESG as motivators for the implementation of climbing and mobile robots -- Multidimensional map: A conceptual design tool to develop robots for power lines --Mobility strategy of multi-limbed climbing robots for asteroid exploration. Sommario/riassunto CLAWAR 2023 is the 26th International Conference Series on Climbing and Walking Robots and Mobile Machine Support Technologies. The conference is organized by CLAWAR Association in collaboration with the Federal University of Santa Catarina, Florianópolis, Brazil, during October 2-4, 2023. This book provides the latest research and development findings and state-of-the-art insights into the mobile robotics and associated technologies in a diverse range of application

scenarios, within the framework of "Synergetic Cooperation Between

Robots and Humans". The topics covered include climbing and inspection robots, education in robotics and robotics in education, hybrid and convertible UAVs, legged robots, multibody systems and mechanism design in robotics, planning and control, robotic navigation, robotics and neurotechnologies for healthcare improvements, and simulation and digital twins in robotic applications. The intended readership includes participants of CLAWAR 2023 conference, worldwide researchers, scientists, and educators in the areas of robotics and related topics. The book is also a good source for courses in robotics and automation, control engineering, mechanical engineering, and mechatronics.