1. Record Nr. UNINA9910866569903321 Autore Carbone Giuseppe Titolo Advances in Automation, Mechanical and Design Engineering: SAMDE 2023 / / edited by Giuseppe Carbone, Med Amine Laribi Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 9783031626647 [1st ed. 2024.] Edizione Descrizione fisica 1 online resource (468 pages) Collana Mechanisms and Machine Science, , 2211-0992;; 161 Altri autori (Persone) LaribiMed Amine 629.8 Disciplina Soggetti Automatic control Robotics Automation Mechatronics Engineering design Biomedical engineering Control, Robotics, Automation **Engineering Design** Biomedical Engineering and Bioengineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Modeling and simulation of a slung load system for UAS -- Research on Nota di contenuto posture dependent mode coupling chatter in robotic milling -- Design of intelligent anti theft alarm system for electric bicycles based on NB IoT -- On necessity of conscious learning From robots to humans --High precision tracking simulation of stepper motor based on improved SVPWM -- Research on Air Autonomous Route Re planning Technology of Combat Aircraft -- Research on fault prediction of electric spindle in five axis machining center based on Bayes SVM -- Innovative Design of an Upper Limb Passive Exoskeleton for Electrical Work A Preliminary Exploration -- Emergency Robotic System for the Elderly Behavior Detection. This book presents the proceedings of the 2023 4th International Sommario/riassunto

Symposium on Automation, Mechanical and Design Engineering (SAMDE), held in Nanjing, China, on December 8–10, 2023. It gathers

contributions by researchers from several countries on the following topics: digitalized development and use of sustainable products and manufacturing systems, artificial intelligence, automated reasoning, human—robot collaborative interaction, sensors and autonomous sensor systems, cyber-physical control systems, generative design including topology optimization, advanced simulation and modelling, intelligent automation, smart materials, materials processing and factories, and circular economy, etc. The book offers a source of information and inspiration for researchers seeking to improve their work and gather new ideas for future developments.