1. Record Nr.	UNINA9910841853903321
Titolo	12th Asian-Pacific Conference on Medical and Biological Engineering : Proceedings of APCMBE 2023, May 18–21, 2023, Suzhou, China—Volume 2: Computer-Aided Surgery, Biomechanics, Health Informatics, and Computational Biology / / edited by Guangzhi Wang, Dezhong Yao, Zhongze Gu, Yi Peng, Shanbao Tong, Chengyu Liu
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-51485-8
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (439 pages)
Collana	IFMBE Proceedings, , 1433-9277 ; ; 104
Disciplina	610.28
Soggetti	Biomedical engineering Biophysics Biomedical Devices and Instrumentation Bioanalysis and Bioimaging Medical and Health Technologies
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Inside-out Accurate Head Tracking with Head-mounted Augmented Reality Device -- A Model-guided Method for Ultrasound Probe Calibration -- Real-time Medical Tool Runout Monitor Based on Dual Laser Displacement Sensors -- Correction of Premature Closure of Sagittal Suture with Small-incision Traction Bow -- A Home-style Intelligent Monitoring Sanitize Robot -- Yolov7-based Multiple Surgical Tool Localization and Detection in Laparoscopic Videos -- A Frequency-based Analysis Method to Improve Adversarial Robustness of Neural Networks for EEG-based Brain-computer Interfaces -- Robot-assisted Optical Coherence Tomography for Automatic Wide-field Scanning -- Adversarial Detection and Defense for Medical Ultrasound Images: From a Frequency Perspective -- A Novel Model-independent Approach for Autonomous Retraction of Soft Tissue -- A Soft Robot Using Magnetic-pneumatic Hybrid Actuation That Functions in Unstructured Environments -- A VR Environment for Cervical Tumor Segmentation Though Three-dimensional Spatial Interaction -- An

Image Fusion Method Combining the Advantages of Dual-mode Optical Imaging in Endoscopy -- An End-to-end Spatial-temporal Transformer Model for Surgical Action Triplet Recognition -- 2D/3D Reconstruction of Patient-specific Surface Models and Uncertainty Estimation via Posterior Shape Models.

Sommario/riassunto	This book presents cutting-edge research and developments in the field of medical and biological engineering, which a special emphasis on activities carried out in the Asian-Pacific region. Gathering the proceedings of the 12th Asian-Pacific Conference on Medical and Biological Engineering (APCMBE 2023), held on May 18–21, 2023, in Suzhou, China, this second volume of a two-volume set covers advances in computer-aided surgery, biomechanics and micro-nanoengineering, health informatics and health engineering, as well as computational modeling and simulation, as well as AI applications in biology and medicine. It addresses a broad audience of researchers and professionals active in biomedical engineering, biomechanics, medical biophysics, and health informatics.