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Sommario/riassunto

This book presents cutting-edge research and developments in the field of biomedical engineering, with a special emphasis on results achieved in Vietnam and neighboring low- and middle-income countries. Covering both fundamental and applied research, and focusing on the theme of “Translational Healthcare Technology from Advanced to Low and Middle Income Countries in the Era of Covid and Digital Transformation”, it reports on the design, fabrication, and application of low-cost and portable medical devices, biosensors, and microfluidic devices, on improved methods for biological data acquisition and analysis, on nanoparticles for biological applications, and on new achievements in biomechanics, tissue engineering, and regeneration. It describes the developments of molecular and cellular biology techniques, neuroengineering techniques, and statistical and computational methods, including artificial intelligence, for biomedical applications. It also discusses strategies to addresssome relevant issues in biomedical education and entrepreneurship. Gathering the proceedings of the 9th International Conference on The Development of Biomedical Engineering in Vietnam, BME 9, held on December 27-29, 2022, in Ho Chi Minh, Vietnam, the book offers important answers to current challenges in the field and a source of inspiration for scientists, engineers, and researchers with various backgrounds working in different research institutes, companies, and countries.