Record Nr. UNINA9910847591003321 Autore Tang Yi-Da Titolo Application of Biomaterials in the Treatment of Cardiovascular Diseases [[electronic resource] /] / edited by Yi-Da Tang, Jing Yang, Yufeng Zheng, Yongjun Li, Yong Zeng Pubbl/distr/stampa Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2024 **ISBN** 981-19-7712-7 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (432 pages) Altri autori (Persone) YangJing ZhengYufeng LiYongjun ZengYong Disciplina 617.4120592 Soggetti Biotechnology **Biomaterials** Internal medicine Internal Medicine Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Chapter 1. Summary (types of cardiovascular diseases, common clinical Nota di contenuto treatment methods and defects of cardiovascular diseases) -- Chapter 2. Anatomy of heart and blood vessel -- Chapter 3. Physicochemical Properties of The Ideal Materials for Cardiac Devices -- Chapter 4. Drug Delivery Systems and Cardiovascular Disease (including genes, proteins, and chemosynthetic drugs) -- Chapter 5. Manufacturing Methods of Materials for Cardiac Implant -- Chapter 6. Stent & Pefusion Balloon -- Chapter 7. Cardiac Valves -- Chapter 8. Occlusion Devices for Cardiovascular Disease -- Chapter 9. Prosthetic Vascular Grafts: Past, Present and Future -- Chapter 10. Cardiac Patch -- Chapter 11. Total Artificial Heart -- Chapter 12. Cardiac Pacemaker and Defibrillator -- Chapter 13. Future Challenges and Perspective. This book summarizes the recent advancements for biomaterials in the Sommario/riassunto field of cardiovascular disease, including drug delivery system (gene,

protein, drug), implant interventional instrument (heart valve, heart blocker, stent, artificial blood vessel, patch, artificial heart, cardiac

pacemaker, etc.) have been innovated and applied to the clinical uses to treatment of cardiovascular disease. Through the summary of this book, readers will have comprehensive and advanced understanding of the application of biomaterials in the field of cardiovascular disease.