1. Record Nr. UNINA9910346771003321 Autore Loewe Axel Titolo Modeling Human Atrial Patho-Electrophysiology from Ion Channels to ECG - Substrates, Pharmacology, Vulnerability, and P-Waves Pubbl/distr/stampa KIT Scientific Publishing, 2016 1000054615 **ISBN** Descrizione fisica 1 online resource (IX, 318 p. p.) Collana Karlsruhe transactions on biomedical engineering / Ed.: Karlsruhe Institute of Technology / Institute of Biomedical Engineering Soggetti Technology: general issues Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Half of the patients suffering from atrial fibrillation (AF) cannot be treated adequately, today. This book presents multi-scale computational methods to advance our understanding of pathomechanisms, to improve the diagnosis of patients harboring an arrhythmogenic substrate, and to tailor therapy. The modeling pipeline ranges from ion channels on the subcellular level up to the ECG on the body surface. The tailored therapeutic approaches carry the potential to reduce the burden of AF.