Record Nr. UNINA9910576868403321 Autore Patricio Sánchez Arciniegas Jorge **Titolo** A Multiscale In Silico Study to Characterize the Atrial Electrical Activity of Patients With Atrial Fibrillation: A Translational Study to Guide **Ablation Therapy** Karlsruhe, : KIT Scientific Publishing, 2022 Pubbl/distr/stampa Descrizione fisica 1 electronic resource (162 p.) Collana Karlsruhe transactions on biomedical engineering Soggetti Electrical engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto The atrial substrate undergoes electrical and structural remodeling during atrial fibrillation. Detailed multiscale models were used to study the effect of structural remodeling induced at the cellular and tissue levels. Simulated electrograms were used to train a machine-learning algorithm to characterize the substrate. Also, wave propagation direction was tracked from unannotated electrograms. In conclusion, in silico experiments provide insight into electrograms' information of the substrate.