1.	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
	Pubbl/distr/stampa	Karlsruhe, : KIT Scientific Publishing, 2022
	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.