1. Record Nr. UNINA9910595071503321 Autore Marti Jordi Titolo Modeling and Simulation of Lipid Membranes Pubbl/distr/stampa Basel, : MDPI Books, 2022 Descrizione fisica 1 electronic resource (174 p.) Research & information: general Soggetti Biology, life sciences **Biochemistry** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Cell membranes are complex structures able to contain the main elements of the cell and to protect them from the external surroundings, becoming the most fundamental interface in Biology. The main subject of this book is the study of the structure and characteristics of lipid membranes in a wide variety of environments. ranging from simple phospholipid membranes to complex systems including proteins, peptides, or oncogenes as well as the analysis of the interactions of the membrane components with small molecules and drugs. The scope of this book is to provide recent developments on membrane structure, composition and function by means of theoretical and experimental techniques, some of them combining computer

simulations with available data obtained at the laboratory. This Special Issue aims to report brand new key contributions to the field and also to give an overview about the connection between experiments and computer simulations, addressing fundamental aspects and applied research in biological membranes, with particular attention paid to the

applications of computer modeling and simulation to medicine.