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Titolo	Membrane Protein Complexes: Structure and Function / / edited by J. Robin Harris, Egbert J. Boekema
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
ISBN	981-10-7757-6
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (459 pages) : illustrations
Collana	Subcellular Biochemistry, , 0306-0225 ; ; 87
Disciplina	572.696
Soggetti	Proteins Protein Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Bacterial Adhesion Pili -- Microbial rhodopsins -- The structural basis for the extraordinary energy-transfer capabilities of the Phycobilisome -- Bacterial Mechanosensitive Channels -- Monoamine Oxidases -- Transient Receptor Potential (TRP) Channels -- Mitochondrial respiratory chain complexes -- The SarcoEndoplasmic Reticulum Calcium ATPase -- Organization of plant Photosystem II and Photosystem I supercomplexes -- The cytochrome b6f complex: biophysical aspects of its functioning in chloroplasts -- Ryanodine receptor structure and function in health and disease -- Conformational equilibrium of Human Platelet Integrin investigated by three-dimensional electron cryo-microscopy -- Mitochondrial proteolipid complexes of creatine kinase -- The Vacuolar ATPase – a Nano-scale Motor that Drives Cell Biology.
Sommario/riassunto	This edited book contains a compilation of 14 advanced academic chapters dealing with the structure and function of membrane protein complexes. This rapidly advancing important field of study closely parallels those on soluble protein complexes, and viral protein and nucleoprotein complexes. Diverse topics are included in this book, ranging from membrane–bound enzymes to ion channels, proton pumps and photosystems. Data from X-ray crystallography, cryo-electron microscopy and other biophysical and biochemical techniques are presented throughout the book. There is extensive use of colour figures of protein structures. Throughout the book structure and

function are closely correlated. The two editors, Egbert Boekema and J. Robin Harris, have worked on aspects of membrane and soluble proteins throughout their scientific careers and also have much publishing experience. The Subcellular Biochemistry series has expanded considerably in recent years, including several related volumes. The theme of protein complexes will be continued within several future volumes, thereby creating encyclopaedic coverage. The chapter topics within this book are particularly relevant to those involved in the biological and biomedical sciences. It is aimed at the advanced undergraduates, postgraduates and established researchers within this broad field. It is hoped that the book will be of interest and use to those involved with the study of cellular membranes and their associated proteins.