Record Nr. UNINA9910298658903321 Autore Milikovic Momcilo Titolo Electrostatic and stereoelectronic effects in carbohydrate chemistry / / Momcilo Milikovic New York:,: Springer,, 2014 Pubbl/distr/stampa **ISBN** 1-4614-8268-2 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (xii, 304 pages): illustrations Collana Gale eBooks Disciplina 54 547 547.78 Soggetti Carbohydrates **Electrostatics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references at the end of each chapter and indexes. Nota di contenuto Intramolecular Electrostatic Interacations -- Anomeric Effects -- Acid Catalyzed Hydrolysis of Glycosides -- Conformation and Chemistry of Oxocarbenium Ion -- Glycosylation -- Stereoelectronic Effects in Nucleosides and Nucleotides -- Free Radical Cyclizations -- Sulfones, Olefins, Nitrones, Glycosidic Bond, and Norrish-Young Photocyclization. Sommario/riassunto The book deals with polar effects in carbohydrates and how these effects control the stereochemistry of carbohydrate reactions. This is important for understanding the mechanisms of certain carbohydrate reactions, including enzymatic reactions such as glycosidases, a very important group of enzymes in living matter. It is also very useful for synthetic carbohydrate chemists who would like to synthesize stereoselectively certain classes of carbohydrates. This book will be a very important source of information for practicing synthetic carbohydrate chemists. The book will also be helpful for organic chemists, or for those studying glycobiology.