

1. Record Nr.	UNINA9910144376103321
Titolo	Handbook of chemical glycosylation : advances in stereoselectivity and therapeutic relevance // edited by Alexei V. Demchenko
Pubbl/distr/stampa	Weinheim, [Germany] : , : Wiley-VCH Verlag GmbH & Co. KGaA, , 2008 ©2008
ISBN	1-282-78437-4 9786612784378 3-527-62164-4 3-527-62165-2
Descrizione fisica	1 online resource (525 p.)
Disciplina	547.78
Soggetti	Glycosylation Oligomers
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 chapters and index.
Nota di contenuto	Handbook of Chemical Glycosylation; Contents; Preface; List of Contributors; 1 General Aspects of the Glycosidic Bond Formation; 1.1 Introduction; 1.2 Major Types of O-Glycosidic Linkages; 1.3 Historical Development: Classes of Glycosyl Donors; 1.4 General Reaction Mechanism; 1.5 Anomeric Effects; 1.6 Stereoselectivity of Glycosylation; 1.6.1 Structure of the Glycosyl Donor; 1.6.1.1 Protecting Groups; 1.6.1.2 Leaving Group; 1.6.2 Structure of the Glycosyl Acceptor; 1.6.2.1 Position of the Hydroxyl; 1.6.2.2 Protecting Groups; 1.6.3 Reaction Conditions; 1.6.3.1 Solvent Effect 1.6.3.2 Promoter (Catalyst), Additions 1.6.3.3 Temperature and Pressure; 1.6.4 Other Factors; 1.7 Special Cases of Glycosylation; 1.7.1 Aminosugars; 1.7.2 Sialosides; 1.7.3 Synthesis of 2-Deoxyglycosides; 1.7.4 Synthesis of -Mannosides; 1.7.5 Synthesis of Furanosides; 1.8 Glycosylation and Oligosaccharide Sequencing; 1.8.1 Leaving-Group-Based Strategies; 1.8.2 Two-Step Activation and Preactivation Strategies; 1.8.3 Protecting-Group-Based Strategies; 1.9 Conclusions and Outlook; References; 2 Glycoside Synthesis from Anomeric Halides;

2.1 Glycosyl Fluorides; 2.1.1 Background  
2.1.2 Synthesis of Glycosyl Fluoride Donors  
2.1.2.1 Fluorinating Reagents; 2.1.2.2 Glycosyl Fluorides from Hemiacetals; 2.1.2.3 Glycosyl Fluorides from Glycosyl Esters; 2.1.2.4 Glycosyl from Glycosyl Halides; 2.1.2.5 Glycosyl Fluorides from S-Glycosides; 2.1.2.6 Glycosyl Fluorides from Other Anomeric Moieties; 2.1.3 Glycosylation Using Glycosyl Fluorides as Glycosyl Donors; 2.1.3.1 A Weak Lewis Acid Cleaves the C-F Bond. How Was the Glycosyl Fluoride Method Discovered?; 2.1.3.2 Various Promoters Employed in Glycosylation by the Glycosyl Fluoride Method  
2.1.3.3 Glycosylations Promoted by Various Promoters  
2.1.3.4 Glycosylation of Silylated Compounds as Glycosyl Acceptors; 2.1.3.5 Two-Stage Activation Procedure; 2.1.3.6 Protecting-Group-Based Strategy; 2.1.4 Application to Natural Product Synthesis; 2.1.5 Special Topics; 2.1.5.1 C-Glycoside Synthesis via O-Glycosylation; 2.1.5.2 Glycosyl Fluorides for the Synthesis of a Combinatorial Library; 2.1.5.3 Glycosyl Fluorides as Glycosyl Donors for Chemoenzymatic Synthesis; 2.1.6 Conclusions and Future Directions; 2.1.7 Typical Experimental Procedures; 2.1.7.1 Preparation of the Glycosyl Donors  
2.1.7.2 Glycosylation Using Glycosyl Fluorides as Glycosyl Donors  
References; 2.2 Glycosyl Chlorides, Bromides and Iodides; 2.2.1 Background; 2.2.2 Glycosyl Chlorides; 2.2.2.1 Preparation of Glycosyl Chlorides; 2.2.2.2 Reactions of Glycosyl Chlorides; 2.2.3 Glycosyl Bromides; 2.2.3.1 Preparation of Glycosyl Bromides; 2.2.3.2 Reactivity Patterns and Some Useful Reactions of Glycosyl Bromides; 2.2.3.3 Stereoselective Glycosylations Employing Glycosyl Bromides and Applications; 2.2.4 Glycosyl Iodides; 2.2.4.1 Preparation of Glycosyl Iodides; 2.2.4.2 Reactions of Glycosyl Iodides  
2.2.5 Conclusions

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## Sommario/riassunto

Since carbohydrate oligomers are still a challenge in synthetic chemistry, this book on recent developments fulfils a great need. Covering the chemistry necessary to synthesize exact copies of these structures, top authors from all around the world comprehensively deal with synthesis from anomeric halides, from miscellaneous glycosyl donors, and by indirect and special methods, as well as 1-oxygen- and 1-sulfur-substituted derivatives. They demonstrate the best approach for the stereoselective formation of the intermonomeric bond, making this essential reading for every biochemist working in bi

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