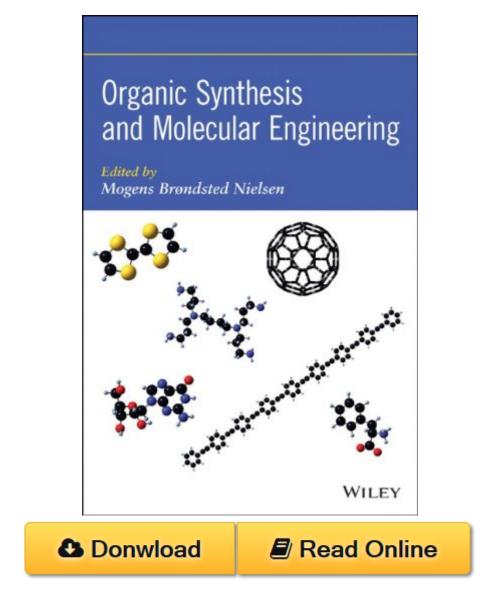
Organic Synthesis and Molecular Engineering PDF



Organic Synthesis and Molecular Engineering by Mogens Brøndsted Nielsen ISBN 1118150929

The theory, methods, and practices needed to build molecules and supramolecular systems

Using a synthetic approach to organic materials chemistry, this book sets forth tested and proven methods and practices that make it possible to engineer organic molecules offering special properties and functions. Throughout the book, plenty of real-world examples demonstrate the countless possibilities of creating one-of-a-kind molecules and supramolecular systems to support a broad range of applications. The book explores applications in both materials and bioorganic chemistry, including molecular electronics, energy storage, sensors, nanomedicine, and enzyme engineering.

Organic Synthesis and Molecular Engineering consists of fourteen chapters, each one contributed by one or more leading international experts in the field. The contributions are based on a thorough review and analysis of the current literature as well as the authors' firsthand experience in the lab engineering new organic molecules. Designed as a practical lab reference, the book offers:

- Tested and proven synthetic approaches to organic materials chemistry
- Methods and practices to successfully engineer functionality into organic molecules
- Explanations of the principles and concepts underlying self-assembly and supramolecular chemistry
- Guidance in selecting appropriate structural units used in the design and synthesis of functional molecules and materials
- Coverage of the full range of applications in materials and bioorganic chemistry
- A full chapter on graphene, a new topic generating intense research

Organic Synthesis and Molecular Engineering begins with core concepts, molecular building blocks, and synthetic tools. Next, it explores molecular electronics, supramolecular chemistry and self-assembly, graphene, and photoresponsive materials engineering. In short, it offers everything researchers need to fully grasp the underlying theory and then build new molecules and supramolecular systems.

Organic Synthesis and Molecular Engineering Review

This Organic Synthesis and Molecular Engineering book is not really ordinary book, you have it then the world is in your hands. The benefit you get by reading this book is actually information inside this reserve incredible fresh, you will get information which is getting deeper an individual read a lot of information you will get. This kind of Organic Synthesis and Molecular Engineering without we recognize teach the one who looking at it become critical in imagining and analyzing. Don't be worry Organic Synthesis and Molecular Engineering can bring any time you are and not make your tote space or bookshelves' grow to be full because you can have it inside your lovely laptop even cell phone. This Organic Synthesis and Molecular Engineering having great arrangement in word and layout, so you will not really feel uninterested in reading.