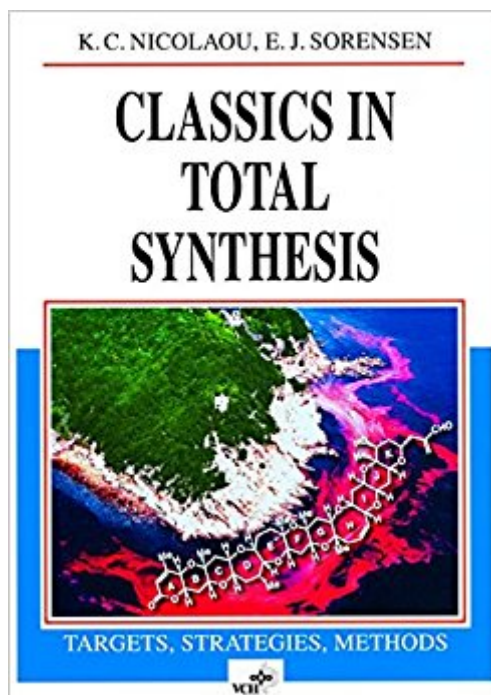


The book was found

Classics In Total Synthesis



Synopsis

K. C. Nicolaou, E. J. Sorensen *Classics in Total Synthesis Targets, Strategies, Methods* This book is a must for every synthetic organic chemist. With didactic skill and clarity, K. C. Nicolaou and E. J. Sorensen present the most remarkable and ingenious total syntheses from the laboratories of some of the world's greatest synthetic organic chemists. To make the strategies more understandable and accessible, especially to the novice, each total synthesis is first analyzed retrosynthetically. The authors then carefully describe each step and comment on alternative methods and potential pitfalls. When appropriate, key chemical reactions are discussed in the wider context of the chemical literature, giving the reader a lesson in both total synthesis and synthetic methods. Diverse structural types of natural products and important organic transformations including pericyclic, ionic, radical, and photochemical reactions are covered. Catalysis, asymmetric synthesis, organometallic chemistry, and cyclization reactions are especially highlighted. Mechanism, reactivity, selectivity, and stereochemistry are presented clearly and discussed analytically. Numerous references to useful reviews and the original literature will make this book the first point of entry into the vast field of synthetic organic chemistry. Special emphasis is placed on the skillful use of graphics and schemes. Retrosynthetic analyses, reaction sequences and crucial synthetic steps are presented in boxed, blue background sections within the text. For easy reference, key intermediates are also shown in the margins. Graduate students, teachers, and researchers alike will find this book to be a gold mine of useful information. Every synthetic chemist will have a copy on his or her desk.

Book Information

Hardcover: 798 pages

Publisher: Wiley-VCH; 1 edition (January 31, 1996)

Language: English

ISBN-10: 3527292845

ISBN-13: 978-3527292844

Product Dimensions: 7.7 x 1.5 x 10 inches

Shipping Weight: 4 pounds

Average Customer Review: 5.0 out of 5 stars 3 customer reviews

Best Sellers Rank: #3,451,223 in Books (See Top 100 in Books) #50 in [Books > Science & Math > Chemistry > Organic > Synthesis](#) #935 in [Books > Science & Math > Chemistry > Physical & Theoretical > Physical Chemistry](#) #8103 in [Books > Textbooks > Science & Mathematics > Chemistry](#)

Customer Reviews

This book is first to cover in detail the syntheses, reactions, and physical properties of nitrocarbons. Examples from the group of other, as yet unknown nitrocarbons are also discussed. It further includes a very complete survey of all published literature on the subject.

K. C. Nicolaou, E. J. Sorensen *Classics in Total Synthesis Targets, Strategies, Methods* This book is a must for every synthetic organic chemist. With didactic skill and clarity, K. C. Nicolaou and E. J. Sorensen present the most remarkable and ingenious total syntheses from the laboratories of some of the world's greatest synthetic organic chemists. To make the strategies more understandable and accessible, especially to the novice, each total synthesis is first analyzed retrosynthetically. The authors then carefully describe each step and comment on alternative methods and potential pitfalls. When appropriate, key chemical reactions are discussed in the wider context of the chemical literature, giving the reader a lesson in both total synthesis and synthetic methods. Diverse structural types of natural products and important organic transformations including pericyclic, ionic, radical, and photochemical reactions are covered. Catalysis, asymmetric synthesis, organometallic chemistry, and cyclization reactions are especially highlighted. Mechanism, reactivity, selectivity, and stereochemistry are presented clearly and discussed analytically. Numerous references to useful reviews and the original literature will make this book the first point of entry into the vast field of synthetic organic chemistry. Special emphasis is placed on the skillful use of graphics and schemes. Retrosynthetic analyses, reaction sequences and crucial synthetic steps are presented in boxed, blue background sections within the text. For easy reference, key intermediates are also shown in the margins. Graduate students, teachers, and researchers alike will find this book to be a gold mine of useful information. Every synthetic chemist will have a copy on his or her desk.

Nicolaou has written the book that Corey's *Logic of Chemical Synthesis* should have been. The total synthesis of over thirty natural products is described in great detail, outlining the strategy and retrosynthetic analysis for each compound. The book begins with Woodward's ground-breaking synthesis of strychnine (in 1954!) and culminates with one of Nicolaou's own great triumphs, the synthesis of brevetoxin B. The other syntheses presented, including vitamin B₁₂, ginkgolide B, and Taxol, are no less impressive. This book is truly inspiring; it is the kind of book that will induce bright young students to enter the field of organic chemistry. It is exciting reading, and I hope it will be but the first in a series. Congratulations, Nicolaou, on an excellent book. (For a sample of the tone of

the book, see Nicolaou's recent article on the synthesis of brevetoxin B in the journal *Angewandte Chemie International Edition*, issue 35, pages 589-607, 1996)

A graduate student strongly recommended me to get this book and start reading. At first intimidated by the complex synthesis steps and unfamiliar reagents, the Nicolaou synthesis book is a must read for organic students and chemists. Unlike "The Logic of Chemical Synthesis" (no doubt is also well-written), Nicolaou's "Classics in Total Synthesis" is a pictorial account of some of the representative syntheses of natural products. The detailed, well-written text discusses total synthesis work of chemists such as Heathcock, Corey, Evans, and Nicolaou himself. Each synthesis is preceded with the historical background and significance. A detailed synthetic scheme is included with detailed discussion of each intermediate and individual step. Reader will surely learn a great deal by working through each synthetic step with a pencil and paper. While most advanced organic texts discuss the typical traditional methods in synthetic chemistry, Nicolaou discusses practical approach to synthesizing complex stereospecific compounds. Corey's "The Logic of Chemical Syntheses" might have the similar scope in organic synthesis, yet Nicolaou will be more reader-friendly especially for beginning students in organic synthesis. Nicolaou presents not only the tactics of the subject, it also brings out the beauty of the art of total synthesis. A good read!

Nicolaou has written the book that Corey's *Logic of Chemical Synthesis* should have been. The total synthesis of over thirty natural products is described in great detail, outlining the strategy and retrosynthetic analysis for each compound. The book begins with Woodward's ground-breaking synthesis of strychnine (in 1954!) and culminates with one of Nicolaou's own great triumphs, the synthesis of brevetoxin B. The other syntheses presented, including vitamin B12, ginkgolide B, and Taxol, are no less impressive. This book is truly inspiring; it is the kind of book that will induce bright young students to enter the field of organic chemistry. It is exciting reading, and I hope it will be but the first in a series. Congratulations, Nicolaou, on an excellent book. (For a sample of the tone of the book, see Nicolaou's recent article on the synthesis of brevetoxin B in the journal *Angewandte Chemie International Edition*, issue 35, pages 589-607, 1996)

[Download to continue reading...](#)

Handbook of Reagents for Organic Synthesis: Reagents for Heteroarene Synthesis (Hdbk of Reagents for Organic Synthesis) Classics in Total Synthesis: Targets, Strategies, Methods Classics in Total Synthesis Advanced Organic Chemistry: Part B: Reaction and Synthesis: Reaction and Synthesis Pt. B The Organic Chemistry of Drug Synthesis, Volume 3 (Organic Chemistry Series of

Drug Synthesis) Landmarking and Segmentation of 3D CT Images (Synthesis Lectures on Biomedical Engineering Synthesis Lectu) More Dead Ends and Detours: En Route to Successful Total Synthesis From Biosynthesis to Total Synthesis: Strategies and Tactics for Natural Products The Total Synthesis of Natural Products: Acyclic and Monocyclic Sesquiterpenes, Part A, Volume 10 Chilton Total Car Care Jeep Wrangler 1987-2011 Repair Manual (Chilton's Total Care) The Total Latin Guitarist: A Fun and Comprehensive Overview of Latin Guitar Playing , Book & CD (The Total Guitarist) 100+ Word Fill In Puzzle Book For Adults: The French Style Brain Teaser Crossword Puzzles With Fill In Words Puzzles for Total Brain Workout! (A Total Brain Workout Series) (Volume 1) Bratislava y Eslovaquia / Bratislava and Slovakia (Guia Total / Total Guide) (Spanish Edition) Rugby Classics: Total Rugby: Fifteen-a-side Rugby for Player and Coach Cobra: The Total Performer! (Cool Classics) True Devotion to Mary: with Preparation for Total Consecration (Tan Classics) Notes on the Synthesis of Form (Harvard Paperbacks) Attacking Inequality in the Health Sector: A Synthesis of Evidence and Tools Advanced Organic Chemistry: Part B: Reaction and Synthesis Insight Yoga: An Innovative Synthesis of Traditional Yoga, Meditation, and Eastern Approaches to Healing and Well-Being

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)