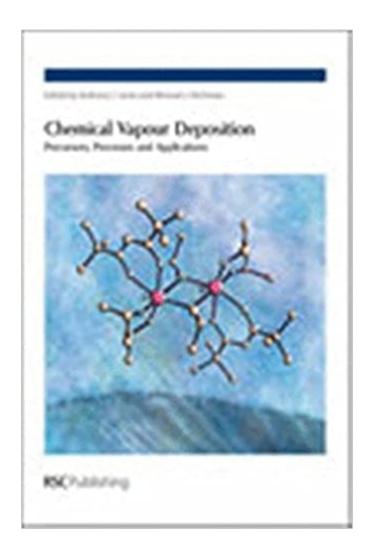


# The book was found

# Chemical Vapour Deposition: Precursors, Processes And Applications





# **Synopsis**

Chemical Vapour Deposition (CVD) involves the deposition of thin solid films from chemical precursors in the vapour phase, and encompasses a variety of deposition techniques, including a range of thermal processes, plasma enhanced CVD (PECVD), photon-initiated CVD, and atomic layer deposition (ALD). The development of CVD technology owes a great deal to collaboration between different scientific disciplines such as chemistry, physics, materials science, engineering and microelectronics, and the publication of this book will promote and stimulate continued dialogue between scientists from these different research areas. The book is one of the most comprehensive overviews ever written on the key aspects of chemical vapour deposition processes and it is more comprehensive, technically detailed and up-to-date than other books on CVD. The contributing authors are all practising CVD technologists and are leading international experts in the field of CVD. It presents a logical and progressive overview of the various aspects of CVD processes. Basic concepts, such as the various types of CVD processes, the design of CVD reactors, reaction modelling and CVD precursor chemistry are covered in the first few chapters. Then follows a detailed description of the use of a variety CVD techniques to deposit a wide range of materials, including semiconductors, metals, metal oxides and nitrides, protective coatings and functional coatings on glass. Finally and uniquely, for a technical volume, industrial and commercial aspects of CVD are also discussed together with possible future trends, which is an unusual, but very important aspect of the book. The book has been written with CVD practitioners in mind, such as the chemist who wishes to learn more about CVD processes, or the CVD technologist who wishes to gain an increased knowledge of precursor chemistry. The volume will prove particularly useful to those who have recently entered the field, and it will also make a valuable contribution to chemistry and materials science lecture courses at undergraduate and postgraduate level.

## **Book Information**

Hardcover: 600 pages

Publisher: Royal Society of Chemistry; 1 edition (January 21, 2009)

Language: English

ISBN-10: 0854044655

ISBN-13: 978-0854044658

Product Dimensions: 7.4 x 1.5 x 9.7 inches

Shipping Weight: 3 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #1,249,877 in Books (See Top 100 in Books) #97 inà Books > Engineering & Transportation > Engineering > Materials & Material Science > Extraction & Processing #104 inà Books > Science & Math > Chemistry > Crystallography #329 inà Â Books > Engineering & Transportation > Engineering > Materials & Material Science > Polymers & Textiles

### Customer Reviews

"...Timely and welcome...comprehensive, well-presented and refreshingly readable."...this book will be very useful to a broad readership, including chemists, engineers and students." (Chemistry and Industry, John Colligon, Manchester Met University.)

Written by leading experts in the field, this book gives a comprehensive overview of the various aspects of chemical vapour deposition processes and covers the basic concepts of types of CVD processes, the design of CVD reactors, reaction and reactor modelling, and the chemistry of CVD precursors and of deposition. There are detailed descriptions of the use of many CVD techniques to deposit a wide range of materials, including semiconductors, metals, metal oxides and nitrides, optical coatings, protective coatings and functional coatings on glass. Commercial aspects of CVD are also discussed, along with possible future trends. The book is aimed at CVD practitioners such as the chemist who wishes to learn more about CVD processes, or the CVD technologist wishing to gain an increased knowledge of precursor chemistry.

### Download to continue reading...

Chemical Vapour Deposition: Precursors, Processes and Applications Nolo's Deposition Handbook: The Essential Guide for Anyone Facing or Conducting a Deposition How to Reduce Fear of a Deposition: Handbook for the Layperson (A Deposition Handbook With Preparation Advice For The Layperson) The Deposition Handbook: A Guide To Help You Give A Winning Deposition Surviving Your Deposition: A Complete Guide to Help Prepare for Your Deposition Pulsed Metal Vapour Lasers (Nato Science Partnership Subseries: 1) Analysis, Synthesis and Design of Chemical Processes (4th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Advances in Chemical Physics, Volume 15: Stochastic Processes in Chemical Physics (v. 15) Kinetics of Chemical Processes: Butterworth-Heinemann Series in Chemical Engineering Chemical Process Safety: Fundamentals with Applications (3rd Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) Numerical Methods with Chemical Engineering Applications (Cambridge Series in Chemical Engineering) Encapsulation Technologies for Electronic Applications (Materials and Processes for Electronic Applications) Advanced

Transport Phenomena: Fluid Mechanics and Convective Transport Processes (Cambridge Series in Chemical Engineering) The Structure and Reaction Processes of Coal (The Plenum Chemical Engineering Series) Analysis, Synthesis and Design of Chemical Processes (3rd Edition) 3rd edition by Turton, Richard, Bailie, Richard C., Whiting, Wallace B., Sh (2009) Hardcover Analysis, Synthesis and Design of Chemical Processes (3rd Edition) 3rd (third) Edition by Turton, Richard, Bailie, Richard C., Whiting, Wallace B., Sh [2009] Elementary Principles of Chemical Processes, 3rd Edition 2005 Edition Integrated Media and Study Tools, with Student Workbook Water Quality Engineering: Physical / Chemical Treatment Processes Petroleum Refining Processes (Chemical Industries) Elementary Principles of Chemical Processes

Contact Us

DMCA

Privacy

FAQ & Help