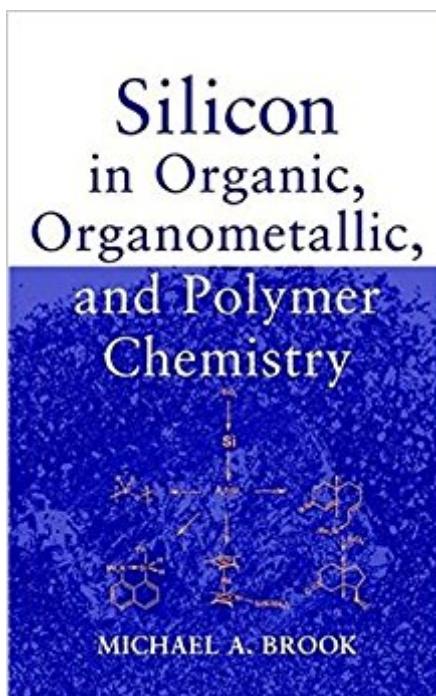


The book was found

# Silicon In Organic, Organometallic, And Polymer Chemistry



## Synopsis

A comprehensive, up-to-date reference to synthetic applications of organosilicon chemistry. Organic, organometallic, and polymer chemistry as well as materials science all utilize silicon in various forms, yet there is little cross-fertilization of ideas and applications among the disciplines. This book presents a much-needed overview of silicon chemistry, allowing fundamental and applied scientists to take full advantage of progress made within and outside their primary fields of expertise. With an emphasis on the preparation and reactivity of silicon compounds in organic, organometallic, and polymer chemistry, the author examines a broad range of useful topics—from mechanisms to syntheses of and syntheses using different organofunctional silanes. Numerous schemes as well as up-to-date examples from academia and industry will help readers to solve current synthetic problems and explore ideas for future research. Clear, concise coverage includes:

- \* The mechanistic basis for the development of new silicon-based reactions
- \* Formation and cleavage of silane reagents and functional siliconheteroatom compounds
- \* Silicones, silica, polysilanes, and other silicon-containing polymers
- \* Properties of molecules containing silicon, including bioactivity
- \* Methods for the preparation of Si-C compounds
- \* Silicon in organic synthesis
- \* An extensive functional group index for easy access to functional group transformations

## Book Information

Hardcover: 704 pages

Publisher: Wiley-Interscience; 1 edition (December 28, 1999)

Language: English

ISBN-10: 0471196584

ISBN-13: 978-0471196587

Product Dimensions: 6.4 x 1.6 x 9.6 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars 1 customer review

Best Sellers Rank: #1,226,064 in Books (See Top 100 in Books) #20 in Books > Science & Math > Chemistry > Organic > Synthesis #22 in Books > Science & Math > Chemistry > Organic > Organometallic Compounds #1215 in Books > Medical Books > Medicine > Internal Medicine > Pathology > Clinical Chemistry

## Customer Reviews

"...this book provides a good 'state-of-the-art' compilations and evaluation at the turn of the century. This work should be included in any chemistry reference collection." (Choice, Vol. 38, No. 8, April

2001) "This book was a pleasure to read. It is very well written in a relaxed chatty style that conveys the obvious deep interest and delight the author brings to the subject...the book can quite rightly claim to be the 'Eaborn' of the 2000s." (Journal of the American Chemical Society, Vol. 123, No. 5, November 2000) In recent years there have been several books published that describe the various topical uses of silicon in organic synthesis. All of these books have been useful, but they did not present the broader picture of how the chemistry of the element silicon has had a major impact on many technologies. The author refers to some earlier "classical" books on silicon chemistry, particularly Eaborn's text of the 1960s, that set a very high and comprehensive standard by which to be judged. Without a doubt, Michael Brook has met this standard. This book was a pleasure to read. It is very well written in a relaxed and chatty style that conveys the obvious deep interest and delight the author brings to the subject. There are an impressive number of references to substantiate this scholarly text. One minor point that might (subjectively) make the book even better would be to place Chapter 14 (Electronic Effects of Silyl Group) earlier since it so germane to all of the book. The price is high, but not unreasonably so, and the book can quite rightly claim to be the "Eaborn" of the 2000s. (Phillip Magnus, University of Texas at Austin) "...Brook discusses selected topics regarding synthesis he considers of most use to graduate students and practicing chemists." (SciTech Book News, Vol. 24, No. 4, December 2000) "...this is a completely successful book..." (Angewandte Chemie - International Edition, 3rd November 2000)

A comprehensive, up-to-date reference to synthetic applications of organosilicon chemistry. Organic, organometallic, and polymer chemistry as well as materials science all utilize silicon in various forms, yet there is little cross-fertilization of ideas and applications among the disciplines. This book presents a much-needed overview of silicon chemistry, allowing fundamental and applied scientists to take full advantage of progress made within and outside their primary fields of expertise. With an emphasis on the preparation and reactivity of silicon compounds in organic, organometallic, and polymer chemistry, the author examines a broad range of useful topics—from mechanisms to syntheses of and syntheses using different organofunctional silanes. Numerous schemes as well as up-to-date examples from academia and industry will help readers to solve current synthetic problems and explore ideas for future research. Clear, concise coverage includes:

- \* The mechanistic basis for the development of new silicon-based reactions
- \* Formation and cleavage of silane reagents and functional siliconheteroatom compounds
- \* Silicones, silica, polysilanes, and other silicon-containing polymers
- \* Properties of molecules containing silicon, including bioactivity
- \* Methods for the preparation of Si-C compounds
- \* Silicon in organic synthesis
- \* An extensive

functional group index for easy access to functional group transformations

just buy one for myself, Love my bread product. It does its job well. as the price. very nice . good.

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

Silicon in Organic, Organometallic, and Polymer Chemistry Study Guide: Ace Organic Chemistry I - The EASY Guide to Ace Organic Chemistry I: (Organic Chemistry Study Guide, Organic Chemistry Review, Concepts, Reaction Mechanisms and Summaries) Organometallic Flow Chemistry (Topics in Organometallic Chemistry) Polymer Clay: The Ultimate Beginners Guide to Creating Animals in 30 Minutes or Less! (Polymer Clay - Polymer Clay for Beginners - Clay - Polymer Clay Animals - Polymer Clay Jewelry - Sculpture) Molecular Visions (Organic, Inorganic, Organometallic) Molecular Model Kit #1 by Darling Models to accompany Organic Chemistry The Chemistry of Organic Silicon Compounds, Vol. 2, Part 1-3 (Patai's Chemistry of Functional Groups) Cute Polymer Clay Popsicles & Ice Cream: Polymer Clay Kawaii Food Charms (Polymer Clay Kawaii Charms Book 1) Silicon-Based Polymer Science: A Comprehensive Resource (ACS Advances in Chemistry) Applied Organometallic Chemistry and Catalysis (Oxford Chemistry Primers) Organic Synthesis: The Roles of Boron and Silicon (Oxford Chemistry Primers) Experimental Organic Chemistry: A Miniscale & Microscale Approach (Cengage Learning Laboratory Series for Organic Chemistry) The Organic Chemistry of Drug Synthesis, Volume 3 (Organic Chemistry Series of Drug Synthesis) What is Organic Chemistry? Chemistry Book 4th Grade | Children's Chemistry Books Organometallic Mechanisms and Catalysis: The Role of Reactive Intermediates in Organic Processes Ace General Chemistry I and II (The EASY Guide to Ace General Chemistry I and II): General Chemistry Study Guide, General Chemistry Review Infrared and Raman Spectra of Inorganic and Coordination Compounds, Applications in Coordination, Organometallic, and Bioinorganic Chemistry Infrared and Raman Spectra of Inorganic and Coordination Compounds, Part B: Applications in Coordination, Organometallic, and Bioinorganic Chemistry, 5th Edition Elements of Polymer Science & Engineering, Second Edition: An Introductory Text and Reference for Engineers and Chemists (The Elements of Polymer Science and Engineering) Organic Homemade Lotion Recipes - For All Skin Types (The Best Lotion DIY Recipes): Lotion Making For Beginners (organic lawn care manual, organic skin care, beauty and the beast) Functional Polymer Coatings: Principles, Methods, and Applications (Wiley Series on Polymer Engineering and Technology)

[Contact Us](#)

[DMCA](#)

Privacy

FAQ & Help