



Chemistry and Biology of Artificial Nucleic Acids

From Brand: Wiley-VCH

[Download now](#)

[Read Online](#) ➔

Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH

This is the first book to provide a comprehensive overview of the field of artificial nucleic acids. Covering a tremendous amount of literature on the chemistry, biology, and structure of artificial nucleic acids, it will constitute an invaluable source of information for the specialist and for young researchers interested in starting a career in this fascinating field of research alike.

This book combines the contributions of many of the major players in this research field, and covers the synthesis of sugar-, base- and backbone-modified nucleic acids, their structural characteristics studied by X-ray crystallography, and NMR in solution as well as their chemical and biological properties.

[!\[\]\(17413706fd4997a1a4bdf85c6864eee1_img.jpg\) Download Chemistry and Biology of Artificial Nucleic Acids ...pdf](#)

[!\[\]\(faf942dc3e59ce8eb64b4ac481eca7e0_img.jpg\) Read Online Chemistry and Biology of Artificial Nucleic Acid ...pdf](#)

Chemistry and Biology of Artificial Nucleic Acids

From Brand: Wiley-VCH

Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH

This is the first book to provide a comprehensive overview of the field of artificial nucleic acids. Covering a tremendous amount of literature on the chemistry, biology, and structure of artificial nucleic acids, it will constitute an invaluable source of information for the specialist and for young researchers interested in starting a career in this fascinating field of research alike.

This book combines the contributions of many of the major players in this research field, and covers the synthesis of sugar-, base- and backbone-modified nucleic acids, their structural characteristics studied by X-ray crystallography, and NMR in solution as well as their chemical and biological properties.

Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH Bibliography

- Sales Rank: #7262586 in Books
- Brand: Brand: Wiley-VCH
- Published on: 2012-04-16
- Original language: English
- Dimensions: 9.70" h x 1.30" w x 7.00" l, 3.29 pounds
- Binding: Hardcover
- 568 pages

 [Download Chemistry and Biology of Artificial Nucleic Acids ...pdf](#)

 [Read Online Chemistry and Biology of Artificial Nucleic Acid ...pdf](#)

Editorial Review

From the Back Cover

Thirty years of investigations on the chemistry and biology of non-natural nucleic acids have provided us with a wealth of new information, ranging from a deeper understanding of the parameters that influence nucleic acids with cellular factors. There is no part of the nucleic acid structure that has not been touched by chemists, and every chemical modification has resulted in an altered property. The nucleic acid structure, as originally defined by the *Watson-Crick* double helix, has now been expanded into an entire landscape of new structures adopted by artificial pairing systems. Countless strategies have been developed for the chemical synthesis of these modified nucleic acids. The resulting polymers have found applications in diagnostics, therapeutics, biotechnology, catalysis, sequencing, and nanotechnology, and have had a major impact in the quest for a better understanding of the origin of life. There is hardly another area in bioorganic chemistry that has contributed so much to progress in biology throughout the last decades.

This book combines the contributions of many of the major players in this research field, and covers the synthesis of sugar-, base-, and backbone-modified nucleic acids, their structural characteristics studied by X-ray crystallography, and NMR in solution as well as their chemical and biological properties.

About the Author

Martin Egli studied chemistry and received his doctorate in organic chemistry and chemical crystallography at the Swiss Federal Institute of Technology (ETH) in Zürich, Switzerland. He has conducted research on the structure and function of native and artificial nucleic acids at the ETH, MIT, and Northwestern University, and currently holds an appointment as Professor of Biochemistry in the School of Medicine at Vanderbilt University, Nashville, Tennessee, USA.

Piet Herdewijn is Professor at the Katholieke Universiteit Leuven, Belgium, and head of the laboratory of medicinal chemistry at the Rega Institute. He obtained his Ph.D. and habilitation from the same university. He was a postdoctoral fellow of the Humboldt Foundation at the University of Konstanz. He has conducted research in bioorganic and medicinal chemistry, mainly in the field of nucleosides, nucleotides, and nucleic acids, at the University of Leuven, the University of Ghent, and the Université d'Evry-Val-d'Essonne.

Users Review

From reader reviews:

Leslie Martin:

Do you certainly one of people who can't read pleasurable if the sentence chained in the straightway, hold on guys this kind of aren't like that. This Chemistry and Biology of Artificial Nucleic Acids book is readable by simply you who hate those perfect word style. You will find the information here are arrange for enjoyable looking at experience without leaving actually decrease the knowledge that want to deliver to you. The writer involving Chemistry and Biology of Artificial Nucleic Acids content conveys thinking easily to understand by a lot of people. The printed and e-book are not different in the written content but it just different in the form of it. So , do you even now thinking Chemistry and Biology of Artificial Nucleic Acids is not loveable to be your top checklist reading book?

Cheree Rodriquez:

Reading a publication can be one of a lot of activity that everyone in the world adores. Do you like reading book so. There are a lot of reasons why people like it. First reading a guide will give you a lot of new info. When you read a guide you will get new information due to the fact book is one of several ways to share the information or maybe their idea. Second, reading a book will make you actually more imaginative. When you looking at a book especially fictional works book the author will bring someone to imagine the story how the personas do it anything. Third, it is possible to share your knowledge to other folks. When you read this Chemistry and Biology of Artificial Nucleic Acids, you are able to tells your family, friends in addition to soon about yours book. Your knowledge can inspire average, make them reading a e-book.

Rose Engle:

Do you have something that you want such as book? The e-book lovers usually prefer to pick book like comic, short story and the biggest some may be novel. Now, why not seeking Chemistry and Biology of Artificial Nucleic Acids that give your enjoyment preference will be satisfied through reading this book. Reading routine all over the world can be said as the opportunity for people to know world better then how they react in the direction of the world. It can't be explained constantly that reading habit only for the geeky person but for all of you who wants to be success person. So , for all of you who want to start looking at as your good habit, it is possible to pick Chemistry and Biology of Artificial Nucleic Acids become your current starter.

Mary Barnett:

Many people spending their period by playing outside having friends, fun activity together with family or just watching TV 24 hours a day. You can have new activity to spend your whole day by looking at a book. Ugh, think reading a book can really hard because you have to accept the book everywhere? It alright you can have the e-book, having everywhere you want in your Mobile phone. Like Chemistry and Biology of Artificial Nucleic Acids which is obtaining the e-book version. So , try out this book? Let's view.

Download and Read Online Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH #PXRIT7Y41QE

Read Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH for online ebook

Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH books to read online.

Online Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH ebook PDF download

Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH Doc

Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH Mobipocket

Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH EPub

PXRIT7Y41QE: Chemistry and Biology of Artificial Nucleic Acids From Brand: Wiley-VCH