Design. Many of the authors explicitly describe their techniques in the context of combinatorial chemistry and high-throughput screening.

Rational Molecular Design in Drug Research is not the place to start for one wishing to learn the details of molecular modeling, or even the basics of specific methods of molecular design. Individual chapters are occasionally vague on the specifics of aspects of the computational methodology employed or assume a significant amount of prior knowledge of the technique (for example, the chapters on 3D-QSAR, while excellent, are too jargon-laced to be comprehensible to a nonspecialist). However, for those specialists interested in how other research groups approach the problem of rational molecular design, or for nonspecialists interested in an overview of the field and particularly in how it fits into the context of the world of genomics and combinatorial chemistry, this book is highly recommended. Since this is a conference proceeding, the record of the discussion which followed each chapter author's presentation is included, and this is particularly valuable; in many cases, areas which this reviewer found to be unclear in the main text were expanded upon in the discussion section. In others, particularly provocative ideas (such as the possibility of using computational results to change the placement of water molecules in the X-ray crystal structure of a protein active site) are debated, further adding to the value of this book.

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JA9856809
10.1021/ja9856809

Advances in Strained and Interesting Organic Molecules, Vol. 7. Edited by Brian Halton. JAI Press: Greenwich, CT. 1999. $109.50. 235 pp. ISBN 0-7623-0530-4.

The previous series *Advances in Strain in Organic Chemistry* and *Advances in Theoretically Interesting Molecules* are now combined under a single title, *Advances in Strained and Interesting Organic Molecules*. Starting with volume 7 to reflect the origin and prodigy of these earlier series, this new contribution features chapters on dihetracyclobutanes, three donor/three acceptor groups on benzene, extremely strained paracyclophanes, all carbon molecules, and isomeric fullerenes.

JA995739R
10.1021/ja995739r

Advances in Developmental Biochemistry, Vol. 5. Edited by Paul M. Wassarman. JAI Press: Greenwich, CT. 1999. $128.50. 233 pp. ISBN 0-7623-0202-x.

This series, along with *Advances in Developmental Biology*, comprise a set of books giving reviews in these respective fields. Volume 5 consists of seven chapters focused upon the biochemistry of the development of mollusks, flies, and mice. Five of the seven chapters address aspects of fertilization, capacitation of sperm, the acrosome reaction, gamete adhesion, and oocyte maturation and ovulation.

JA995740Q
10.1021/ja995740q

Advances in Electron Transfer Chemistry, Vol. 6. Edited by Patrick S. Mariano. JAI Press: Greenwich, CT. 1999. $109.50. 165 pp. ISBN 0-7623-0213-5.

This series of books covers various aspects of the reaction mechanisms of single electron movement in chemistry and biochemistry. Volume 6 has mini-reviews of photoinduced electron transfer of cyclopropane derivatives, electrochemistry of fluorinated organic structures, and photoinduced electron transfer reactions of organosilicon compounds.

JA995741I

10.1021/ja995741i

Advances in Atomic Spectroscopy, Vol. 4. Edited by Joseph Sneddon. JAI Press: Greenwich, CT. 1998. $109.50. 229 pp. ISBN 0-7623-0342-5.

This series presents cutting-edge reviews and articles in atomic spectroscopy. Volume 4 has two chapters related to different aspects of electrothermal atomic absorption spectroscopy (AAS), followed by chapters on graphite furnace AAS, flow injection AS, and determination of Hg in fish using AS.

JA995742A
10.1021/ja995742a

Advances in Chemical Physics, Vol. 108. Global and Accurate Vibration Hamiltonians from High-Resolution Molecular Spectroscopy. Edited by Michel Herman, Jacques Lievin, Jean Vander Auwera, and Alain Camparague. J. Wiley & Sons Inc.: New York, NY. 1999. $175.00. ISBN 0-471-32843-X.

This series is dedicated to helping the reader obtain general information about a wide variety of topics in chemical physics. This volume analyzes taking the Hamiltonian to the vibration−rotation spectrum and then examines the vibration−rotation spectrum to derive the Hamiltonian.

JA9957433
10.1021/ja9957433

Advances in Chemical Physics, Vol. 109. Edited by I. Prigogine. J. Wiley & Sons Inc.: New York, NY. 1999. $195.00. ISBN 0-471-32920-7.

This series is dedicated to helping the reader obtain general information about a wide variety of topics in chemical physics. Volume 109 of this series covers the following topics: theory of complex frequency dependent susceptibility of magnetic fluids, simulating molecular properties of liquid crystals, modeling of water and aqueous solutions at supercritical conditions, polar and nonpolar solvation dynamics, and spatial patterns and spatiotemporal dynamics in chemical systems.

JA995744V
10.1021/ja995744v

Progress in Inorganic Chemistry, Vol. 48. Edited by Kenneth K. Karlin. J. Wiley & Sons Inc.: New York, NY. 1999. $145.00. ISBN 0-471-32623-2.

Volume 48 of this series covers the following topics: perovskites, transition metals in polymeric π-organic frameworks, hemilabile ligands, organometallic fluorides, impregnated molecular sieves, and metal-mediated B−X activation.

JA995745N
10.1021/ja995745n

The Stille Reaction. By V. Farina, V. Krishnamurthy, and W. J. Scott. J. Wiley & Sons Inc.: New York, NY. 1998. 632 pp. $59.95. ISBN 0-471-31273-8.

This book is a compilation of examples of Stille cross coupling reactions. It covers the mechanism, regiochemistry, stereochemistry, and the scope and limitations on the electrophile and stannane. Importantly, multiple experimental preparations are included, as well as approximately 570 pages of tabulated examples.

JA995746F

10.1021/ja995746f