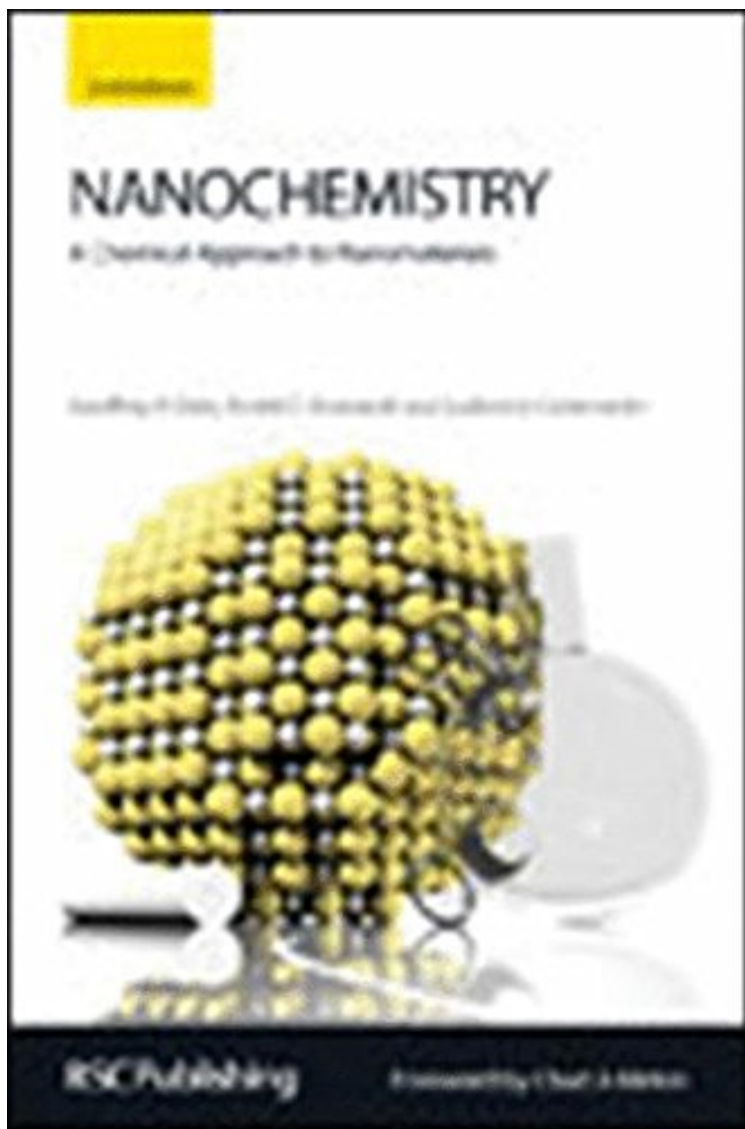


Nanochemistry: A Chemical Approach to Nanomaterials

Geoffrey A Ozin, Andr Arsenault, Ludovico Cademartiri
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Geoffrey A Ozin, Andr Arsenault, Ludovico Cademartiri : Nanochemistry: A Chemical Approach to Nanomaterials before purchasing it in order to gage whether or not it would be worth my time, and all praised Nanochemistry: A Chemical Approach to Nanomaterials:

0 of 0 people found the following review helpful. It's a good book for what it is By W.J. It's a good book for what it is - an airy and almost jocular introduction to nanochemistry. Unfortunately, or to be more accurate, typically, since it is a textbook there is a paucity of practical information. If you need more than a cursory examination of one of the book's subjects, you will have to hunt down a referenced paper (which has a high probability of being behind a paywall) and

sift through an obtuse methods section written by a researcher who either has a fundamentally poor understanding of the material or is deliberately concealing key concepts to prevent a premature prior art revelation on the advice of their institution's IP attorney. While breezily written and easy to read, this book solidly contributes to a condemnation of the nickle-and-dime-you-to-death mentality of academic science. So, good job! Flicitations and j'accuse all in one. Well done, sirs, well done. 1 of 1 people found the following review helpful. Nanochemistry By Dr Robert Crosdale This book is a great text for those wanting to discover more from new technology. Nanochemistry: A Chemical Approach is ideal for the University students studying topics that include, Materials Chemistry or Medicinal Chemistry. The impact on society of nano materials and the health areas associated with this technology is all wrapped into this book also. Dr. R. Crosdale 0 of 0 people found the following review helpful. Simple and very well presented. By Tomasz Ciach More complex than "Concepts of Nanochemistry" Great book about chemistry as a tool in nanoscience... I use it to teach nanotechnology in Chemical Faculty.

International interest in nanoscience research has flourished in recent years, as it becomes an integral part in the development of future technologies. The diverse, interdisciplinary nature of nanoscience means effective communication between disciplines is pivotal in the successful utilization of the science. Nanochemistry: A Chemical Approach to Nanomaterials is the first textbook for teaching nanochemistry and adopts an interdisciplinary and comprehensive approach to the subject. It presents a basic chemical strategy for making nanomaterials and describes some of the principles of materials self-assembly over 'all' scales. It demonstrates how nanometre and micrometre scale building blocks (with a wide range of shapes, compositions and surface functionalities) can be coerced through chemistry to organize spontaneously into unprecedented structures, which can serve as tailored functional materials. Suggestions of new ways to tackle research problems and speculations on how to think about assembling the future of nanotechnology are given. Primarily designed for teaching, this book will appeal to graduate and advanced undergraduate students. It is well illustrated with graphical representations of the structure and form of nanomaterials and contains problem sets as well as other pedagogical features such as further reading, case studies and a comprehensive bibliography.

I have used your Nanochemistry book as my textbook for a graduate level ChE course introducing material self-assembly. Students liked the topic and the book a lot. I followed your book and the course evaluation is excellent (4.8/5.0). I will teach the same class in Spring '08 semester and will use the same book as the textbook. Thanks for providing such a great book for the society. - Peng Jiang Excellent features of the book make it a useful, practical tool for teachers of materials chemistry, to this reviewer's joy. As materials chemistry spreads through every domain of modern chemical research and into all sectors of the industry, chemistry practitioners would do well to find the time to read this seminal book. An invaluable reference book for undergraduate and graduate students. As a superb textbook for teaching of materials chemistry and nanotechnology. A gem in the scientific literature... a beautifully written and richly illustrated book that is unlike any other. Ozin and Arsenault should be congratulated for their groundbreaking book. Reading it will reward students in chemistry and materials science as well as researchers from many different disciplines. Nanochemistry will be an invaluable reference book for undergraduate and graduate students looking for an easy way to educate themselves with the up-to-date advances made in chemical patterning, self-assembly, and nanomaterial synthesis.... a superb textbook.... to this wonderful book written.... insightful perspective on nanochemistry. Strongly recommend this book (only 39.95 for a hardcover copy!) to every student and researcher on materials chemistry, physics, materials science, engineering and biology. The book succeeds in its goal of presenting concepts useful to create functional solid-state nanostructures that will likely be helpful for applications in several fields of modern science such as electronics, photonics, batteries, solar cells, fuel cells, and chemical storage and release. "A text that covers all the basic concepts of nanoscale chemistry and materials science, and sets them in their historical context, has been long overdue. But here it is - not just a comprehensive guide to the field, but a recipe book for the future. Nanoengineers, start here!" Well-written and informative introductions to all aspects of the field that have a major chemistry component. This book can be highly recommended to develop and accompany courses for chemistry students. This book is well worth buying. It is a kaleidoscopic compendium of the achievements of chemists working with materials scientists and physicists. From the Back Cover The global success of the 1st edition of Nanochemistry, along with exceptionally rapid change in the field, has necessitated the publication of a 2nd edition after only three years. This truly major update highlights the latest breakthroughs using more than eighty new case histories, more problem sets, and more teaching principles. Nanotechnology is touted to begin a new era by bringing us materials that were not available before. This book describes the fascinating chemistry behind nanotechnology in a clear and easy to read style. Aimed at teachers, graduate students and advanced undergraduates it provides an authoritative, rigorous and hype-free guide to this burgeoning field. For those who already have some knowledge of the subject, the book remains invaluable as a reference and source of inspiration for future research or teaching. With a combined total of over forty years teaching and research experience, the authors are leaders in the fields of materials chemistry and nanochemistry. They have chosen to focus on concepts rather than formulas whilst describing all the

techniques commonly used to synthesize nanomaterials. Problem sets are used to get students to thinking creatively and laterally about what they have learnt. The questions are designed to draw connections between subjects, fields and topics - of fundamental importance for anyone intending to work in such an interdisciplinary field. Nanochemistry is long but later chapters do not require knowledge of earlier sections so it can be read a little at a time. s of the first edition stated that it is one of the most entertaining books in science, given the many figures, the variety of subjects and the well thought out structure. Suitable for those coming from a physics, biology, medicine, materials science, engineering or chemistry background, the book is ideal for whoever needs a birds-eye view of the field. The extensive bibliography allows the reader to find any level of detail behind each of the subjects. Nowhere else in the literature is it possible to find such a comprehensive and up-to-date look at the chemistry of nanotechnology.

About the Author Geoffrey A. Ozin obtained his undergraduate degree at Kings College London and his graduate degree at Oriel College Oxford. Following post-doctoral research as an ICI Fellow at Southampton University he joined the University of Toronto where he is now Government of Canada Research Chair in Materials Chemistry and University Professor. He is also Honorary Professor at The Royal Institution of Great Britain and University College London, as well as a Member of the London Centre for Nanotechnology. Andr C. Arsenault is Chief Technology Officer and cofounder of Opalux Inc., a Toronto-based company developing products based on opal technology. He completed his honours degree in Biological Chemistry at the University of Toronto in 2001 followed by a PhD in the groups of Geoffrey A. Ozin and Ian Manners in 2006. He is currently the author of 21 scientific publications, and the holder of one US patent. His work has appeared several times in the news media. Ludovico Cademartiri is a PhD student in the group of Geoffrey A. Ozin at the University of Toronto. He completed his Laurea cum laude in Materials Science at the University of Parma, Italy in 2002 before joining the graduate program in interdisciplinary chemistry at the University of Toronto. He is the author of 12 scientific publications and has been awarded the CRC Graduate Prize in Chemistry and the CSC DIC Prize for Graduate Work in Inorganic Chemistry.