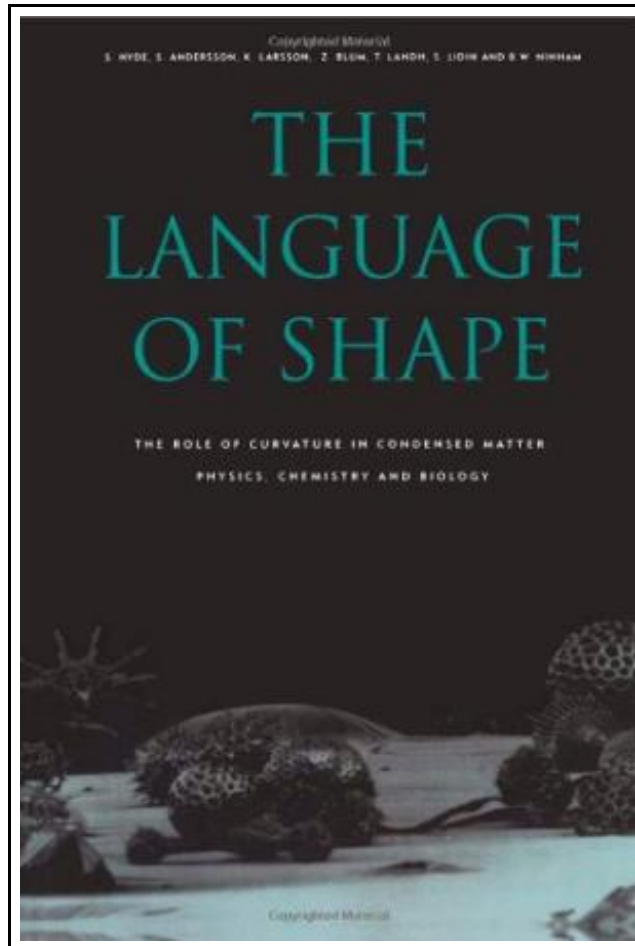


# The Language of Shape: The Role of Curvature in Condensed Matter: Physics, Chemistry and Biology (Hardback)



Filesize: 8.95 MB

## ***Reviews***

*This book is definitely not effortless to begin on looking at but quite entertaining to read. Better than never, though i am quite late in start reading this one. I am just easily can get a enjoyment of looking at a written ebook.*


*(Elinor Hyatt)*

## THE LANGUAGE OF SHAPE: THE ROLE OF CURVATURE IN CONDENSED MATTER: PHYSICS, CHEMISTRY AND BIOLOGY (HARDBACK)



To get **The Language of Shape: The Role of Curvature in Condensed Matter: Physics, Chemistry and Biology (Hardback)** PDF, you should access the hyperlink beneath and save the document or gain access to other information that are related to THE LANGUAGE OF SHAPE: THE ROLE OF CURVATURE IN CONDENSED MATTER: PHYSICS, CHEMISTRY AND BIOLOGY (HARDBACK) book.

ELSEVIER SCIENCE TECHNOLOGY, United Kingdom, 1996. Hardback. Book Condition: New. Reprinted from Erkenntnis, 45: ed.. 241 x 170 mm. Language: English . Brand New Book. This book develops the thesis that structure and function in a variety of condensed systems - from the atomic assemblies in inorganic frameworks and organic molecules, through molecular self-assemblies to proteins - can be unified when curvature and surface geometry are taken together with molecular shape and forces. An astonishing variety of synthetic and biological assemblies can be accurately modelled and understood in terms of hyperbolic surfaces, whose richness and beauty are only now being revealed by applied mathematicians, physicists, chemists and crystallographers. These surfaces, often close to periodic minimal surfaces, weave and twist through space, carving out interconnected labyrinths whose range of topologies and symmetries challenge the imaginative powers. The book offers an overview of these structures and structural transformations, convincingly demonstrating their ubiquity in covalent frameworks from zeolites used for cracking oil and pollution control to enzymes and structural proteins, thermotropic and lyotropic bicontinuous mesophases formed by surfactants, detergents and lipids, synthetic block copolymer and protein networks, as well as biological cell assemblies, from muscles to membranes in prokaryotic and eukaryotic cells. The relation between structure and function is analysed in terms of the previously neglected hidden variables of curvature and topology. Thus, the catalytic activity of zeolites and enzymes, the superior material properties of interpenetrating networks in microstructured polymer composites, the transport requirements in cells, the transmission of nerve signals and the folding of DNA can be more easily understood in the light of this. The text is liberally sprinkled with figures and colour plates, making it accessible to both the beginning graduate student and researchers in condensed matter physics and chemistry, mineralogists, crystallographers and biologists.

 [Read The Language of Shape: The Role of Curvature in Condensed Matter: Physics, Chemistry and Biology \(Hardback\) Online](#)

 [Download PDF The Language of Shape: The Role of Curvature in Condensed Matter: Physics, Chemistry and Biology \(Hardback\)](#)

## Relevant Books



**[PDF] The Web Collection, Revealed: Adobe Creative Cloud Update (Mixed media product)**

Click the hyperlink below to get "The Web Collection, Revealed: Adobe Creative Cloud Update (Mixed media product)" file.

[Read ePub »](#)



**[PDF] Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]**

Click the hyperlink below to get "Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]" file.

[Read ePub »](#)



**[PDF] Hope for Autism: 10 Practical Solutions to Everyday Challenges**

Click the hyperlink below to get "Hope for Autism: 10 Practical Solutions to Everyday Challenges" file.

[Read ePub »](#)



**[PDF] Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep**

Click the hyperlink below to get "Star Flights Bedtime Spaceship: Journey Through Space While Drifting Off to Sleep" file.

[Read ePub »](#)



**[PDF] Slavonic Rhapsodies, Op.45 / B.86: Study Score**

Click the hyperlink below to get "Slavonic Rhapsodies, Op.45 / B.86: Study Score" file.

[Read ePub »](#)



**[PDF] Suite in E Major, Op. 63: Study Score**

Click the hyperlink below to get "Suite in E Major, Op. 63: Study Score" file.

[Read ePub »](#)