



## 中国科技出版传媒股份有限公司(科学出版社) China Science Publishing & Media Ltd. (Science Press)

## 《生物膜弹性理论精要》 Essentials of Elastic Theory of Biomembranes

Author: TU Zhanchun and OUYANG Zhongcan ISBN:9787508855233

This book gives a brief introduction of the basic concepts such as the component and physical state, elasticity and shape of biomebranes. It also highlights the elastic theory of biomembrane and reviews its development. Based on Helfrich's spontaneous curvature model, this book discusses shape equation of lipid bubble and its analytical solution, the controlling equation of the edged lipid membrane and its special solution, neck—end joining conditions of budding lipid vesicles, stress tensor and moment tensor of lipid membrane, elastic theory of chiral membrane. Different from other works, in the mathematical processing of elasticity, this book mainly uses external differential



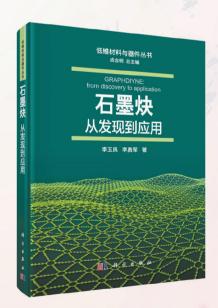
and active frame method, instead of conventional tensor analysis method. This book is rich in physical and mathematical content while being concise and neat in style.

《石墨炔:从发现到应用》

Graphdiyne: from discovery to application

Author: LI Yuliang, LI Yongjun ISBN:9787030575258

This book is one title from the Low-dimensional Materials and Devices series. Graphdiyne is a new type of two-dimensional carbon material. The book comprehensively and systematically introduces the theoretical prediction, structure, synthesis of graphdiyne, featuring the characterization methods and aggregate structure of graphdiyne. Moreover, this book sheds some light on its frontier research and application in the fields such as electronics, information, energy conversion and storage, catalysis, environmental detection, biomedicine, etc. The development of graphdiyne is changing rapidly with each passing day. This book is a systematic summary and collation of the



author's original research results all these years in the field of graphdiyne. It has great impetus and high academic reference value for the development of new graphdiyne materials.

This book can also be used as a professional reference book for senior undergraduates and postgraduates in materials, physics, chemistry and related fields.