

## <<液晶>>

### 图书基本信息

书名 : <<液晶>>

13位ISBN编号 : 9787506272742

10位ISBN编号 : 7506272741

出版时间 : 2005-6

出版时间 : 世界图书出版公司

作者 : S.Chandrasekhar

页数 : 460

版权说明 : 本站所提供之下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问 : <http://www.tushu007.com>

## <<液晶>>

### 内容概要

液晶：英文版，ISBN：9787506272742，作者：( ) S.Chandrasekhar著

## &lt;&lt;液晶&gt;&gt;

## 书籍目录

Preface to the first edition	Preface to the second edition	1 Introduction	1.1 Thermotropic liquid crystals: structure and classification of the mesophases	1.1.1 Liquid crystals of rod-like molecules	1.1.2 Liquid crystals of disc-like molecules	1.1.3 Polymer liquid crystals	1.2 Lyotropic liquid crystals	1.3  Polymorphism in thermotropic liquid crystals	2 Statistical theories of nematic order	2.1 Melting of molecular crystals: the Pople-Karasz model	2.1.1 Order-disorder in positions and orientations	2.1.2  Plastic crystals and liquid crystals	2.1.3 Pressure-induced mesomorphism	2.2 Phase transition in a fluid of hard rods	2.3 The Maier-Saupe theory and its applications	2.3.1 Definition of long-range orientational order	2.3.2 The mean field approximation	2.3.3 Evaluation of the order parameter	2.3.4 Theory of dielectric anisotropy	2.3.5 Relationship between elasticity and orientational order	2.4  Hybrid models: hard rods with a superposed attractive potential	2.5 Short-range order effects in the isotropic phase	2.5.1 The Landau--de Gennes model	2.5.2 Magnetic and electric birefringence	2.5.3 Light scattering	2.5.4 Flow birefringence	2.5.5 Comparison with the Maier-Saupe theory	2.6 Near-neighbour correlations: Bethe's method	2.6.1 The Krieger-James approximation	2.6.2  Antiferroelectric short-range order	2.7 The nematic liquid crystal free surface	3 Continuum theory of the nematic state	3.1 The Ericksen-Leslie theory	3.1.1 Conservation laws and the entropy inequality	3.1.2 Constitutive equations	3.1.3 Coefficients of viscosity	3.1.4 Parodi's relation	3.2  Curvature elasticity: the Oseen-Zeucher-Frank equations	3.3 Summary of equations of the continuum theory	3.4 Distortions due to magnetic and electric fields: static theory	3.4.1 The Freedericksz effect	3.4.2  The twisted nematic device	3.4.3 The Freedericksz effect in highly anisotropic nematics: periodic distortions	3.4.4 The constant $k_{13}$	3.5 Disclinations	3.5.1 Schlieren textures	3.5.2 Interaction between disclinations	3.5.3 Non-singular structures ( $s = \pm 1$ ): escape in the third dimension	3.5.4  Twist disclinations	3.5.5 Singular points	3.5.6 Interaction between disclinations and surfaces	3.5.7 Defects in the presence of an external field	3.5.8 Some consequences of elastic anisotropy	3.5.9 The core structure	3.6 Flow properties	3.6.1 Miesowicz's experiment	3.6.2 Tsvetkov's experiment	3.6.3 Poiseuille flow	3.6.4 Shear flow	3.6.5 Transverse pressure and secondary flow	3.7 Reflexion of shear waves	3.8 Dynamics of the Freedericksz effect.....	4 Cholesteric liquid crystals	5 Smectic liquid crystals	6 Discotic Liquid crystals	References	Index
------------------------------	-------------------------------	----------------	---	---	---	-------------------------------	-------------------------------	---	---	--	--	---	-------------------------------------	---	---	---	------------------------------------	---	---------------------------------------	---	--	---	-----------------------------------	---	------------------------	--------------------------	--	---	---------------------------------------	--	---	--	--------------------------------	--	------------------------------	---------------------------------	-------------------------	--	--	--	-------------------------------	---	---	-----------------------------	-------------------	--------------------------	--	--	----------------------------------	-----------------------	--	--	---	--------------------------	---------------------	------------------------------	--------------------------------	-----------------------	------------------	--	------------------------------	--	-------------------------------	---------------------------	----------------------------	------------	-------

## <<液晶>>

### 版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>