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Nota di contenuto	<ul> <li>Fundamentals of Liquid Crystal Devices; Copyright; Contents; Series Editor s Foreword; Preface to the First Edition; Preface to the Second Edition; Chapter 1 Liquid Crystal Physics; 1.1 Introduction; 1.2 Thermodynamics and Statistical Physics; 1.2.1 Thermodynamic laws;</li> <li>1.2.2 Boltzmann Distribution; 1.2.3 Thermodynamic quantities; 1.2.4 Criteria for thermodynamical equilibrium; 1.3 Orientational Order; 1.3.1 Orientational order parameter; 1.3.2 Landau-de Gennes theory of orientational order in nematic phase; 1.3.3 Maier-Saupe theory; 1.4 Elastic Properties of Liquid Crystals</li> <li>1.4.1 Elastic properties of nematic liquid crystals1.4.2 Elastic properties of cholesteric liquid crystals; 1.4.3 Elastic properties of smectic liquid crystals; 1.5 Response of Liquid Crystals to Electromagnetic Fields;</li> <li>1.5.1 Magnetic susceptibility; 1.5.2 Dielectric permittivity and refractive index; 1.6 Anchoring Effects of Nematic Liquid Crystal at Surfaces;</li> <li>1.6.1 Anchoring energy; 1.6.2 Alignment layers; 1.7 Liquid crystal director elastic deformation; 1.7.1 Elastic deformation and disclination;</li> <li>1.7.2 Escape of liquid crystal director in disclinations; Homework</li> </ul>

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Sommario/riassunto	"Revised throughout to cover the latest developments in the fast moving area of display technology, this 2nd edition of Fundamentals of Liquid Crystal Devices, will continue to be a valuable resource for those wishing to understand the operation of liquid crystal displays. Significant updates include new material on display components, 3D LCDs and blue-phase displays which is one of the most promising new technologies within the field of displays and it is expected that this new LC-technology will reduce the response time and the number of optical components of LC-modules. Prof. Yang is a pioneer of blue-phase display technology and Prof. Wu has made significant contributions to the continuing advancement of the technology, and so are both undeniably well placed to offer an overview of this state-of-the-art technology" "Explains the link between fundamental scientific principles to the technological state-of-the-art"