

1. Record Nr.	UNINA9910453228303321
Autore	Warner M
Titolo	Liquid crystal elastomers [[electronic resource] /] / M. Warner and E.M. Terentjev
Pubbl/distr/stampa	Oxford, : Clarendon Press, 2007
ISBN	1-281-34603-9 0-19-152363-1
Edizione	[Rev. ed.]
Descrizione fisica	1 online resource (422 p.)
Collana	international series of monographs on physics ; ; 120
Altri autori (Persone)	TerentjevE. M (Eugene Michael)
Disciplina	530.4/29 530.429
Soggetti	Liquid crystals Polymer networks Elastomers Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous ed.: 2003.
Nota di bibliografia	Includes bibliographical references (p. 382-392) and indexes.
Nota di contenuto	Contents; 1 A bird's eye view of liquid crystal elastomers; 2 Liquid crystals; 2.1 Ordering of rod and disc fluids; 2.2 Nematic order; 2.3 Free energy and phase transitions of nematics; 2.4 Molecular theory of nematics; 2.5 Distortions of nematic order; 2.6 Transitions driven by external fields; 2.7 Anisotropic viscosity and dissipation; 2.8 Cholesteric liquid crystals; 2.9 Smectic liquid crystals; 3 Polymers, elastomers and rubber elasticity; 3.1 Configurations of polymers; 3.2 Liquid crystalline polymers; 3.2.1 Shape of liquid crystalline polymers; 3.2.2 Frank elasticity of nematic polymers; 3.3 Classical rubber elasticity3.4 Manipulating the elastic response of rubber; 3.5 Finite extensibility and entanglements in elastomers; 4 Classical elasticity; 4.1 Deformation tensor and Cauchy-Green strain; 4.2 Non-linear and linear elasticity; 4.3 Geometry of deformations and rotations; 4.3.1 Rotations; 4.3.2 Shears and their decomposition; 4.3.3 Square roots and polar decomposition of tensors; 4.4 Compressibility of rubbery networks; 5 Nematic elastomers; 5.1 Structure and examples of nematic elastomers; 5.2 Stress-optical coupling; 5.3 Polydomain textures and alignment by stress

7 Soft elasticity7.1 Director anchoring to the bulk; 7.1.1 Director rotation without strain; 7.1.2 Coupling of rotations to pure shear; 7.2 Soft elasticity; 7.2.1 Soft modes of deformation; 7.2.2 Principal symmetric strains and body rotations; 7.2.3 Forms of the free energy allowing softness; 7.3 Optimal deformations; 7.3.1 A practical method of calculating deformations; 7.3.2 Stretching perpendicular to the director; 7.4 Semi-soft elasticity; 7.4.1 Example: random copolymer networks; 7.4.2 A practical geometry of semi-soft deformation; 7.4.3 Experiments on long, semi-soft strips
7.4.4 Unconstrained elastomers in external fields7.5 Semi-soft free energy and stress; 7.6 Thermomechanical history and general semi-softness; 7.6.1 Thermomechanical history dependence; 7.6.2 Forms of the free energy violating softness; 8 Distortions of nematic elastomers; 8.1 Freedericks transitions in nematic elastomers; 8.2 Strain-induced microstructure: stripe domains; 8.3 General distortions of nematic elastomers; 8.3.1 One-dimensional quasi-convexification; 8.3.2 Full quasi-convexification; 8.3.3 Numerical and experimental studies; 8.4 Random disorder in nematic networks
8.4.1 Nematic ordering with quenched disorder

Sommario/riassunto

Liquid crystal elastomers are an entirely new physical system, occupying a transitional zone between liquids and solids. This book is the foundation treatise in this emerging field of combined chemistry, physics, mathematics and engineering. It reviews experimental techniques and results, theoretical ideas and reviews the foundations of the field. - ;Liquid crystals are fluids with a directionality defined. Polymers are long molecules with a shape that can be changed. As a network, polymers form rubber - a soft solid that is locally liquid-like and capable of huge extension. Liquid crystal ela

2. Record Nr.	UNINA9910137512003321
Autore	Howes Llewellyn
Titolo	Judging Q and saving Jesus : Q's contribution to the wisdom-apocalypticism debate in historical Jesus studies / / Llewellyn Howes
Pubbl/distr/stampa	South Africa, : AOSIS, 2015 Durbanville, South Africa : , : AOSIS, , [2015] ©2015
ISBN	9780620687379 (ebook)
Descrizione fisica	1 online resource (xix, 342 pages) : digital, PDF file(s)
Collana	Open Access e-Books Knowledge Unlatched
Disciplina	226.066
Soggetti	Q hypothesis (Synoptics criticism)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references (pages 304-336) and index.
Nota di contenuto	Chapter 1. A focused overview of the quest for Jesus -- Chapter 2. Q as document -- Chapter 3. Eschatological judgment and the Son of Man -- Chapter 4. 'Do not judge!' in Q 6:37-38 -- Chapter 5. The Sayings Gospel Q and the historical Jesus.
Sommario/riassunto	The monograph Judging Q and Saving Jesus is characterised by careful textual analysis, showing a piercing critical eye in its impressive engagement with the secondary literature, and sharp and insightful critique. The target audience are specialists in the field of research on the Sayings Source Q (the hypothetical source of certain sayings of Jesus common to Matthew and Luke), historical Jesus, and early Christian theology. The book takes the stance that the hypothetical document Q can be reconstructed with sufficient precision and that this enables biblical scholars to study with confidence its genre and its thematic and ideological profile. The genre issue is central to the book overall structure and the alternative proposals are discussed at length and with sophistication. The author's inference is that Q's macrogenre is sapiential with occasional insertions of apocalyptic microstructures and motifs. This finding embodies progress in Historical Jesus studies.

3. Record Nr.	UNINA9910712906403321
Autore	Beers Yardley <1913->
Titolo	The theory of the optical wedge beam splitter
Pubbl/distr/stampa	[Washington] : , : National Bureau of Standards; [for sale by the Supt. of Docs., U.S. Govt. Print. Off.], , 1974
Descrizione fisica	1 online resource (26 pages) : illustrations
Collana	NBS monograph ; ; 146
Classificazione	33.18
Disciplina	389/.08 s 535.5/028
Soggetti	Beam splitters
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.