

1. Record Nr.	UNINA9910143424303321
Autore	Frejlich Jaime <1946->
Titolo	Photorefractive materials [[electronic resource]] : fundamental concepts, holographic recording and materials characterization / / Jaime Frejlich
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Interscience, c2007
ISBN	1-280-72168-5 9786610721689 0-470-08906-7 0-470-08905-9
Descrizione fisica	1 online resource (335 p.)
Disciplina	620.11295 621.367
Soggetti	Crystal optics Photorefractive materials Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 293-303) and index.
Nota di contenuto	PHOTOREFRACTIVE MATERIALS; CONTENTS; LIST OF FIGURES; LIST OF TABLES; PREFACE; ACKNOWLEDGMENTS; I FUNDAMENTALS; 1 ELECTRO-OPTIC EFFECT; 1.1 Light propagation in crystals; 1.1.1 Wave propagation in anisotropic media; 1.1.2 General wave equation; 1.1.3 Index ellipsoid; 1.2 Tensorial Analysis; 1.3 Electro-optic effect; 1.3.1 Sillenite-type crystal; 1.3.2 Lithium niobate; 1.3.3 KDP-(KH(2)PO(4)); 1.4 Concluding Remarks; 2 PHOTOACTIVE CENTERS AND PHOTOCONDUCTIVITY; 2.1 Photoactive centers: Deep and shallow traps; 2.1.1 Cadmium telluride; 2.1.2 Sillenite-type crystals; 2.1.3 Lithium niobate 2.2 Photoconductivity2.2.1 Localized states: traps and recombination centers; 2.2.2 Theoretical models; 2.2.2.1 One-center model; 2.2.2.1.1 Steady state under uniform illumination; 2.2.2.2 Two-center/one-charge carrier model; 2.2.2.2.1 Steady state under uniform illumination; 2.2.2.2.2 Light-induced absorption; 2.2.2.3 Dark conductivity and dopants; 2.2.3 Photoconductivity in bulk material; 2.3

Photochromic effect; 2.3.1 Transmittance with light-induced absorption; II HOLOGRAPHIC RECORDING; 3 RECORDING A SPACE-CHARGE ELECTRIC FIELD; 3.1 Index of refraction modulation; 3.2 General formulation
4.1.1 Out of Bragg condition4.2 Dynamic coupled wave theory; 4.2.1 Combined phase-amplitude stationary gratings; 4.2.1.1 Fundamental properties; 4.2.1.2 Irradiance; 4.2.2 Pure phase grating; 4.2.2.1 Time evolution; 4.2.2.1.1 Undepleted pump approximation; 4.2.2.1.2 Response time with feedback; 4.2.2.2 Stationary hologram; 4.2.2.2.1 Diffraction; 4.2.2.3 Steady-state nonstationary hologram with bulk absorption; 4.2.2.3.1 Diffraction efficiency; 4.2.2.3.2 Output beams phase shift; 4.3 Phase modulation; 4.3.1 Phase Modulation in dynamically recorded gratings
4.3.1.1 Phase modulation in the signal beam4.3.1.1.1 Unshifted hologram; 4.3.1.1.2 Shifted hologram; 4.3.1.2 Output phase shift; 4.4 Four-wave mixing; 4.5 Final remarks; 5 ANISOTROPIC DIFFRACTION; 5.1 Coupled wave with anisotropic diffraction; 5.2 Anisotropic diffraction and optical activity; 5.2.1 Diffraction efficiency with optical activity ; 5.2.2 Output polarization direction; 6 STABILIZED HOLOGRAPHIC RECORDING; 6.1 Introduction; 6.2 Mathematical formulation; 6.2.1 Stabilized stationary recording; 6.2.1.1 Stable equilibrium condition
6.2.2 Stabilized recording of running (nonstationary) holograms

Sommario/riassunto

Photorefractive Materials presents an overview of the basic features and properties of photorefractive materials, covering a wide array of related topics. It provides a coherent approach suitable for introductory and advanced students seeking to learn or review the fundamentals, as well as senior researchers who need a reference while investigating more specialized areas.

2. Record Nr.	UNINA9910703846403321
Titolo	Iraq at a crossroads: options for U.S. policy : hearing before the Committee on Foreign Relations, United States, Senate, One Hundred Thirteenth Congress, second session, July 24, 2014
Pubbl/distr/stampa	Washington : , : U.S. Government Publishing Office, , 2015
Descrizione fisica	1 online resource (iii, 79 pages)
Collana	S. hrg. ; ; 113-656
Soggetti	Terrorism - Iraq - Prevention Religious minorities - Iraq Humanitarian assistance, American - Iraq Diplomatic relations Humanitarian assistance, American Religious minorities Terrorism - Prevention Legislative hearings. United States Foreign relations Iraq Iraq Foreign relations United States Iraq United States
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Paper version available for sale by the Superintendent of Documents, U. S. Government Publishing Office. Title from title screen (viewed July 23, 2015).