

1. Record Nr.	UNINA9910480362703321
Titolo	Analysis of the Composition and Structure of Glass and Glass Ceramics [[electronic resource] /] / edited by Hans Bach, Dieter Krause
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1999
ISBN	3-662-03746-7
Edizione	[1st ed. 1999.]
Descrizione fisica	1 online resource (XVIII, 528 p.)
Collana	Schott Series on Glass and Glass Ceramics, Science, Technology, and Applications, , 1431-7907
Disciplina	530.41
Soggetti	Condensed matter Engineering Analytical chemistry Materials science Physical chemistry Condensed Matter Physics Engineering, general Analytical Chemistry Characterization and Evaluation of Materials Physical Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Overview -- 2. The Chemical Analysis of Glasses, Glass Ceramics, and Related Materials -- 3. The Quasi-Static Structure of Oxide Glasses -- 4. Dynamics of the Glass Structure -- 5. Chemical Resistance and Corrosion, and Ion Release -- 6. Analysis and Diagnosis of Local Defects -- List of Contributors -- Sources of Figures and Tables.
Sommario/riassunto	This book is one of a series reporting on international research and development activities conducted by the Schott Group companies. With the series Schott aims to provide an overview of its activities for scientists, engineers, and managers from all branches of industry worldwide where glass and glass ceramics are of interest. Each volume begins with a chapter providing a general idea of the current problems, results, and trends relating to the subject treated. This volume lays the

foundations for - supervision of production processes, including raw materials, evaporation from the melt, exhaust gases, and environmental concerns; - troubleshooting in case of glass defects in combination with research for the design of faultless (in the ppm range) or at least high-yield processes; - understanding the origin of customer complaints because of unfulfilled expectations concerning material properties or product behaviour. The book is conceived as a monograph. The individual chapters, however, are written by leading Schott experts on the corresponding subjects. Many figures, tables, and examples are chosen to introduce the reader to thin-film science and technology.

2. Record Nr.	UNINA9910159514103321
Autore	Thomas Gary
Titolo	Cherish : The one word that changes everything for your marriage. // Gary Thomas
Pubbl/distr/stampa	Grand Rapids, : Zondervan, 2017
ISBN	0-310-35015-8
Edizione	[Unabridged.]
Descrizione fisica	1 online resource (5 audio files) : digital
Classificazione	FAM030000REL012050SEL016000
Altri autori (Persone)	ThomasGary
Soggetti	Nonfiction Christian Nonfiction Family & Relationships Religion & Spirituality
Lingua di pubblicazione	Inglese
Formato	Audiolibro
Livello bibliografico	Monografia
Note generali	Unabridged.
Sommario/riassunto	Gary Thomas, pastor and bestselling author of Sacred Marriage, believes that one simple word can bring hope, light, and life into any marriage: Cherish. Most marriages survive by gritting teeth and holding on. But what if surviving marriage wasn't the goal? What if we aimed to thrive instead? In Cherish, Thomas teaches us that although there are a countless number of marriages consisting of two people

just going through the motions, there are real ways this pattern can be reversed: when husbands and wives learn to cherish one another in their everyday actions and words. The way we treat something acknowledges whether we cherish it or hold it with indifference or contempt. To truly cherish something is to go out of our way to show it off, protect it, and honor it. We want others to see and recognize and affirm the value that we see. Thomas reminds us that in a world desperate for marriage redemption, the act of cherishing is needed now more than ever. Cherishing your spouse will elevate your marriage relationally, emotionally, spiritually, and even physically. You will set different goals for your relationship, and you'll see your marriage with fresh eyes. Through personal stories, real-world examples, and timeless biblical truths, Thomas shares the tools you need to turn your marriage around, including: Using your mind to change your heart Sacrificing for your spouse Praying with intentionality Prioritizing your life partner Through the biblical act of cherishing, we can empower our spouses to become who they are called by God to be, and in the process to become more of who we are called to be, creating a marriage that feels more precious, more connected, and more satisfying. If you're ready to revolutionize your relationship, it's time to learn how to truly Cherish it.

3. Record Nr.	UNINA9911019535603321
Autore	Ghafouri-Shiraz H
Titolo	Distributed feedback laser diodes and optical tunable filters // H. Ghafouri-Shiraz
Pubbl/distr/stampa	West Sussex, England ; ; Hoboken, NJ, : J. Wiley, 2003
ISBN	9786610270408 9781280270406 1280270403 9780470300039 0470300035 9780470856222 047085622X 9780470856239 0470856238
Descrizione fisica	1 online resource (343 p.)
Disciplina	621.36/6
Soggetti	Light emitting diodes Solid-state lasers Tunable lasers Light filters
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 and index.
Nota di contenuto	Distributed Feedback Laser Diodes and Optical Tunable Filters; Contents; Preface; Acknowledgements; Glossary of Abbreviations; Glossary of Symbols; 1. An Introduction to Optical Communication Systems; 1.1 Introduction; 1.2 Historical Progress; 1.3 Optical Fibre Communication Systems; 1.3.1 Intensity Modulation with a Direct Detection Scheme; 1.3.2 Coherent Detection Schemes; 1.4 System Requirements for High-Speed Optical Coherent Communication; 1.4.1 Spectral Purity Requirements; 1.4.2 Spectral Linewidth Requirements; 1.5 Summary; 1.6 References 2. Principles of Distributed Feedback Semiconductor Laser Diodes: Coupled Wave Theory2.1 Introduction; 2.2 Basic Principle of Lasers;

2.2.1 Absorption and Emission of Radiation; 2.2.2 The Einstein Relations and the Concept of Population Inversion; 2.2.3 Dispersive Properties of Atomic Transitions; 2.3 Basic Principles of Semiconductor Lasers; 2.3.1 Population Inversion in Semiconductor Junctions; 2.3.2 Principle of the Fabry-Perot Etalon; 2.3.3 Structural Improvements in Semiconductor Lasers; 2.3.4 Material Gain in Semiconductor Lasers 2.3.5 Total Radiative Recombination Rate in Semiconductors 2.4 Coupled Wave Equations in Distributed Feedback Semiconductor Laser Diodes; 2.4.1 A Purely Index-coupled DFB Laser Diode; 2.4.2 A Mixed-coupled DFB Laser Diode; 2.4.3 A Gain-coupled or Loss-coupled DFB Laser Diode; 2.5 Coupling Coefficient; 2.5.1 A Structural Definition of the Coupling Coefficient for DFB Semiconductor Lasers; 2.5.2 The Effect of Corrugation Shape on Coupling Coefficient; 2.5.3 Transverse Field Distribution in an Unperturbed Waveguide; 2.5.4 Results Based upon the Trapezoidal Corrugation; 2.6 Summary; 2.7 References

3. Structural Impacts on the Solutions of Coupled Wave Equations: An Overview 3.1 Introduction; 3.2 Solutions of the Coupled Wave Equations; 3.3 Solutions of Complex Transcendental Equations using the Newton-Raphson Approximation; 3.4 Concepts of Mode Discrimination and Gain Margin; 3.5 Threshold Analysis of a Conventional DFB Laser; 3.6 Impact of Corrugation Phase at Laser Facets; 3.7 The Effects of Phase Discontinuity along the DFB Laser Cavity; 3.7.1 Effects of Phase Shift on the Lasing Characteristics of a 1PS DFB Laser Diode 3.7.2 Effects of Phase Shift Position (PSP) on the Lasing Characteristics of a 1PS DFB Laser Diode 3.8 Advantages and Disadvantages of QWS DFB Laser Diodes; 3.9 Summary; 3.10 References; 4. Transfer Matrix Modelling in DFB Semiconductor Lasers; 4.1 Introduction; 4.2 Brief Review of Matrix Methods; 4.2.1 Formulation of Transfer Matrices; 4.2.2 Introduction of Phase Shift (or Phase Discontinuity); 4.2.3 Effects of Finite Facet Reflectivities; 4.3 Threshold Condition for the N-Sectioned Laser Cavity; 4.4 Formulation of the Amplified Spontaneous Emission Spectrum using the TMM 4.4.1 Green's Function Method Based on the Transfer Matrix Formulation

Sommario/riassunto

Advances in optical fibre based communications systems have played a crucial role in the development of the information highway. By offering a single mode oscillation and narrow spectral output, distributed feedback (DFB) semiconductor laser diodes offer excellent optical light sources as well as optical filters for fibre based communications and dense wavelength division multiplexing (DWDM) systems. This comprehensive text focuses on the basic working principles of DFB laser diodes and optical filters and details the development of a new technique for enhanced system performance. Consi
