

1. Record Nr.	UNINA9911006678003321
Titolo	Handbook of magneto-optical data recording : materials, subsystems, techniques // edited by Terry W. McDaniel, Randall H. Victora
Pubbl/distr/stampa	Westwood, N.J., : Noyes Publications, c1997
ISBN	1-282-28695-1 1-282-76933-2 9786612286957 9786612769337 0-08-094628-3 1-59124-089-1
Descrizione fisica	1 online resource (967 p.)
Altri autori (Persone)	McDanielTerry W VictoraRandall
Disciplina	621.39/76 20 621.39767 621.3976
Soggetti	Computer storage devices Magneto-optical devices Data disk drives CD-ROMs
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	Front Cover; Handbook of Magneto-Optical Data Recording: Materials, Subsystems, Techniques; Copyright Page; Contents; Chapter 1. Magneto-Optical Data Recording: Introduction and Overview; 1.0 INTRODUCTION TO OPTICAL STORAGE; 2.0 THE ADVANTAGES OF OPTICAL STORAGE; 3.0 THE STORAGE HIERARCHY AND OPTICAL LIBRARIES; 4.0 THE MO DRIVE; 5.0 MAGNETO-OPTICAL STORAGE PRODUCTS AND SUCCESS IN THE MARKETPLACE; REFERENCES; Chapter 2. Heads and Lasers; 1.0 INTRODUCTION; 2.0 LASER DIODES; 3.0 INCIDENT LIGHT PATH; 4.0 RETURN LIGHT PATH; 5.0 EXAMPLES OF PRODUCTION MO OPTICAL HEADS; 6.0 FUTURE IMPROVEMENTS ACKNOWLEDGMENTSREFERENCES; Chapter 3. Servos and Actuators; 1.0

INTRODUCTION; 2.0 THE SERVO LOOP; 3.0 ACTUATOR TECHNOLOGY; LIST OF SYMBOLS; REFERENCES; Chapter 4. Media Substrates And Format; 1.0 DISK LAYOUT AND FUNCTIONAL AREAS; 2.0 PRE-MASTERING; 3.0 MASTERING; 4.0 MOLDING AND STAMPING; 5.0 PROTECTION COATS; LIFETIME; 6.0 HUBBING; 7.0 CARTRIDGING; 8.0 OPTICAL AND MECHANICAL PROPERTY CONTROL; ACKNOWLEDGEMENT; REFERENCES; Chapter 5. Magneto-Optical Thin Film Recording Materials in Practice; 1.0 INTRODUCTION; 2.0 DESIGN CONCEPTS; 3.0 FILM DEPOSITION AND MANUFACTURING METHODS 4.0 Magneto-Optical Thin Film Materials 5.0 REFLECTOR THIN FILM MATERIALS; 6.0 ENVIRONMENT AND LIFETIME; 7.0 SUMMARY AND OUTLOOK; ACKNOWLEDGMENTS; ABBREVIATIONS AND SYMBOLS; REFERENCES; Chapter 6. Materials Characterization; 1.0 INTRODUCTION; 2.0 OPTICAL CHARACTERIZATION; 3.0 MAGNETO-OPTICAL CHARACTERIZATION; 4.0 THERMAL CHARACTERIZATION; 5.0 SUMMARY; ACKNOWLEDGMENTS; REFERENCES; Chapter 7. Writing and Erasing in Magneto-Optical Recording; 1.0 INTRODUCTION; 2.0 WRITING REGIMES AND LIMITS; 3.0 WRITING ISOLATED MARKS; 4.0 Writing and Calibrating Data Sequences; 5.0 ERASING DATA SEQUENCES 6.0 SPECIAL TOPICS 7.0 CONCLUSION; REFERENCES; Chapter 8. The Magneto-Optical Readout Process; 1.0 INTRODUCTION; 2.0 ORIGINS OF THE MAGNETO-OPTICAL READOUT SIGNAL; 3.0 OPTICAL PROPAGATION IN THE READOUT PATH; 4.0 OPTICAL SYSTEM CHARACTERIZATION; 5.0 NOVEL READOUT TECHNIQUES; ACKNOWLEDGMENTS; REFERENCES; Chapter 9. Sources of Noise in Magneto-Optical Readout; 1.0 INTRODUCTION; 2.0 SHOT NOISE; 3.0 ELECTRONIC NOISE; 4.0 LASER NOISE; 5.0 DIFFERENTIAL DETECTION AND MISBALANCE; 6.0 INTRODUCTION TO MEDIA NOISE; 7.0 DISK REFLECTIVITY FLUCTUATIONS AND DEPOLARIZATION NOISE; 8.0 WRITE NOISE 9.0 JITTER AND SIGNAL-AMPLITUDE FLUCTUATIONS 10.0 EQUALIZATION; 11.0 SNR AND JITTER; 12.0 SUMMARY; ACKNOWLEDGMENTS; REFERENCES; Chapter 10. Modeling the Magneto-Optical Recording Processes; 1.0 INTRODUCTION; 2.0 THE ROLE OF MODELING; 3.0 OPTICAL MODELING; 4.0 THERMAL MODELING; 5.0 THERMOMAGNETIC MARKING; 6.0 MAGNETIC MODELING; 7.0 SYSTEM MODELING; 8.0 SUMMARY; REFERENCES; Chapter 11. Testing; 1.0 OVERVIEW; 2.0 INFLUENCE OF TESTING CONDITIONS ON TEST RESULTS; 3.0 MECHANICAL TESTS; 4.0 OPTICAL TESTS; 5.0 PRERECORDED CHARACTERISTICS TESTS; 6.0 RECORDING FUNCTION TESTS; 7.0 STANDARDS DOCUMENTATION 8.0 TESTING ISSUES WITH NEXT GENERATION MEDIA

Sommario/riassunto

This handbook brings together in a single volume expert contributions on the many aspects of MO data recording, including the materials in use, techniques for achieving recording function, and storage device subsystems. As a multiple author treatment, it brings perspective from many viewpoints and institutions. The insights delivered should be valuable to a wide audience from students to practitioners in all areas of information storage.