1. Record Nr. UNINA9910155230803321

Titolo	Hearing loss : etiology, management and societal implications / / Jennifer D. Hughes, editor
Pubbl/distr/stampa	New York : , : Nova Biomedical, , 2017 ©2017
ISBN	1-5361-0403-5
Descrizione fisica	1 online resource (196 pages) : illustrations
Collana	Otolaryngology Research Advances
Disciplina	617.89
Soggetti	Hearing disorders Deafness
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.

2. Record Nr. UNINA9910789702303321

Autore	Robertson Max
Titolo	Substrate Surface Preparation Handbook
Pubbl/distr/stampa	Norwood : , : Artech House, , 2011 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2011]
ISBN	1-5231-1759-1 1-60807-214-2
Descrizione fisica	1 online resource (196 p.)
Collana	Artech House applied photonics series
Disciplina	621.3815 671
Soggetti	Optical materials - Surfaces Glass grinding and polishing
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	Substrate SurfacePreparation Handbook; Contents; Foreword; Preface; 1 Introduction; 1.1 Choosing a Process; 1.2 Definitions of Processes Used in This Book; 1.3 Lapping, Grinding, and Polishing Abrasives; 2 Preparation: Before the Start; 2.1 Plates and Measurement; 2.1.1 Plate Measurement; 2.1.2 Maintaining Plate Shape; 2.2 Lapping Plates; 2.2.1 Glazing; 2.3 Polishing Plates; 2.4 Polishing Surfaces: Care and Conditioning; 2.5 Baseplates for Polishing; 2.5.1 Baseplate Materials; 2.6 The Use of Smoothing Blocks; 2.7 Jigs; 2.7.1 When to Use a Jig; 2.7.2 Jig Balance; 2.7.3 Jig Maintenance. 2.8 Sample Mounting2.8.1 Vacuum Mounting; 2.8.2 Wax Mounting; 2.8 -- Automated Bonding; 2.8.4 Evaporated Wax Films; 2.8.5 Surface Tension Mounting; 2.8.6 Epoxy Bonding; 2.9 Sample Viewing and Assessment; 2.10 Plate and Sample Flatness Control; 2.10.1 Wafer Distortion; 2.11 Conclusion; References; 3 Lapping; 3.1 The Lapping Process; 3.1.1 If the Stock Removal Is Too Slow; 3.1.2 If the Stock Removal Is Too Fast; 3.2 Plate Shape Monitoring; 3.3 Scratching; 3.4 Smoothing; References; 4 Polishing; 4.1 Introduction; 4.2 Sample Load; 4.3 Abrasives; 4.4 Edge Polishing; 4.5 Slurry Flow Rate. 4.6 Grit Sizes4.7 Aligning the Sample; 4.8 The Polishing Run; 4.8.1 Before the Start; 4.8.2 Monitoring Progress; 4.9 Jig Rotation; 4.10

Sample Surface Shape and In-Process Alignment; 4.11 Chemical Polishing; 4.12 Chemomechanical Polishing; 4.13 Fluid Jet Polishing: Future Developments; References; 5 Specific Processes and Materials; 5.1 Geology; 5.2 Hard Materials; 5.2.1 Lapping Hard Materials; 5.2.2 Polishing Hard Materials; 5.3 Water-Soluble Materials; 5.4 Electro-Optic Materials; 5.4.1 Infrared and Electro-Optic Materials; 5.4.2 Processing Infared and Electro-Optic Materials; References.
6 Specialized Techniques6.1 Diamond Machining: Introduction; 6.1.1 Diamond Machining of Ductile Materials; 6.1.2 Diamond Machining of Brittle Materials; 6.2 Sawing; 6.2.1 Wire Saws; 6.2.2 High-Speed Saws; 6.2.3 Annular Saws; References; 7 Surface; 7.1 The Lapped Surface Finish; 7.2 Subsurface Damage; 7.3 Understanding Surface Finish; 7.3.1 Cutoff; 7.3.2 Stylus Radius; Reference; 8 Optics; 8.1 Glass; 8.2 Processing with Pitch; 8.3 Pitch Alternatives; 8.4 Spherical Surfaces; 8.5 Blocking Spherical Components; 8.6 Specifying Diamond Tooling; 8.7 Testing of Optical Components; References.
9 Semiconductor Device DeconstructionReferences; 10 Metallurgical Polishing and Microscopy; 10.1 Processing; 10.1.1 Process Stages; 10.2 Examination; 10.3 Microscope Setup; References; 11 Laboratory Setup; 11.1 Equipment Locations; 11.2 Laboratory Layout and Dimensions; 11.3 Optimizing the Process Route; 11.4 Sample Cleaning; 11.5 Safety Regulations; 11.6 Lab Environment; 11.7 Consumables; References; 12 Using Interferometry; 12.1 Basic Principles; 12.2 Analysis of Fringe Patterns; 12.3 Normal and Grazing Incidence; 12.4 Introducing the Workshop Interferometer; References; Bibliography.

Sommario/riassunto

Substrate Surface Preparation serves as a practical, one-stop reference, covering the technologies developed to produce flat surfaces with nanometer accuracy for the subsequent building of semiconductor devices and integrated circuits. This hands-on resource offers you detailed guidance in the entire substrate surface preparation process, from lapping and polishing ... to specialized techniques and surface finishing. Supported with over 125 illustrations, this unique book provides you with a complete understanding of important maintenance methods and the full range of equipment available in the fi.