

1. Record Nr.	UNINA9910697055403321
Titolo	The commander's handbook for religious ministry support
Pubbl/distr/stampa	Washington, DC : , : Headquarters, U.S. Marine Corps, , 2004
Descrizione fisica	1 volume (various pagings) : illustrations ; ; 20 cm
Collana	MCRP ; ; 6-12C
Soggetti	Military chaplains - United States Handbooks and manuals.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Cover title. "5 January 2004"--p. [i]. Format not distributed to depository libraries.
Nota di bibliografia	Includes bibliographical references.

2. Record Nr.	UNINA9911007368603321
Titolo	Handbook of silicon wafer cleaning technology // edited by Karen A. Reinhardt, Werner Kern
Pubbl/distr/stampa	Norwich, NY, : William Andrew, c2008
ISBN	1-282-76970-7 0-08-094746-8 9786612769702 1-282-00282-1 9786612002823 0-8155-1773-4
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (749 p.)
Collana	Materials science & process technology series
Altri autori (Persone)	ReinhardtKaren A KernWerner <1925->
Disciplina	621.3815/2
Soggetti	Silicon-on-insulator technology
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 Silicon Wafer Cleaning Technology; Copyright Page; Contents; Foreword; Preface to the Second Edition; Preface to First Edition; PART I: INTRODUCTION AND OVERVIEW; Chapter 1. Overview and Evolution of Silicon Wafer Cleaning Technology; 1.1 Introduction; 1.2 Importance of Clean and Conditioned Wafer Surfaces; 1.3 Overview of Wafer Contamination Aspects; 1.4 Overview of Wafer Cleaning and Surface Conditioning Technology; 1.5 Evolution of Wafer Cleaning Science and Technology; 1.6 Summary and Conclusion; References Chapter 2. Overview of Wafer Contamination and Defectivity2.1 Wafer Contamination; 2.2 Behavior and Impact of Contamination; 2.3 Sources of Defects and Contamination; References; PART II: WET CHEMICAL PROCESS; Chapter 3. Particle Deposition and Adhesion; 3.1 Introduction to Particle Deposition and Adhesion; 3.2 Particle Transport, Deposition, and Adhesion; 3.3 Particle Adhesion; 3.4 Particle Removal; 3.5 Summary; References; Chapter 4. Aqueous Cleaning and Surface Conditioning Processes; 4.1 Overview of Aqueous Cleaning, Rinsing,

and Drying Applications and Techniques

4.2 Common Chemistries and Their Applications 4.3 Process Variables

Affecting Cleaning; 4.4. Rinsing and Drying; 4.5 Aqueous Cleaning

Equipment; 4.6 Current and Future Challenges; 4.7 Summary;

Acknowledgments; References; PART III: DRY CLEANING PROCESSES;

Chapter 5. Gas-phase Wafer Cleaning Technology; 5.1 Introduction and

Overview of Gas-Phase and Vapor-Phase Cleaning and Surface

Conditioning; 5.2 Chemistry and Mechanisms; 5.3 Removal of Silicon

Oxides with HF Vapor; 5.4 O₃ and UV/O₃ for Organic Removal, Resist

Stripping, and Surface Oxidation; 5.5 UV/Cl₂ for Metallic

Contamination Removal

5.6 Applications for Gas-Phase Cleaning 5.7 Process Equipment; 5.8

Integrated Process Equipment; 5.9 Summary; Acknowledgments;

References; Chapter 6. Plasma Stripping, Cleaning, and Surface

Conditioning; 6.1 Introduction to Plasma Stripping and Cleaning; 6.2

Applications of Plasma Stripping, Cleaning, and Surface Conditioning;

6.3 Mechanisms of Plasma Stripping, Cleaning, and Surface

Conditioning; 6.4 Plasma Stripping, Cleaning, and Surface Conditioning

Equipment; 6.5 Plasma Diagnostics; 6.6 Plasma Damage; 6.7

Conclusions; Acknowledgments; References

Chapter 7. Cryogenic Aerosols and Supercritical Fluid Cleaning 7.1

Cryogenic and Supercritical Cleaning as Emerging Technologies; 7.2

Introduction to Cryogenic Aerosols; 7.3 Introduction to Supercritical

and Densified Fluid Cleaning; 7.4 Summary; Acknowledgments;

References; PART IV: ANALYTICAL AND CONTROL ASPECTS; Chapter 8.

Detection and Measurement of Particulate Contaminants; 8.1

Measurements of Particle and Defects; 8.2 Defect and Particle

Measurements on Wafers; 8.3 Particle Measurement in Liquid

Chemicals; 8.4 Particle Measurement in Vacuum, Gas, and Air;

Acknowledgements; References

Chapter 9. Surface Chemical Composition and Morphology

Sommario/riassunto

The second Edition of the Handbook of Silicon Wafer Cleaning Technology is intended to provide knowledge of wet, plasma, and other surface conditioning techniques used to manufacture integrated circuits. The integration of the clean processes into the device manufacturing flow will be presented with respect to other manufacturing steps such as thermal, implant, etching, and photolithography processes. The Handbook discusses both wet and plasma-based cleaning technologies that are used for removing contamination, particles, residue, and photoresist from wafer surfaces. Both the process and t
